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## UNDERGRADUATE GUIDE

The Guide contains information about the many academic programs that make the University of Wisconsin-Madison one of the world's foremost institutions of higher education

The Guide is published online only. It is not available in printed format.
The information in the Guide applies to all undergraduate students at the university regardless of their classification (school/college affiliation). Information in the individual school/college sections applies specifically to students who intend to graduate from one of those schools or colleges.

It is important for students to be familiar with all the information that applies to them. Students are strongly encouraged to consult their advisors at least once each semester to be certain they are completing requirements that apply to their degree and major programs.

The Guide is intended to complement other university information including specific materials supplied by schools, colleges, departments, and programs.

For more information about admission expectations, academic preparation, the application process, and important dates and deadlines, contact:

Office of Admission and Recruitment (https://www.admissions.wisc.edu) 702 West Johnson Street, Suite 1101
Madison, WI 53715-1007
onwisconsin@admissions.wisc.edu
608-262-3961
Schedule a campus at VisitBucky (https://www.admissions.wisc.edu/ visitbucky) or call 608-262-3961.

UW-Madison summer brochures and program information are available from the Division of Continuing Studies (http:// continuingstudies.wisc.edu).

All entering students, to protect their interests, should become wel acquainted with the regulations regarding student academic and nonacademic misconduct. Information about the Family Educational Rights and Privacy Act of 1974, as amended, is distributed during Wisconsin Welcome and is available at:

Office of the Registrar (https://registrar.wisc.edu)
333 East Campus Mall \#10101
Madison, WI 53715-1384

## ACCREDITATION

The University of Wisconsin-Madison is accredited by the Higher Learning Commission (http://www.hlcommission.org)

230 South Lasalle Street, Suite 7-500
Chicago, IL 60604
Telephone 1-800-621-7440
www.hlcommission.org (http://www.hlcommission.org)
UW-Madison, which was first accredited in 1913, was last accredited in 2009, and will go through a reaccreditation process again in 2018-19.

## SAFE LEARNING AND WORK ENVIRONMENT

Guide to creating and maintaining a Safe Learning and Work Environment at UW-Madison: Responsibilities, Resources, and Reporting
Requirements. (https://compliance.wisc.edu/safe-learning-work-guide)

## REGISTRATION WITH MINNESOTA OFFICE OF HIGHER EDUCATION

The University of Wisconsin-Madison is a public institution registered as a "Private Institution" with the Minnesota Office of Higher Education pursuant to sections 136A. 61 to 136A.71. Registration is not an endorsement of the institution. Credits earned at the institution may not transfer to all other institutions.

## AFFIRMATIVE ACTION AND COMPLIANCE STATEMENT

The University of Wisconsin-Madison is committed to providing equal opportunity and equal access and to complying with all applicable federal and state laws and regulations and University of Wisconsin System and university non-discrimination policies and procedures. For information on all covered bases, the names of the Title IX and Americans with Disabilities Act Coordinators, and the processes for how to file a complaint alleging discrimination, please contact the Office of Compliance (https://compliance.wisc.edu). The Office of Compliance is located at 361 Bascom Hall, 500 Lincoln Drive, Madison WI 53706 and can be reached at Voice: 608-265-6018 (relay calls accepted); Fax: 608 263-4725; Email: uwcomplianceoffice@wisc.edu.

The following are the nondiscrimination bases for covering students and applicants for admission to the university; university employees and applicants for employment at the university; and those wishing to take part in university programs and activities, including visitors to campus.

## STUDENTS/EDUCATIONAL PROGRAMS

- age
- ancestry
- color
- creed
- disability
- ethnicity (specifically involving harassment by UW employees)
- gender identity or expression
- marital or parental status
- national origin
- pregnancy
- race
- religion
- retaliation for opposing discrimination, making a complaint of discrimination or taking part in an investigation relating to discrimination
- sex
- sexual orientation
- or any other category protected by law, including physical condition or developmental disability as defined in Wisconsin Statutes§51.01(5).


## EMPLOYEES/APPLICANTS

- age
- ancestry
- arrest record
- color
- conviction record
- creed
- disability
- ethnicity (specifically involving harassment by university employees)
- gender identity or expression
- genetic information including genetic testing
- honesty testing
- marital or parental status
- military service
- national origin
- pregnancy
- race
- religion
- retaliation for opposing discrimination, making a complaint of discrimination or taking part in an investigation relating to discrimination
- sex
- sexual orientation
- use or nonuse of lawful products off the employer's premises during nonworking hours,
- veteran status
- declining to attend a meeting or participate in any communication about religious matters or political matters, or any other category protected by law


## VISITORS AND PROGRAM PARTICIPANTS/UNIVERSITY ACTIVITIES

- age
- ancestry
- color
- creed
- disability
- national origin
- race
- retaliation for making a complaint of discrimination, or taking part in an investigation relating to discrimination, or opposing discrimination
- sex
- sexual orientation

Also covered is any other non-discrimination category that may be subsequently added, even if not included in the above list, as a result of federal or State of Wisconsin court, legislative, or regulatory action, or action taken by UWS or the University.

## INFORMATION FOR STUDENTS WITH DISABILITIES

The McBurney Disability Resource Center provides disability-related services and accommodations to undergraduate, graduate, professional, Special, and guest students. The center works closely with students and faculty on the provision of reasonable accommodations to ensure access
to the learning environment. Common accommodations include extended time and/or small group environment for exams, class notetakers, sign language interpreting, real time and media captioning, and conversion of printed materials to an accessible format. McBurney staff members also collaborate with students and faculty to determine reasonable flexibility with regard to attendance, participation, and deadlines for disorders that fluctuate in severity over the course of enrollment. The center makes referrals to other campus offices or community resources for nonclassroom accommodations related to housing, transportation, personal care needs, and so on. Students should contact the center upon admission to begin the eligibility for services process. Early notice is essential in order to have accommodations in place prior to the start of the semester. For detailed information, see How to Become a McBurney Client (http://mcburney.wisc.edu/students/howto.php).

## McBurney Disability Resource Center

702 West Johnson Street, Suite 2104
Madison, WI 53706
608-263-2741 (voice)
608-225-7956 (text)
608-265-2998 (fax)
mcburney@studentlife.wisc.edu
www.mcburney.wisc.edu (http://www.mcburney.wisc.edu)
The information, policies, and rules contained herein are subject to change. No part of this publication should be construed as a contract or offer to contract. The information in this catalog is current as of June 1, 2018. Later revisions are announced through department or program offices. Students are responsible for knowing current university regulations. University offices can provide current information about possible changes.

## ADMISSION

## OFFICE OF ADMISSIONS AND RECRUITMENT

Students seeking to earn a bachelor's degree from the University of Wisconsin-Madison will apply for admission through the Office of Admissions and Recruitment (https://www.admissions.wisc.edu). Undergraduate admission is competitive and selective; professional admissions counselors review applications using a holistic process. We focus on academic excellence, reviewing high school and college coursework (when applicable), the courses students have chosen to take, the rigor and breadth of the curriculum, and how the student has performed in their coursework. We also consider written essays, letters of recommendation, and extracurricular involvement.

Our review process is designed to help us identify students who are not only academically stellar but also have qualities such as leadership, concern for humanity, and achievement in the arts, athletics, and other areas. We also seek diversity in personal background and experience for potential contribution to the University of Wisconsin-Madison community.

We invite and encourage all students considering the University of Wisconsin-Madison to join us on campus for a tour (https:// www.admissions.wisc.edu/visitbucky). There are many options to explore and discover what UW-Madison has in store.

## APPLY (HTTPS://WWW.ADMISSIONS.WISC.EDU/APPLY)

To submit an application for admission review the application dates and deadlines as well as the required application materials listed on our website.

Dates and Deadlines (https://www.admissions.wisc.edu/apply) Freshman Applicants (https://www.admissions.wisc.edu/apply/ freshman/materials.php)
Transfer Applicants (https://www.admissions.wisc.edu/apply/transfer/ materials.php)
Reentry Applicants (https://www.admissions.wisc.edu/apply/reentry)

## FRESHMEN

Competitive freshman applicants have taken advantage of the rigor offered at their high schools, performed well in challenging courses, and have strong ACT or SAT scores. Beyond academic excellence we are looking for students who demonstrate leadership, community engagement, and passion.

Students are considered freshman applicants if they have not yet completed high school (secondary-level education); have not earned a GED/HSED (but will by the time they enroll at UW-Madison); or have not enrolled in a college or university in a degree-granting program since graduating high school or earning a GED/HSED. For more information about admission requirements and expectations of freshman applicants please see our website (https://www.admissions.wisc.edu/apply/ freshman/requirements.php).

## TRANSFER STUDENTS

Successful transfer applicants will have a consistently high or upward grade trend; a strong cumulative grade point average; and rigorous coursework in English composition, college-level math, science, social science, humanities, literature, and foreign language. Admission to the university does not guarantee acceptance to an intended major, which is a separate process from the undergraduate admission process.

Students are considered transfer applicants if they have enrolled in an accredited college or university in a degree-granting program after graduating from high school or earning a GED/HSED. Students must have 24 transferable credits earned at a college or university after high school graduation to be eligible for admission as a transfer applicant. For more information about admission requirements and expectations of transfer applicants please see our website (https://www.admissions.wisc.edu/ apply/transfer/requirements.php).

Prospective transfer students can begin satisfying UW-Madison general education and degree requirements before transferring. For more information on selecting courses for the purpose of satisfying UW-Madison requirements, see Transfer Admissions (https:// www.admissions.wisc.edu/apply/transfer). Transfer credit is generally given for college-level courses taken at a degree-granting institution accredited by a CHEA-recognized organization (http://chea.org). Courses must be similar in nature, level, and content to UW-Madison undergraduate courses and apply to a UW-Madison academic program. Students may wish to consult the UW-Madison Transfer Credit Policy (https://www.admissions.wisc.edu/apply/transfer/transfer_credit.php) for more details.

## REENTERING STUDENTS

Students previously registered at UW-Madison in an undergraduate degree program who wish to resume undergraduate study after an
absence of a semester or more are considered reentry students. Reentry students must file an application for readmission but are not subject to the application fee.

To guarantee an early enrollment appointment time, reentry students should submit the complete application by February 1 for the fall term or by October 1 for the spring term. In addition to submitting an application, reentry applicants must submit official transcripts for any work completed elsewhere since last enrolled at UW-Madison, a list of courses in progress (if applicable), and an academic action from the dean's office if they are in "dropped" or "must obtain permission to continue" status.

## NONDEGREE UNIVERSITY SPECIAL AND GUEST STUDENTS

Undergraduate students visiting from other universities or recent UW-Madison graduates may desire to enroll at UW-Madison as nondegree University Special and Guest students. Contact the Division of Continuing Studies, Adult Career and Special Student Services (http:// www.continuingstudies.wisc.edu/advising).
21 North Park Street
Madison, WI 53715
608-263-6960
advising@dcs.wisc.edu

## PLACEMENT TESTS

Each student comes to UW-Madison with a unique set of skills and academic preparation. To asses where each student stands in beginning to meet their General Education Requirements (p. 22), placement tests provide academic advisors with the tools to help determine in which courses students should enroll. Placement tests are required of all incoming freshman and some transfer students depending on college course work. Other exams such as ACT, SAT, SAT II, TOEFL, Advanced Placement (AP), International Baccalaureate (IB), etc. do not satisfy the requirement of placement tests, however, scores on these exams may assist in appropriate course enrollment advising.

UW Placement tests are developed by faculty and instructional staff from various UW System campuses and led by Testing and Evaluation Services (https://testing.wisc.edu) (T\&E). T\&E conducts studies to support the development of these tests and effectively uses the results to place incoming students into appropriate levels of English, math, and foreign language.

Outlined below are the situations typical for requiring placement tests. The Office of Admissions and Recruitment (https:// www.admissions.wisc.edu) determines which placement tests are required. After students are admitted to the University of WisconsinMadison, they will receive an email from the Office of Admissions and Recruitment indicating which placement tests are required.

## LANGUAGE PLACEMENT EXAMS

The UW System offers placement exams for French, German and Spanish that are available through the Regional Placement Testing Program. Students are encouraged to take a foreign language placement test if they plan to continue studying a foreign language they have already taken in high school or college. If no placement exam is taken, students may enroll in the first semester course. UW-Madison offers language instruction in more than 30 languages. For additional information about
placement, see Languages at UW-Madison (http://languages.wisc.edu/ advising/placement).

## MATH PLACEMENT EXAMS

Students admitted to undergraduate degree granting programs who:

1. Are admitted as first-year students
2. Are admitted as transfer students and
A. Have not previously completed the UW System math placement exam.

## OR

B. Do not have credit for the UW-Madison direct equivalent of MATH 112, MATH 113, MATH 114, MATH 211, or any MATH course that is numbered higher than 211.
i. For students who have a course in progress at the time of admission, it is assumed they will complete the course, so they are not asked to take the placement test.

OR
C. Have completed the equivalent of MATH 96 at a UW System institution.

## Notes:

Satisfaction of QR-A from a math course that is transferred in does not automatically exempt students from the UW math placement test. MATH 101 equivalents will be converted to MATH 96, and/or will be reviewed by the math department for possible MATH 96.
See also the Mathematics Placement Chart (https://www.math.wisc.edu/ undergraduate/math-placement-tech-algorithm-uw-madison).

## ENGLISH PLACEMENT EXAMS

Two exams-the UW English Placement Test (UWEPT) and the UWMadison English as a Second Language Assessment Test (MSNESLAT)are used to place students into courses focused on development of skills needed for success in college-level communication tasks.

The UWEPT is taken by students admitted to undergraduate degreegranting programs who:

1. Are admitted as first-year students and are not required to take the MSNESLAT (see section below)
OR
2. Are admitted as transfer students and are not required to take the MSNESLAT (see section below) and
A. Have not previously completed the UW System English Placement Exam.

## OR

B. Do not have credit for the UW-Madison equivalent of a Communication Part A (p. 22) course.

The MSNESLAT is taken by all students who are required to submit a TOEFL or IELTS score for admission to UW-Madison.

The MSNESLAT is designed to evaluate English language proficiency, and to place students into English as a Second Language courses that help students improve skills in the written and spoken English used in academic contexts. Students who take the MSNESLAT and obtain a score that does not exempt them from ESL 118 must satisfy the university's expectation of college-level English language proficiency. This can be done by taking ESL 118 or by achieving a score of exempt on the MSNESLAT.

## RETROACTIVE LANGUAGE CREDIT

In some schools and colleges at UW-Madison, it is possible to earn retro credits for prior work completed in a foreign language. To earn these credits, students must take a course above the first-semester level on the UW-Madison campus in French, German, Hebrew, Italian, Latin, Portuguese, Spanish, or any other language in which they have some proficiency and the course is also offered on the UW-Madison campus. The course must be designated with the Foreign Language attribute of 2nd, 3rd, 4th, or 5th semester language course and must be the first foreign language course taken by the student after enrolling in the university. Students who take a college-level language course while still in high school may still pursue retro credits at the university.

Students interested in earning retro credits should plan to take the foreign language placement test and consult with the foreign language advisor at SOAR (http://soar.wisc.edu). Students must enroll in the language course prior to earning 30 degree credits (including credits transferred from other colleges but not including AP, CLEP, IB or retro credits in another language) and earn a grade of $B$ or better. UW-Madison honors retro credits earned at previous UW institutions as long as the student enrolled in the course prior to earning 30 credits and earned a grade of $B$ or better. Native speakers of a language are not eligible to earn retro credits in that language. For more information, see Retroactive Credits (p. 323) in the College of Letters \& Science section of the Guide.

## ADVANCED PLACEMENT (AP) AND INTERNATIONAL BACCALAUREATE (IB)

Both Advanced Placement (https://www.admissions.wisc.edu/ apply/freshman/apib.php) and International Baccalaureate (https:// www.admissions.wisc.edu/apply/freshman/apib.php) Higher Level examinations offer the possibility of receiving credits at UW-Madison. Many high schools offer courses through the College Board's Advanced Placement (AP) program or the International Baccalaureate (IB) program. UW-Madison offers degree credit based on a student's performance on the AP and IB exams administered in high schools. (AP and IB exams must be taken before entering UW-Madison.) Students who receive credit for a particular course through AP or IB and take the same course at UW-Madison will not receive degree credit twice; however, the grade in the UW-Madison course will be included in the overall grade point average.

## GCE ADVANCED LEVEL (A-LEVEL)

In many cases, students may receive advanced-standing credit for some A-level (https://www.admissions.wisc.edu/apply/freshman/ apib.php) exams. After a student has been admitted, the Office of Admissions and Recruitment (https://www.admissions.wisc.edu) will perform an official evaluation of credit for A-Level exam results. In order to grant the credit, we require an official copy of the A-Level exam certificate from the examination board. Credits will not be posted from Results Slips or internal school transcripts. Review the chart (https:// www.admissions.wisc.edu/apply/freshman/apib.php) to see how ALevel credit will be awarded. Examinations not listed in this chart will be evaluated by the Office of Admissions and Recruitment for appropriate advanced standing credit.

## COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

The College-Level Examination Program (CLEP) (https:// www.admissions.wisc.edu/apply/freshman/apib.php) allows students who have gained college-level knowledge outside the classroom to take examinations for possible college credit. Each exam is 90 minutes long and is made up primarily of multiple-choice questions. Some exams include an essay; however, UW-Madison does not require the essay for any CLEP exam. Credit will be granted only to those students who have completed fewer than 16 semester hours of college credit when the examinations are taken. Students must earn a minimum score of 65 to receive credit. The scores for awarding credit at the University of Wisconsin-Madison do not necessarily match those recommended by the American Council on Education.

## CREDIT BY DEPARTMENTAL EXAMINATION

Students may acquire knowledge, skills, and competencies through experiences that are academic in nature but may not necessarily correspond to a setting in which UW-Madison awards traditional credit. Credit by department examination is one opportunity for undergraduate students to demonstrate mastery of material that is equivalent to what would be learned in a specific UW-Madison course. The course credits granted through departmental examination are based on a student's demonstration that they have mastered the learning outcomes equivalent to those for the specified course. Examples of circumstances that will lead students to seek credit by examination may be: they completed preparation for advanced placement exams in high school but were unable to take the AP test; they have placement test scores that place them in a course lower than what they think they are prepared for; they did not get transfer equivalency for a course but they judge that they have completed the material in a course at another university.

To learn more about obtaining credit by departmental examination including eligibility and fees, review the policy here (https://kb.wisc.edu/ page.php?id=49600).

## MAJORS AND CERTIFICATES

Explore UW-Madison Undergraduate Opportunities (http:// guide.wisc.edu/explore-majors)

- African Cultural Studies, B.A. (p. 362)
- African Cultural Studies, B.S. (p. 367)
- African Studies, Certificate (p. 793)
- Afro-American Studies, B.A. (p. 372)
- Afro-American Studies, B.S. (p. 376)
- Afro-American Studies, Certificate (p. 380)
- Agricultural and Applied Economics, B.S. (p. 42)
- Agricultural Business Management, B.S. (p. 46)
- Agronomy, B.S. (p. 66)
- American Indian Studies, Certificate (p. 382)
- Animal Sciences, B.S. (p. 72)
- Anthropology, B.A. (p. 385)
- Anthropology, B.S. (p. 390)
- Applied Mathematics, Engineering, and Physics, B.S. AMEP (p. 1077)
- Archaeology, Certificate (p. 395)
- Art Education, B.S. (p. 1407)
- Art History, B.A. (p. 399)
- Art History, B.S. (p. 408)
- Art History, Certificate (p. 416)
- Art, B.S. (p. 1416)
- Art, BFA (p. 1423)
- Asian American Studies, Certificate (p. 422)
- Asian Languages and Cultures, B.A. (p. 426)
- Asian Languages and Cultures, B.S. (p. 427)
- Asian Studies, B.A. (p. 797)
- Asian Studies, B.S. (p. 802)
- Astronomy-Physics, B.A. (p. 460)
- Astronomy-Physics, B.S. (p. 463)
- Athletic Training, B.S. (p. 1608)
- Atmospheric and Oceanic Sciences, B.A. (p. 466)
- Atmospheric and Oceanic Sciences, B.S. (p. 470)
- Biochemistry, B.A. (L\&S) (p. 1046)
- Biochemistry, B.S. (CALS) (p. 109)
- Biochemistry, B.S. (L\&S) (p. 1054)
- Biological Systems Engineering, B.S. (p. 118)
- Biology Core Curriculum Honors, Certificate (p. 488)
- Biology in Engineering for Engineering Majors, Certificate (p. 233)
- Biology, B.A. (L\&S) (p. 967)
- Biology, B.S. (CALS) (p. 82)
- Biology, B.S. (L\&S) (p. 986)
- Biomedical Engineering, B.S. (p. 235)
- Botany, B.A. (p. 491)
- Botany, B.S. (p. 495)
- Business Management for Agricultural and Life Sciences, Certificate (p. 50)
- Business, Certificate (p. 1313)
- Business: Accounting, BBA (p. 1308)
- Business: Actuarial Science, BBA (p. 1373)
- Business: Finance, Investment, and Banking, BBA (p. 1321)
- Business: Information Systems, BBA (p. 1362)
- Business: International Business, BBA (p. 1325)
- Business: Management and Human Resources, BBA (p. 1344)
- Business: Marketing, BBA (p. 1357)
- Business: Operations and Technology Management, BBA (p. 1365)
- Business: Real Estate and Urban Land Economics, BBA (p. 1369)
- Business: Risk Management and Insurance, BBA (p. 1377)
- Cartography and Geographic Information Systems, B.A. (p. 695)
- Cartography and Geographic Information Systems, B.S. (p. 699)
- Chemical Engineering, B.S. (p. 242)
- Chemistry, B.A. (p. 526)
- Chemistry, B.S. (p. 532)
- Chicana/o and Latina/o Studies, Certificate (p. 539)
- Chinese Professional Communications, Certificate (p. 429)
- Chinese, B.A. (p. 432)
- Chinese, B.S. (p. 438)
- Chinese, BSE (p. 1438)
- Civil Engineering, B.S. (p. 249)
- Classical Humanities, B.A. (p. 542)
- Classical Humanities, B.S. (p. 547)
- Classical Studies, Certificate (p. 552)
- Classics, B.A. (p. 554)
- Classics, B.S. (p. 558)
- Communication Arts, B.A. (p. 569)
- Communication Arts, B.S. (p. 576)
- Communication Sciences and Disorders, B.A. (p. 587)
- Communication Sciences and Disorders, B.S. (p. 591)
- Communication Sciences and Disorders, BSE (p. 1450)
- Community and Environmental Sociology, B.S. (p. 133)
- Community and Nonprofit Leadership, B.S. (p. 1665)
- Comparative Literature and Folklore Studies, B.A. (p. 595)
- Comparative Literature and Folklore Studies, B.S. (p. 600)
- Computer Engineering, B.S. (p. 263)
- Computer Sciences, B.A. (p. 607)
- Computer Sciences, B.S. (p. 612)
- Computer Sciences, Certificate (p. 617)
- Conservation Biology, B.A. (p. 498)
- Conservation Biology, B.S. (p. 504)
- Criminal Justice, Certificate (p. 511 )
- Dairy Science, B.S. (p. 139)
- Dance, B.S. (p. 1581)
- Dance, BFA (p. 1587)
- Dance, Certificate (p. 1592)
- Development Economics, Certificate (p. 51)
- Digital Studies, Certificate (p. 583)
- East Asian Studies, Certificate (p. 807)
- East Central European Languages, Literatures, and Cultures, Certificate (p. 725)
- Economics, B.A. (p. 619)
- Economics, B.S. (p. 625)
- Education and Educational Services, Certificate (p. 1606)
- Education Studies, B.S. (p. 1599)
- Educational Policy Studies, Certificate (p. 1605)
- Electrical Engineering, B.S. (p. 267)
- Elementary Education, BSE (p. 1457)
- Engineering for Energy Sustainability, Certificate (p. 273)
- Engineering Mechanics, B.S. (p. 276)
- Engineering Physics, B.S. (p. 283)
- Engineering Thermal Energy Systems, Certificate (p. 311)
- English, B.A. (p. 631)
- English, B.S. (p. 637)
- Entomology, B.S. (p. 144)
- Entrepreneurship, Certificate (p. 1355)
- Environmental Sciences, B.A. (L\&S) (p. 473)
- Environmental Sciences, B.S. (CALS) (p. 206)
- Environmental Sciences, B.S. (L\&S) (p. 481)
- Environmental Studies Major (p. 646)
- Environmental Studies, Certificate (p. 1291)
- European Studies, Certificate (p. 810)
- Folklore, Certificate (p. 605)
- Food Science, B.S. (p. 149)
- Food Systems, Certificate (p. 137)
- Forest Science, B.S. (p. 154)
- French, B.A. (p. 653)
- French, B.S. (p. 659)
- French, BSE (p. 1475)
- French, Certificate (p. 664)
- Game Design, Certificate (http://guide.wisc.edu/undergraduate/ education/curriculum-instruction/game-design-certificate)
- Gender and Women's Studies, B.A. (p. 675)
- Gender and Women's Studies, B.S. (p. 682)
- Gender and Women's Studies, Certificate (p. 689)
- Genetics and Genomics, B.S. (p. 168)
- Geography, B.A. (p. 703)
- Geography, B.S. (p. 708)
- Geological Engineering, B.S. (p. 256)
- Geology and Geophysics, B.A. (p. 715)
- Geology and Geophysics, B.S. (p. 719)
- German, B.A. (p. 726)
- German, B.S. (p. 730)
- German, BSE (p. 1489)
- German, Certificate (p. 733)
- Global Health, Certificate (p. 185)
- Health and the Humanities, Certificate (p. 643)
- Health Care Management, Specialization (p. 1315)
- History and History of Science, Medicine, and Technology, B.A. (p. 756)
- History and History of Science, Medicine, and Technology, B.S. (p. 761)
- History of Science, Medicine, and Technology, B.A. (p. 767)
- History of Science, Medicine, and Technology, B.S. (p. 769)
- History, B.A. (p. 772)
- History, B.S. (p. 781)
- Horticulture, B.S. (p. 174)
- Human Development and Family Studies, B.S. (p. 1684)
- Individual Major, B.A. (p. 1063)
- Individual Major, B.S. (p. 1687)
- Individual Major, B.S. (p. 1066)
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- Individual Major, BSE (p. 1595)
- Industrial Engineering, B.S. (p. 301)
- Integrated Liberal Studies, Certificate (p. 964)
- Integrated Studies in Science, Engineering, and Society, Certificate (p. 1252)
- Interior Architecture, B.S. (p. 1676)
- International Engineering, Certificate (p. 299)
- International Studies, B.A. (p. 822)
- International Studies, B.S. (p. 879)
- Introductory Studies in Dance/Movement Therapy, Certificate (p. 1594)
- Italian, B.A. (p. 666)
- Italian, B.S. (p. 670)
- Italian, BSE (p. 1505)
- Italian, Certificate (p. 674)
- Japanese Professional Communication, Certificate (p. 444)
- Japanese, B.A. (p. 448)
- Japanese, B.S. (p. 454)
- Japanese, BSE (p. 1517)
- Jewish Studies, B.A. (p. 1150)
- Jewish Studies, B.S. (p. 1156)
- Jewish Studies, Certificate (p. 1161)
- Journalism, JBA (p. 1223)
- Journalism, JBS (p. 1227)
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- Landscape Architecture, B.S. (p. 56)
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- Landscape Architecture, BSLA (p. 60)
- Languages and Cultures of Asia, B.A. (p. 459)
- Languages and Cultures of Asia, B.S. (p. 459)
- Latin American, Caribbean, and Iberian Studies, B.A. (p. 936)
- Latin American, Caribbean, and Iberian Studies, B.S. (p. 943)
- Latin, B.A. (p. 561)
- Latin, B.S. (p. 565)
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- Legal Studies, B.A. (p. 514)
- Legal Studies, B.S. (p. 519)
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- Life Sciences Communication, B.S. (p. 181)
- Linguistics, B.A. (p. 1037)
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- Manufacturing Engineering, Certificate (p. 312)
- Material Culture Studies, Certificate (p. 419)
- Materials Science and Engineering, B.S. (p. 306)
- Mathematics, B.A. (p. 1080)
- Mathematics, B.S. (p. 1089)
- Mathematics, Certificate (p. 1099)
- Mechanical Engineering, B.S. (p. 314)
- Medieval Studies, Certificate (p. 790)
- Microbiology, B.A. (L\&S) (p. 1068)
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- Middle East Studies, Certificate (p. 950)
- Molecular Biology, B.A. (p. 1004)
- Molecular Biology, B.S. (p. 1009)
- Music, B.A. (p. 1102)
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- Naval Science, BNS (p. 300)
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- Nursing, BSN (p. 1696)
- Nursing, BSN (Accelerated Program) (p. 1700)
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- Philosophy, B.A. (p. 1165)
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- Physics, B.A. (p. 1173)
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- Political Science, B.A. (p. 1192)
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- Psychology, B.A. (p. 1204)
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- Russian, B.A. (p. 740)
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- Russian, East European, and Central Asian Studies, Certificate (p. 954)
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- Spanish, BSE (p. 1569)
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- Sustainability, Certificate (p. 1296)
- Teaching English to Speakers of Other Languages, Certificate (p. 645)
- Technical Communication, Certificate (p. 296)
- Technical Japanese Studies for Undergraduates, Certificate (p. 299)
- Textiles and Design, Certificate (http://guide.wisc.edu/ undergraduate/human-ecology/design-studies/textiles-designcertificate)
- Textiles and Fashion Design, B.S. (p. 1679)
- Theatre and Drama, B.S. (p. 1653)
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- Zoology, B.A. (p. 1026)
- Zoology, B.S. (p. 1032)


## SCHOOLS AND COLLEGES

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- College of Engineering (p. 222)
- College of Letters \& Science (p. 319)
- Gaylord Nelson Institute for Environmental Studies (p. 1290)
- School of Business (p. 1297)
- School of Education (p. 1380)
- School of Human Ecology (p. 1658)
- School of Nursing (p. 1689)
- School of Pharmacy (p. 1706)


## ADVISING

## WHAT IS ADVISING?

At UW-Madison advising is a partnership between students and the network of advisors they build during their time here. Advising is one of the most essential resources available to students and can play a pivotal role in the college experience and beyond. Advisors can help students get the most out of their Wisconsin Experience by helping them make wellinformed decisions, sharing strategies for success, supporting them as they encounter challenges, connecting them to resources, and providing information about campus policies and procedures.

There are many reasons to see an advisor and advising is not limited to certain subjects or specific months of the year. Here are some of the many topics that advisors can help students with:

- Discovering and achieving academic, career, and life goals
- Connecting a major to a career
- Creating a graduation timeline plan
- Selecting courses and fulfilling degree requirements
- Connecting with tutors
- Getting involved with campus organizations
- Practicing for job interviews
- Choosing a study abroad program
- Finding an internship
- Researching volunteer opportunities
- Understanding university policies and deadlines
- Talking about graduate school
- Proofreading resumes and cover letters

To find contact information for advisors, including the assigned advisor, see this link (http://www.advising.wisc.edu/content/find-an-advisor).

## SCHOOL AND COLLEGE ACADEMIC ADVISING OFFICES

UW-Madison has eight undergraduate schools and colleges. All undergraduates are assigned to an advisor in their area of academic interest, or to a Cross-College Advising Service advisor who specializes in working with undecided students.

## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES (CALS)

Academic Affairs Office
cals.wisc.edu/academics/undergraduate-students/advising (http:// cals.wisc.edu/academics/undergraduate-students/advising)

## COLLEGE OF ENGINEERING (EGR)

Academic Affairs Office
engr.wisc.edu/academics/student-services (http://engr.wisc.edu/ academics/student-services)

## COLLEGE OF LETTERS \& SCIENCE (L\&S)

Academic Advising Services
advising.ls.wisc.edu (http://advising.ls.wisc.edu)

## COLLEGE OF LETTERS \& SCIENCE, CENTER FOR ACADEMIC EXCELLENCE (CAE) <br> cae.Is.wisc.edu (http://cae.Is.wisc.edu)

## COLLEGE OF LETTERS \& SCIENCE HONORS PROGRAM

honors.Is.wisc.edu (http://honors.Is.wisc.edu)
For honors programs outside of L\&S, contact the school/college advising office.

## SCHOOL OF EDUCATION (EDU)

Education Academic Servicese
education.wisc.edu/soe/academics/undergraduate-students (http:// education.wisc.edu/soe/academics/undergraduate-students)

## SCHOOL OF HUMAN ECOLOGY (SOHE)

Student Academic Affairs and Career Development sohe.wisc.edu/advising (http://sohe.wisc.edu/advising)

## SCHOOL OF NURSING (NUR)

Academic Programs Office
students.nursing.wisc.edu/undergraduate-menu/ (http://
students.nursing.wisc.edu/undergraduate-menu)

## SCHOOL OF PHARMACY (PHRM)

Student \& Academic Affairs Office
pharmacy.wisc.edu/student-academic-affairs/advising (http:// pharmacy.wisc.edu/student-academic-affairs/advising)

## WISCONSIN SCHOOL OF BUSINESS (BUS)

BBA Advising Center
bus.wisc.edu/bba/mybiz (http://bus.wisc.edu/bba/mybiz)

## CROSS-COLLEGE ADVISING SERVICE (CCAS)

The Cross-College Advising Service (CCAS) (https://ccas.wisc.edu) is a campuswide advising service for undergraduates who are undecided about a major and want to explore the many academic opportunities on campus. CCAS also assists students who are considering changing majors or who have not been admitted to limitedenrollment programs and need to explore other options. CCAS advisors are knowledgeable about all the programs and majors offered by the eight undergraduate schools and colleges on campus. Each year at SOAR (Student Orientation, Advising, and Registration) (http://soar.wisc.edu), approximately one-third of the students in the entering class self-identify as "undecided/exploring" and are assigned to CCAS advisors.

In addition to the main CCAS office in Ingraham Hall, CCAS has residence hall advising offices in Chadbourne Residential College, Sellery Hall, Witte Hall, Ogg Hall, and Dejope Hall. The Dejope office is available to all students in Lakeshore-area residence halls.

## CAREER PLANNING

All students are encouraged to work with a career advisor, Each individual school or college offers career services, and the Career Exploration Center (CEC) works with students looking to explore their options. Links to each of the campus career services ofices are available online at careers.wisc.edu

Career planning is a multi-year process that includes self-assessment and reflection, exploring academic and career options, gaining experience in areas of interest, and ultimately organizing and conducting a job or graduate school search.

Students work with professional career advisors to engage in a wide variety of career planning activities to prepare for life after earning a degree from UW-Madison: educational workshops, job shadowing, informational interviewing, mock interviews, internships, career fairs and more. Active engagement in these activities assists students in achieving career readiness, which is "the attainment and demonstration of competencies that prepare college graduates for a successful transition into the workplace." (National Association of Colleges and Employers).

## CAREER EXPLORATION CENTER (CEC)

The Career Exploration Center (CEC) (https://ccas.wisc.edu/ careerexplorationcenter) is an early-stage career counseling resource that focuses primarily on students who have not yet decided on an academic major and/or their intended career path. The CEC is the leading campus resource for UW-Madison undergraduates who desire integrated major and career exploration. CEC career advisors help students focus on their interests, values, strengths, and personality to give them the tools they need to make decisions about their careers and their futures.

The center offers individual career advising appointments, a robust career library, workshops on a variety of topics that engage students in major and career exploration, career assessments (often referred to as "career
tests"), and the Majors Fair which provides students the opportunity to speak with representatives from more than 100 academic programs in one place.

## PRE-PROFESSIONAL STUDY <br> PRE-HEALTH ADVISING

Students interested in preparing for medicine, dentistry, pharmacy, veterinary medicine, nursing, occupational therapy, physical therapy, physician assistant or public health, chiropractic, or podiatric medicine should work with the Center for Pre-Health Advising (CPHA) (http:// prehealth.wisc.edu).

CPHA supports students as they explore graduate and professional programs in healthcare. Its team of professional advisors helps students integrate the prerequisite coursework into their school/college and major requirements, discuss ways to get involved in research and clinical service opportunities on campus. CPHA advisors can help students prepare for professional exams and the application process, summer research programs, internships, and scholarship opportunities.

## PRE-LAW

The best preparation for law school is a broad liberal arts background that includes courses that strengthen communication skills, the ability to think logically, and understanding human instructions and values. Pre-law is not an undergraduate major.

The Center for Pre-Law Advising provides advising and other resources to UW-Madison students and alumni at all stages in the process of considering, preparing for, and applying to law school. Unlike other preprofessional tracks in college, there is no prerequisite coursework that students must complete in order to either apply to or succeed in law school. There are, however, certain skills and broad areas of knowledge that could better prepare students for law school. Pre-Law Advising staff are available to assist with course selection, law school application development, and research on careers in the legal profession. For more information, students should contact a pre-law advisor (see Pre-Law Advising (http://prelaw.wisc.edu)).

## ADVISING OFFICES AND PROGRAMS adult career and special student services acsss.wisc.edu (http://acsss.wisc.edu)

CENTER FOR EDUCATIONAL OPPORTUNITY (CEO)<br>ceo.wisc.edu (http://ceo.wisc.edu)

CHANCELLOR'S AND POWERS-KNAPP SCHOLARSHIP PRGRAMS
cspks.wisc.edu (http://cspks.wisc.edu)

## INTERNATIONAL STUDENT SERVICES

iss.wisc.edu (http://iss.wisc.edu)

## NATIVE AMERICAN CENTER FOR HEALTH PROFESSIONS

med.wisc.edu/education/native-american-center-for-health-professions/ (http://med.wisc.edu/education/native-american-center-for-healthprofessions)

OFFICE OF ACADEMIC SERVICES, ATHLETICS
uwbadgers.com (http://guide.wisc.edu/undergraduate/http:/ uwbadgers.com)

## OFFICE OF MULTICULTURAL ARTS INITIATIVES

omai.wisc.edu (http://omai.wisc.edu)

## PEOPLE PROGRAM <br> peopleprogram.wisc.edu (http://peopleprogram.wisc.edu)

## TRANSFER TRANSITION PROGRAM

transfer.wisc.edu/ (http://transfer.wisc.edu)

## UNDERGRADUATE ACADEMIC AWARDS OFFICE

awards.advising.wisc.edu/ (http://awards.advising.wisc.edu)

## STUDY ABROAD ADVISING SCHOOL/COLLEGE STUDY ABROAD OFFICES

Several schools and colleges have their own study abroad offices and offer information about study abroad programs that are directly related to certain areas of study.

- College of Agricultural and Life Sciences
- College of Engineering
- University of Wisconsin Law School
- Wisconsin School of Business


## INTERNATIONAL ACADEMIC PROGRAMS (IAP)

studyabroad.wisc.edu (http://studyabroad.wisc.edu)
International Academic Programs (IAP) offers more than 200 programs on six continents for students of all ajors. Courses through IAP programs can count toward degree requirements, allowing students to stay on track for graduation. Scholarships, grants, and financiall aid are available.

## INTERNATIONAL INTERNSHIPS

internships.international.wisc.edu (http://
internships.international.wisc.edu)
The International Internship Program (IIP) works with students of all majors looking to gain experience and explore careers through international internships. Students can intern around the world or in the United States. Advising, academic credits, and scholarships are available.

## NON-UNIVERSITY STUDY ABROAD

Students considering participating in a study abroad program sponsored by a university other than UW-Madison should contact International Academic Programs (IAP) for more information.

## GRADUATING IN FOUR YEARS OR FEWER

UW-Madison encourages, supports, and expects students to work with academic advisors to create, maintain, and plan a graduation timeline. Students should consult with their assigned academic advisor(s) before each enrollment period, and more as needed.

To ensure a timely graduation, students should discuss the following topics with their advisor.

- Exploring interests while making progress on degree requirements
- Setting and achieving academic and career goals
- Academic challenges and connecting to resources that support academic success
- Procedures and requirements for declaring a major
- Using the Degree Audit Reporting System (DARS) (https:// registrar.wisc.edu) to check progress toward the degree
- Any changes to a declared major, as well as alternative plans if applying to a competitive limited-enrollment program
- A strategic course schedule to stay on track for graduation

A reciprocal agreement for a four-year graduation plan is available for most degree programs to students entering UW-Madison as freshmen. Students interested in the agreement must attend SOAR (Student Orientation, Advising, and Registration). For more information see UWMadison Four-Year Graduation Agreement (https://provost.wisc.edu/uw-madison-four-year-graduation-agreement).

## DEGREE AUDIT REPORTING SYSTEM (DARS)

A Degree Audit Reporting System (DARS) (https://registrar.wisc.edu/ dars_student.htm) report is an automated summary of a student's degree progress. All schools and colleges at UW-Madison use DARS to audit the progress of most undergraduate degree programs and certificates.

DARS reports indicate which requirements are completed, which are complete with in-progress courses, and which remain unsatisfied. The report may specify courses that meet unsatisfied requirements. For most undergraduate programs, DARS is the tool used to determine completion of the program and/or eligibility to graduate.

Students can request and review their DARS in the Student Center via MyUW, and should contact their assigned advisor(s) for help reading and interpreting their DARS report.

## OFFICER EDUCATION

The Reserve Officers Training Corps (ROTC) prepares students to become commissioned officers in the U.S. Air Force, Army, Navy, or Marines, as well as for civilian careers. Students may be enrolled in ROTC while pursuing a degree at UW-Madison. ROTC courses are open to all undergraduates who have met the prerequisites. The number of ROTC credits that count toward a UW-Madison degree can vary by department and school or college. Prospective and registered students should contact the military program offices listed in this section of the catalog for information about regular course offerings, summer camp programs, and scholarships.

## AIR FORCE ROTC-AEROSPACE STUDIES

The Air Force ROTC (AFROTC) program is the primary path available to enter the U.S. Air Force as an officer. Students enroll in the AFROTC program while working toward the bachelor's degree in any major they choose. They attend an aerospace studies class each semester, a handson leadership laboratory, and weekly physical fitness sessions, while learning about how the Air Force works and deciding which job fields match their interests. Upon graduating, they enter active duty service as second lieutenants, in leadership and management roles in the Air Force.

Most career fields have an active-duty commitment of four years after college. If students choose to separate from the Air Force at that time,
they can pursue other careers with experience and the distinction of "military officer" on their resumes.

AFROTC is designed for students with three or more years remaining until graduation. To receive an officer's commission, AFROTC cadets must complete all necessary requirements for a degree as well as courses specified by the Air Force. Courses are often taken for academic credit as part of a student's electives. The amount of credit given toward a degree for AFROTC academic work is determined by the student's school or college, and major department.

Scholarships are available to qualified applicants. Scholarships may provide full tuition, laboratory and incidental fees, and reimbursement for textbooks. In addition, scholarship cadets receive a nontaxable allowance ranging from $\$ 300$ to $\$ 500$ per month, depending on academic/
AFROTC year. Juniors and seniors automatically receive \$450 and \$500, respectively

All AFROTC courses are open to all students regardless of membership in the program. Students are invited to take one of the program's courses to determine if AFROTC is right for them with no obligation to join. For more information, please contact the Recruiting Flight Commander at 608-262-3440 or 608-265-4812; afrotc@mailplus.wisc.edu.

## MILITARY SCIENCE-ARMY ROTC

The Army Reserve Officers' Training Corps (ROTC) is the nation's largest leadership and management-development training program. It offers the opportunity to earn a commission as a Second Lieutenant for Active Duty, Army Reserve, or Army National Guard while pursuing an academic degree. It enables young men and women to prepare themselves to be leaders in the Army or the civilian career field of their choice. The traditional four-year Army ROTC Program is divided into a two-year Basic Course and a two-year Advanced Course. A non-contracted student enrolled in the Basic Course does not incur a military service obligation.

## BASIC COURSE

This instruction introduces the student to fundamental military and leadership subjects. It is normally taken over four successive semesters, but may be completed in as few as two semesters. Students should discuss available options with the Scholarship \& Enrollment Officer before registering for courses if they have fewer than four semesters to complete the Basic Course.

The regular curriculum consists of a lecture and lab each semester. Freshmen are encouraged to take MIL SCI 101 Foundations of Officership and MIL SCI 110 Leadership Lab 1A in the fall and MIL SCI 102 Basic Leadership and MIL SCI 111 Leadership Lab 1B in the spring Sophomores are encouraged to take MIL SCI 201 Individual Leadership Studies and MIL SCI 210 Leadership Lab 2A in the fall and MIL SCI 202 Leadership and Teamwork and MIL SCI 211 Leadership Lab 2B in the spring. Students can enroll in a lecture without enrolling in the lab, but cannot enroll in a lab without the corresponding lecture. Labs are intended to provide practical leadership experience and military skills training such as map reading, land navigation, field training, and rifle/ pistol marksmanship.

## ADVANCED COURSE

Students who have completed the Basic Course or an equivalency (see Two-Year Program) and have passed all enrollment eligibility criteria continue on into the Advanced Course. This course consists of the following to include corresponding leadership labs, physical fitness
training sessions, and a four-week summer camp (Cadet Leader Course) at Fort Knox, Ky

| Code | Title | Credits |
| :--- | :--- | ---: |
| MIL SCI 301 | Leadership and Problem Solving | 2 |
| MIL SCI 302 | Leadership and Ethics | 2 |
| MIL SCI 401 | Leadership and Management | 2 |
| MIL SCI 402 | Officership | 2 |
| MIL SCI 491 | American Military History | 3 |

During labs and physical training sessions students are provided practical leadership opportunities to prepare them for summer camp and their future military careers. Students normally attend summer camp between their junior and senior years of Military Science. Students must complete all components of this course to earn a commission.

## TWO-YEAR PROGRAM

Students who are veterans, members of the Army National Guard/ Army Reserve, or who have participated in the Junior Reserve Officers' Training Corps Program in high school may qualify for direct entry into the Advanced Course. Students who did not complete the ROTC Basic Course (see above), but have two years of academic study remaining may be eligible to attend the Cadet Initial Entry Training. This course compresses two years of the Basic Course into four weeks and is held at Fort Knox, KY during the summer. Students who believe they qualify for this program should consult with the Scholarship \& Enrollment Officer for more information.

## SCHOLARSHIPS

Qualified students may compete for Army ROTC scholarships ranging from two to four years in duration. Students must be enrolled and participating in Army ROTC to be eligible for scholarships. Scholarships are merit based and pay full tuition \& fees (both in and out-of-state) or room and board (capped at $\$ 5,000 /$ semester) but not both, $\$ 600 /$ semester for textbooks and laboratory expenses, and a tax fee subsistence stipend of $\$ 300-\$ 500$ for each month of the regular school year depending on Military Science level. Interested students should consult with the Scholarship \& Enrollment Officer for more detailed information concerning the scholarship eligibility requirements. For additional information about Army ROTC, students may contact Josh Beyerl in the Department of Military Science, 1910 Linden Drive, 608-262-3411, armyrotc@mailplus.wisc.edu.

The naval science curriculum is designed to prepare college students to become commissioned officers in the Navy or Marine Corps. Naval Science courses are normally taken for academic credit as part of a student's free electives. Enrollment will be in one of the following categories.

## NAVAL SCIENCE-NAVAL ROTC MISSION

The Naval ROTC Program was established to develop midshipmen mentally, morally and physically and to imbue them with the highest ideals of duty, and loyalty, and with the core values of honor, courage and commitment in order to commission college graduates as Naval officers who possess a basic professional background, are motivated toward careers in the Naval service, and have a potential for future development
in mind and character so as to assume the highest responsibilities of command, citizenship and government.

## PROGRAM DESCRIPTION

The purpose of the Naval ROTC Program is to educate and train qualified young men and women for service as commissioned officers in the Navy's unrestricted line, and the Marine Corps. As the largest single source of Navy and Marine Corps officers, the Naval ROTC Scholarship Program plays an important role in preparing mature young men and women for leadership and management positions in an increasingly technical Navy and Marine Corps.

Selected applicants for the four-year Naval ROTC Scholarship Program are awarded scholarships through a highly competitive national selection process, and receive full tuition, books stipend, educational fees and other financial benefits. Upon graduation, midshipmen are commissioned as active duty officers in the Navy's unrestricted line or the Marine Corps.

The four-year Naval ROTC Scholarship Program is available to qualified students who graduate from high school before August 1 of the year they intend to start college, and have earned less than 30 credit hours of college-level courses.

Students may affiliate with the Naval ROTC program, with the approval of the Professor of Naval Science, as College Program midshipmen, but receive none of the monetary benefits of scholarship students. College program midshipmen may apply and compete for $3-, 2$-, or 1 -year NROTC scholarships in each of their freshman, sophomore and junior academic years.

Students selected for the Navy ROTC Scholarship Program make their own arrangements for college enrollment and room and board, and take the normal course load required by the college or university for degree completion.

Upon graduation, midshipmen who complete all academic requirements in the Navy ROTC program are commissioned as an Ensign in the Navy or a $2^{\text {nd }}$ Lieutenant in the Marine Corps and will be required to serve a minimum of five years of active military service. (Additional service requirements may apply for specific service assignments; e.g., pilot, nuclear power officer.)

## PROGRAM REQUIREMENTS

- Complete all requirements for a bachelor's degree.
- Complete specified Naval Science courses:


## Navy Option

| Code | Title | Credits |
| :--- | :--- | ---: |
| NAV SCI 101 | Introduction to Naval Science | 2 |
| NAV SCI 102 | Seapower-Maritime Affairs | 3 |
| NAV SCI 201 | Naval Leadership and Management | 3 |
| NAV SCI 202 | Navigation | 3 |
| NAV SCI 301 | Naval Engineering | 3 |
| NAV SCI 302 | Naval Weapons | 3 |
| NAV SCI 401 | Naval Operations | 3 |
| NAV SCI 402 | Naval Leadership and Ethics | 3 |

## Marine Option

Code Title Credits
NAV SCI 101
Introduction to Naval Science
2

| NAV SCI 202 | Navigation | 3 |
| :--- | :--- | :--- |
| NAV SCI 350 | Amphibious Campaigns | 3 |
| NAV SCI 351 | Land Campaigns | 3 |
| NAV SCI 401 | Naval Operations | 3 |
| NAV SCI 402 | Naval Leadership and Ethics | 3 |

- In addition (or concurrent) to prescribed undergraduate degree and Naval Science course load, midshipmen must also satisfy these academic requirements:
- Calculus (two semesters, by end of sophomore year). Not required for Marine option students.
- Physics (two-semesters of calculus-based physics, by end of junior year). Not required for Marine option students.
- English grammar and composition (two-semesters).
- National Security Policy/American Military Affairs (onesemester).
- World Culture/Regional Studies (one-semester; certain countries or cultures do not satisfy).
- Maintain a minimum, cumulative 2.5 GPA.
- Register for, and attend a one credit Naval Science leadership lab each semester (NAV SCI 175 Introductory Naval Laboratory I, NAV SCI 176 Introductory Naval Laboratory II, NAV SCI 275 Elementary Naval Laboratory I, NAV SCI 276 Elementary Naval Laboratory II, NAV SCI 375 Intermediate Naval Laboratory I, NAV SCl 376 Intermediate Naval Laboratory II, NAV SCI 475 Advanced Naval Laboratory I, NAV SCI 476 Advanced Naval Laboratory II)
- Participate in a 4-6-week training period each summer


## SUMMER TRAINING REQUIREMENTS

A significant portion of a midshipman's professional training during their four-year curriculum is received during summer training.

Navy option midshipmen attend summer training, to include Career Orientation and Training for Midshipmen (CORTRAMID) for rising sophomores, and Atlantic/Pacific Training of Midshipmen (LANTRAMID/ PACTRAMID) for rising juniors and seniors.

Marine Corps option summer training includes Career Orientation and Training for Midshipmen (CORTRAMID) for rising sophomores, and Atlantic/Pacific Training of Midshipmen (LANTRAMID/PACTRAMID) for rising juniors. All rising senior Marine option midshipmen attend the 6week Marine Corps Officer Candidate School in Quantico, VA.

Midshipmen must ultimately make decisions as to which warfare area they will request to be commissioned into; CORTRAMID and the various summer training programs are designed to instill awareness of these areas and provide midshipmen with the background necessary to make informed decisions regarding their career choice.

## POSSIBLE SUMMER TRAINING ASSIGNMENTS

- CORTRAMID: Midshipmen assigned to this training will travel to a Fleet concentration area on either the East or West coast and spend a week with each of the following warfare communities: surface ship, submarine, aviation, and Marine Corps.
- Nuclear Power: Midshipmen can be assigned to a nuclear submarine or aircraft carrier.
- Afloat Aviation Option: Selected, qualified midshipmen train aboard an aircraft carrier; training includes flight time on navy aircraft if feasible
- Ashore Aviation Option: Selected, qualified midshipmen train with a shore-based Navy aviation squadron, including flight time if feasible
- Foreign Exchange Training of Midshipmen (FOREXTRAMID) - if selected, Midshipmen would be assigned to spend a summer training period training with a foreign Navy.


## PEOPLE

Air Force ROTC-Aerospace Studies: Professor Lt Col Goar; Assistant Professor Capt Paeth

Military Science-Army ROTC: Professor Lieutenant Colonel Blue; Enrollment Officer. Josh Beyerl

Naval Science-Professor, CAPT Zacharski; Associate Professor, CDR Barrett; Assistant Professors; LT Dryden, LT Ebert, and Marine Cpt Simonds. The assistant professors act as undergraduate advisors and may be contacted through the department office.

## CONTACT INFORMATION

Air Force ROTC-Aerospace Studies
608-262-3440
1433 Monroe Street, Madison, WI 53711
http://www.afrotc.wisc.edu/
Military Science-Army ROTC
608-262-3411
1910 Linden Drive, Madison, WI 53706
http://www.badgerrotc.wisc.edu/

## Naval Science

608-262-3794
1610 University Avenue, Madison, WI 53726-4086
http://nrotc.wisc.edu/

## WISCONSIN EXPERIENCE

## WISCONSIN EXPERIENCE

The Wisconsin Experience is UW-Madison's vision for the total undergraduate student experience, which combines learning in and out of the classroom. Tied to the Wisconsin Idea and steeped in our long-standing institutional values-the commitment to the truth, shared participation in decision-making, and service to local and global communities-the Wisconsin Experience describes how students develop and integrate these core values across their educational experience.

Through the Wisconsin Experience, our students will engage in the following areas of intellectual and personal growth.

## Empathy and Humility

- Develop and demonstrate cultural understanding of self and others
- Engage locally, nationally, and globally in a respectful and civil manner
- Appreciate and celebrate one another's abilities, views, and accomplishments


## Relentless Curiosity

- Actively learn with expert instructors, scholars, and peers
- Engage in creative inquiry, scholarship, and research
- Develop resilience, and foster courage in life and learning

Intellectual Confidence

- Develop competence, depth, and expertise in a field of study
- Integrate ideas and synthesize knowledge across multiple contexts
- Exercise critical thinking and effective communication


## Purposeful Action

- Apply knowledge and skills to solve problems
- Engage in public service, partner with others, and contribute to community
- Lead for positive change


## STUDENT LEARNING AT UW-MADISON

Student engagement and activism are deeply rooted in UW-Madison's rich history of academic and research excellence. Occasionally, students are expected to help the university better understand and improve student learning by participating in evaluative activities, which include undergraduate surveys, focus groups, and questionnaires, and by providing examples of their work through presentations, posters, demonstrations, and writing samples. We rely on the student perspective when assessing the effectiveness of academic and co-curricular programs. By participating, students help improve their own educational and related experiences and contribute to better educational experiences for future students.

## ACADEMIC ENRICHMENT AND HONORS PROGRAMS

UW-Madison offers students many ways to enrich their academic program, regardless of the major field of study they choose to pursue. Engaging in research, studying abroad, being part of learning communities, participating in university honors, becoming a student leader, engaging in service learning-these are all vital components that enhance and strengthen classroom learning. This partnership between in- and out-of-classroom learning form the foundation of the Wisconsin Experience. The university encourages students to take advantage of opportunities to integrate their learning experiences.

## Honors Programs

Honors programs, which vary slightly among the schools and colleges, are designed for students who wish to undertake work that is more intensive than regular course work. High grade point averages are required to maintain honors student standing. For more information, students should refer to the specific school or college (p. 15) section in this catalog, contact an honors advisor or consult Honors and Scholars Programs (http://provost.wisc.edu/honors_schools_colleges.htm).

## Undergraduate Research Opportunities

One of the most exciting things in life is to discover something new. UWMadison provides unique opportunities to learn from and work with some of the world's leading researchers and scholars. Options range from assisting with professors' ongoing research to designing and directing one's own projects. For many examples, see Undergraduate Research Opportunities (http://provost.wisc.edu/undergradresearch.htm). The Undergraduate Research Scholars Program (http://urs.ls.wisc.edu) is one opportunity available in the first or second year of study. Students may cap off their undergraduate degree with a senior thesis or senior honors thesis and are encouraged to present their work at the Undergraduate Symposium. For program descriptions, see Undergraduate Symposium (https://ugradsymposium.wisc.edu). For a sampling of the many grants and awards available to support and honor this work, visit the

Undergraduate Academic Awards Office (http://provost.wisc.edu/ undergrad/scholarship.html).

## Service Learning

Undergraduates have access to more than 100 service-learning courses each year. These courses emphasize hands-on experiences that address real-world issues as a venue for educational growth. More information on service learning is available at the Morgridge Center for Public Service (http://morgridge.wisc.edu).

## Learning Communities

UW-Madison's rich tradition of supporting learning communities (http:// www.housing.wisc.edu/residencehalls-lc.htm) means that the traditional classroom is not the only place where students learn. Students may choose to participate in any of the many residential and nonresidential learning communities, where students, faculty, and staff work together as both learners and teachers to pursue their academic interests. For more information about residential options, see this link (http:// www.housing.wisc.edu/residencehalls-lc.htm).

## STUDY ABROAD PROGRAMS

Study abroad programs provide students with opportunities to gain the global competence vital in the twenty-first century. Each year UWMadison sends more than 2,000 students on study abroad programs around the globe. Study abroad provides a unique learning environment that extends and enhances courses taken on the home campus.

International Academic Programs (IAP) (https://
www.studyabroad.wisc.edu) serves as the primary study abroad office on campus, offering over 200 programs in over 60 countries around the world. IAP program offerings, available to all majors, range from shortterm, faculty-led opportunities to intensive language study, internships, a semester or a year at a university overseas, service-learning, and programs with special themes. Students can visit the Study Abroad Resource Center, 301 Red Gym, to meet with returned study abroad students and professional study abroad advisors who can help students prepare and research study abroad options.

In addition to IAP, the College of Agricultural and Life Sciences (p. 31), College of Engineering (p. 222), and Wisconsin School of Business (p. 1297) also offer international programs. These programs serve specialized needs within these schools and colleges for their undergraduate students.

## The Value of Study Abroad

Study abroad plays a crucial role in preparing students to broaden their international awareness and sharpen their skills for today's global job market. Regardless of their major, students will find that study abroad has much to offer. The availability of a variety of program sites and durations allows students to select programs based on their individual academic interests and personal goals and objectives. Students can choose from programs specifically designed to further their language skills or choose from programs featuring courses taught in English, and which require no previous foreign language training. Students can also find programs that incorporate internships for academic credit, servicelearning opportunities, and independent field research.

## Academic Credit and Eligibility

Credits earned through UW-Madison study abroad programs are considered "residence credits." Credits and grades will be posted on the UW-Madison transcript. In general, credits earned abroad can count toward fulfilling college and major requirements in any UWMadison school or college. Seniors who complete their major and degree
requirements while abroad on a UW-Madison program may graduate at the end of their study abroad program.

Each study program has its own eligibility requirements. Opportunities are available to students at all academic levels and for a range of program durations from one week to one year. Interested students benefit by talking with their academic advisor early in their academic career about how study abroad can fit into their academic plan and future career goals.

## Costs and Affordability

All programs are developed as cost-effectively as possible, recognizing the financial concerns of students. Overall the cost of study abroad includes items that students would have to pay for whether they were at home or abroad: academic fees, room and board, health insurance, and everyday living expenses such as telephone, local transportation, books, and supplies.

Students who study abroad in UW-Madison-sponsored programs may be eligible to use federal financial aid toward the costs of the program. Students should meet with the UW-Madison Office of Student Financial Aid to discuss eligibility requirements. In addition, students can apply for scholarships (https://www.studyabroad.wisc.edu/ scholarships.html) specifically designated for use with study abroad programs. These include UW-Madison, national, and international scholarship opportunities. Students can also use most campus and academic department scholarships for UW-Madison-sponsored study abroad programs.

## UW-MADISON'S ESSENTIAL LEARNING OUTCOMES

UW-Madison's Essential Learning Outcomes (ELOs) are shared learning outcomes that serve as an overarching framework to guide the undergraduate experience. Complemented by the Wisconsin Experience, these broad categories encompass many of the goals and purposes shared by UW-Madison's academic degree programs and co-curricular experiences.

## Knowledge of Human Cultures and the Physical and Natural World

Focused by engagement with big questions, both contemporary and enduring.

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts


## Intellectual and Practical Skills

Teamwork and problem solving. Practiced extensively across the curriculum in the context of progressively more challenging problems, projects, and standards for performance.

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information, media, and technology literacy


## Personal and Social Responsibility

Anchored through active involvement with diverse communities and realworld challenges.

- Civic knowledge and engagement-local and global
- Intercultural knowledge and competence
- Ethical reasoning and action


## - Foundations and skills for lifelong learning

## Integrative Learning

Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problem.

- Synthesis and advanced accomplishment across general and specialized studies

The ELOs were developed through an extensive project conducted by the Association of American Colleges and Universities (AAC\&U) responding to the question: "What qualities and skills do you want in college graduates?" The ELOs represent the responses from employers, business leaders, faculty, staff, and alumni.

## REQUIREMENTS FOR UNDERGRADUATE

## DEGREES

## REQUIREMENTS FOR UNDERGRADUATE DEGREES

The University of Wisconsin-Madison sets minimum standards that must be met by all students pursuing an undergraduate degree. The information in the following paragraphs provides general information about study at UW-Madison. Requirements may vary among the schools and colleges, and for specific programs. Students should learn about and understand the specific requirements for their program of study.

## TOTAL DEGREE CREDITS

To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits (which includes AP, IB and other test credit, transfer credit, and retroactive credit). Requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. Undergraduate Majors (p. 12).

## RESIDENCE CREDIT

Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats, as credits earned in UW-Madison Study Abroad/Study Away programs. Some schools and colleges may have additional requirements concerning courses taken in residence; students should refer to the specific school or college section of the Guide or consult with an advisor.

## UNDERGRADUATE MAJOR DECLARATION

Undergraduate degrees at UW-Madison presume that students are completing a program of study that consists of a degree program that combines the requirements for the degree with focused study in a discipline, or that combines school or collegewide requirements with an undergraduate major in which they pursue focused study. All undergraduates are expected to have declared or to have been admitted to their focused area of study by the end of the semester in which they have accumulated 86 credits. Students who have not met this expectation may be prevented from enrolling in future terms until they meet with their advisor. Some schools and colleges have additional requirements governing when majors may be declared; students should refer to the specific school or college section of the Guide and consult with an advisor about declaring their major. For additional details,
see Policy on Major Declaration for Schools/Colleges That Enroll Undergraduates (https://kb.wisc.edu/vesta/page.php?id=58465).

## ACADEMIC PROBATION

Undergraduate students must maintain the minimum academic thresholds, including the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## GENERAL EDUCATION REQUIREMENTS

All undergraduate students at UW-Madison must complete the university-wide General Education Requirements, which are designed to convey the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. These requirements provide for breadth across the humanities and arts, social studies, and natural sciences; competence in communication, critical thinking, and analytical skills necessary for success in college and beyond; and investigation of the issues raised by living in a culturally diverse society. This core is intended to provide students with intellectual and practical skills, basic knowledge of human cultures and the physical world, strategies for understanding these topics, and tools intended to contribute to their sense of personal and social responsibility. General Education complements the work students do in their majors and degrees. Together, these requirements help students learn what they need to know not just for making a living, but also for making a life.

Completing the General Education Requirements is an important part of achieving these competencies, and to do so, students choose from many courses in communication, ethnic studies, quantitative reasoning, and breadth of study across disciplines in the natural sciences, humanities, literature, and arts, and social and behavioral sciences.

Each school and college may choose to allow General Education courses to count toward other degree and/or major requirements. Students should always check with their advisors to discuss any additional degree requirements and determine if students are required to take specific General Education courses or to complete the requirements in a particular order. Students should review their Degree Audit (DARS) report to see how they are progressing toward fulfilling the General Education requirements. Please refer to this website (https://gened.wisc.edu) for more information about the requirements.

The university-wide General Education requirements are:

## BREADTH, 13-15 CREDITS, DISTRIBUTED OVER THREE AREAS

All students must complete 13-15 credits of coursework intended to provide a breadth of experience across the major modes of academic inquiry. This requirement encourages students to adopt a broad intellectual perspective, to examine the world through investigative, critical, and creative strategies practiced in the natural (computational, biological, and physical) sciences, social and behavioral sciences, as well as in the arts and humanities.

Learning Outcomes: Students acquire critical and creative thinking skills as well as enhance their problem-solving skills through a breadth of study across the humanities and arts, social studies, computational, biological sciences and physical sciences.

In courses satisfying the Breadth requirement, students will:

- articulate examples of significant contributions to human understanding achieved through various "ways of knowing" found in the arts and humanities; social and behavioral sciences; and computational, biological, and physical sciences.
- recognize and articulate the ways in which different disciplines approach questions that call upon different tools of inquiry, understanding, and creative enterprise.
- identify ways in which multiple tools of inquiry and understanding can be used to achieve greater insight into resolving "big" questions (e.g., climate change, poverty, global health etc.), evaluating the strengths and weaknesses of those approaches, and understanding which complementary approaches will help achieve meaningful change.
- evaluate different modes of inquiry across the humanities and arts; social studies; computational, biological, and physical sciences, and identify strengths and weaknesses of those approaches across disciplines when approaching a question.

To achieve these outcomes, students are required to complete courses in the following areas.

- Natural Science, 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Humanities/Literature/Arts, 6 credits
- Social Studies, 3 credits

This requirement challenges students to understand that there are many ways to research, understand, communicate about, and interpret creatively the world around us. These "ways of knowing" intersect and overlap, and the ideas presented in one area will often inform and transform what students know and how they think about the others. Students develop skills that help them make informed decisions in a wide range of political, economic, and social contexts, to think critically about the world, to better understand their own and others' experience, and to behave in socially responsible ways. (For more information about how this exposure to breadth of inquiry and expression enriches students' undergraduate experience and complements intensive study in the major, please see the General Education Requirements (https://gened.wisc.edu) website.)

## COMMUNICATION, 3 TO 5/6 CREDITS

The Communication requirement helps to ensure that all graduates of UW-Madison acquire essential communication and researchgathering skills necessary for success in university course work and beyond. Communication-A (Comm-A) and Communication-B (CommB) courses train students to gather and assess information from a variety of sources and to present different kinds of information, insight, and analysis to diverse audiences. These courses are essential for students' career success and their preparation for public life in a rapidly changing world. While Comm-A courses focus exclusively on essential communication skills, Comm-B courses provide content instruction in a specific discipline and teach research, writing, and speaking skills in conjunction with the course content. Comm-B courses are offered by departments across campus and vary widely in topic, content, and format.

Learning Outcomes: Students develop skills that enable them to be effective speakers and writers in and out of the classroom.

In courses satisfying the Communication requirement, students will:

- make effective use of information retrieved, organized, and synthesized from appropriate sources.
- present ideas and information clearly and logically to achieve a specific purpose.
- make effective use of communicative forms appropriate to a specific discipline, and adapted to the intended audience.
- use appropriate style and conventions associated with particular communicative forms, genres, or disciplines.

To achieve these outcomes, students must complete the following Communication requirements:

- Part A. Literacy Proficiency. 2-3 credits at first-year level dedicated to reading, listening, and discussion, with emphasis on writing. While most incoming freshmen are required to complete coursework to fulfill this requirement, students may be exempted from Part A by approved college course work while in high school, AP test scores, or placement testing. Students are expected to satisfy this requirement by the end of their first year of undergraduate study.
- Part B. Enhancing Literacy Proficiency. 2-3 credits of more advanced coursework for students who have completed or been exempted from Part A. Students should consult with the appropriate undergraduate advisor about when this requirement should be completed. Courses that satisfy this requirement are offered in many fields of study; although a wide variety of courses fulfill this requirement, students are encouraged to select a course most in keeping with their interests or other requirements of their intended field(s) of study.


## ETHNIC STUDIES, 3 CREDITS

The Ethnic Studies requirement is intended to increase understanding of the culture and contributions of persistently marginalized racial or ethnic groups in the United States, and to equip students to respond constructively to issues connected with our pluralistic society and global community. Because this increased understanding is expected to have a positive effect on campus climate, students are expected to complete this requirement within the first 60 credits of undergraduate study

Learning Outcomes: Students draw connections between historical and present day circumstances, and consider perceptions and cultural assumptions when examining questions and making decisions.

In courses satisfying the Ethnic Studies requirement, students will:

- articulate some of the effects the past has had on present day circumstances, perceptions of, and disparities in, race in the U.S.
- recognize and question cultural assumptions, rules, biases, and knowledge claims as they relate to race and ethnicity.
- examine questions and make decisions with consideration for the cultural perspectives and worldviews of others.

Students complete this requirement by taking one course of at least 3 credits that is designated as an Ethnic Studies course.

## QUANTITATIVE REASONING, 3 TO 6 CREDITS

Quantitative Reasoning is the process of forming conclusions, judgments or inferences from quantitative information. The Quantitative Reasoning requirement at UW-Madison has two parts: Part A and B. Quantitative Reasoning A courses provide students with skills in mathematics, computer science, statistics or formal logic that are needed for dealing with quantitative information. The acquired skills are broad-based in
order to have a positive impact on the readiness of students to take a Quantitative Reasoning B course in a variety of disciplines. Quantitative Reasoning B courses allow students to enhance their Quantitative Reasoning Proficiency in a more advanced setting, where they make significant use of quantitative tools in the context of other course material.

Learning Outcomes: Students utilize mathematical models for scientific or real life problems to set up, analyze, interpret, make judgments, and draw appropriate conclusions based on quantitative analysis of data.

In courses satisfying the Quantitative Reasoning requirement, students will set up an abstract mathematical model or hypothesis for a given scientific or real life problem.

- interpret, handle and manipulate quantitative data sets for scientific or real life problems.
- quantitatively analyze data to obtain relevant insight about a given problem.
- make judgments and draw appropriate conclusions based on the quantitative analysis of data.

Students must complete the following to satisfy the Quantitative Reasoning Requirement:

- Part A. Quantitative Reasoning Proficiency. This requirement can be satisfied by:
- approved college work while in high school, AP test scores, or placement testing; or
- taking a 3 credit course at UW-Madison with a Quantitative Reasoning A designation.

To ensure timely completion of the undergraduate degree, students should complete Part A of the Quantitative Reasoning requirement by the end of their first year.

- Part B. Enhancing Quantitative Reasoning Proficiency. 3 credit course at UW-Madison with a Quantitative Reasoning B designation after satisfying the Part A requirement. Courses that satisfy this requirement are offered in a variety of fields of study. Students are encouraged to select a course in keeping with their interests or other requirements of their intended field(s) of study.


## IDENTIFYING COURSES THAT MEET GENERAL EDUCATION REQUIREMENTS

The university offers hundreds of courses that meet the requirements described above. Students should consider their own interests and check with their advisor when deciding which courses to complete. Please note that many undergraduate programs of study have breadth requirements that go beyond these basic university-wide requirements.

The following language is used in the UW-Madison course listings to indicate how courses count toward satisfying the communication, quantitative reasoning, and ethnic studies portions of the General Education Requirements. Courses that satisfy these requirements are also tagged with a mortarboard symbol. \#

- Communication Part A
- Communication Part B
- Ethnic Studies
- Quantitative Reasoning Part A
- Quantitative Reasoning Part B

Note: Some Communication Part B courses carry Communication B credit only at the lecture or section level and/or only in certain semesters; these courses will be indicated in the Schedule of Classes.

Course descriptions also include information about whether courses meet General Education Humanities, Natural Science, or Social Studies Breadth Requirements. (Click on course numbers in the Guide to see this information.) Students should also be aware that each school and college may, at its own discretion, designate additional courses that satisfy these requirements. For this reason, students should consult their advisors to obtain information about how these requirements are implemented in the school or college in which they are enrolled.

## GENERAL EDUCATION POLICIES

Exemption from General Education: All students are required to meet the fundamental degree requirements of the university, which include general education.

Disability-Based Waivers:The university has determined that waivers to the communication and quantitative reasoning portions of the general education component would fundamentally alter the nature of the University of Wisconsin-Madison degree. Students should not expect to obtain disability-based waivers to the communication and quantitative reasoning portions of the General Education Requirements.

Pass/Fail: Effective fall 2012, all courses taken to meet the University General Education Requirements must be taken on a graded basis. These grades are included in students' GPA calculations according to school/ college GPA rules.

## GRADUATING

Declaration of Intent to Graduate. When students expect to graduate, they must indicate their intent by completing the graduation application available in the MyUW Student Center. It is the policy of UW-Madison that all work for the degree must be completed and all degree requirements satisfied before the degree can be conferred.

Conferral of Degrees. When students have been certified as having completed all university general education, degree, and major requirements, the degree will be awarded. When the degree is awarded, a diploma will be issued, listing the degree earned, and the transcript updated to reflect the degree, major, and any other approved academic programs completed. Students who have holds (https://kb.wisc.edu/ helpdesk/page.php?id=4139) on their records will not receive their diplomas, or be able to order transcripts, until the holds are cleared.

Commencement. Students who wish to attend the spring or winter commencement ceremony must indicate their intent by completing the graduation application available via Student Center in My UW (https:// login.wisc.edu/idp/profile/SAML2/Redirect/SSO?execution=e4s1) by the posted deadline (https://commencement.wisc.edu/information-forgraduates). Students may participate in the commencement ceremony (https://commencement.wisc.edu), in which the chancellor and deans symbolically confer the degrees, even if all degree requirements have not been completed. Neither participation in the ceremony nor listing in the program conveys degree conferral. Students will not receive the diploma or transcript notation until all degree requirements are certified as complete by their respective school or college. Should a student's graduation plans change, updates to the intended term of graduation must be indicated via the graduation application in the MyUW Student Center.

## ENROLLMENT AND RECORDS

The Office of the Registrar (https://registrar.wisc.edu) is responsible for maintaining the academic records of students who attend the University of Wisconsin-Madison and for many services associated with these records, including enrollment and grading. The office is located at:

333 East Campus Mall \#10101
608-262-3811

Many student services are available online in the Student Center on My UW-Madison (My UW) (https://login.wisc.edu/idp/profile/SAML2/ Redirect/SSO?execution=e2s1), including enrolling for courses, viewing grades, and updating address and emergency contact information. Students are responsible for the accuracy of the addresses provided in My UW and for the courses selected when they enroll. For more information about services available through the Student Center, see the Student Demos \& Tutorials section of the Office of the Registrar website (https://registrar.wisc.edu).

My UW is available to eligible students, who gain access by using their Net ID and password. Access to My UW-Madison is available from any computer with Internet access. For further information about My UW-Madison, see DoIT (Division of Information Technology) (http:// it.wisc.edu).

## ENROLLMENT

Students enroll for courses, obtain information about deadlines, view their class schedule, and more in the Student Center on My UW (https:// login.wisc.edu/idp/profile/SAML2/Redirect/SSO?execution=e3s1). Individuals who are not eligible to activiate their Net ID to access the Student Center can view an up-to-date schedule of classes at the Office of the Registrar website (https://registrar.wisc.edu). Information about key deadlines and course enrollment, and online demonstrations of class search, course enrollment, and the Student Center are also available at the Office of the Registrar website (https://registrar.wisc.edu). Additional assistance with the course enrollment process is available by calling 608-262-0920 or sending an e-mail to webenroll@em.wisc.edu.

## GRADING SYSTEM

The general quality of a student's work is expressed in terms of a grade point average (GPA). It is based on the total number of credits taken for which grades of A through F are received. Semester grades are reported by letter only; plus and minus signs are not authorized. The highest possible GPA is 4.0, representing A grades in every course; the lowest possible is 0.0 . The following is the official scale of grades at UWMadison.

| GRADES WITH ASSOCIATED GRADE POINTS PER CREDIT |  |  |
| :--- | :--- | :--- |
| Grade |  | Grade Points <br> Per Credit |
| A | Excellent | 4 |
| AB | Intermediate Grade | 3.5 |
| B | Good | 3 |
| BC | Intermediate Grade | 2.5 |
| C | Fair | 2 |
| D | Poor | 1 |
| F | Failure | 0 |

Excluded from the grade point average are:
S or U (Satisfactory or Unsatisfactory) in courses taken on the pass/fail basis: $S$ for grades $A$ through $C$; U for grades $D$ and $F$.

Cr or N (Credit or No Credit) in courses offered on a credit/no credit basis.
I (Incomplete), a temporary grade used when work is not completed during a term. The symbol IN will be used to indicate an incomplete in a $\mathrm{Cr} / \mathrm{N}$ course.

Audited courses, denoted as AU in place of a number of credits on grade reports and transcripts, are graded either S (Satisfactory) or NR (No Report).
$P$ (Progress), a temporary grade used for courses extending beyond one term. The final grade determines the grade for each term and replaces $P$ grades for the course.

DR (Dropped), recorded for any course officially dropped later than two days before the last day to add courses.

NW (No Work) is used to indicate that the student never attended and no work was submitted.

In those relatively few cases in which no authorized grade is reported for a student at the close of a term, NR (No Report) will be used to signify the fact for record purposes.

## CREDIT/NO CREDIT COURSES

Some courses are designated as being offered on a Credit/No Credit basis. The transcript for the course will indicate either CR, meaning the student earned the credits for which the course was offered, or N , meaning that the student did not earn any credit even though enrolled for the course. Students may not take such courses on any other basis.

## PASS/FAIL

## POLICY ON USE OF PASS/FAIL GRADING OPTION FOR UNDERGRADUATES

This policy concerns the use of the pass/fail grading option for degreeseeking undergraduate students. According to the UW-Madison grading scale, grades of $S$ (satisfactory) and $U$ (unsatisfactory) are the transcripted grades that are used for what is commonly known as pass/ fail. It applies only to courses that use the default A-F grading scale and that also allow students to choose to take a course on a pass/fail (PF) basis. ${ }^{1}$

The instructor enters the letter grade earned by students on the grade roster, and those letter grades are subsequently recorded as a pass (S) or fail $(U)$ on the student record. A pass $(S)$ will be recorded when a letter grade of A through C is earned. A fail (U) will be recorded when a letter grade of $D$ or $F$ is earned. In addition to the $S$ or $U$ notation, the student transcript includes the symbol \# for courses that were taken on a pass/ fail basis. Neither the $S$ nor the $U$ is used in computing the grade point average. Instructors are not informed that a student has elected to take the course pass/fail.

## STUDENT ELIGIBILITY

Students must be in good academic standing according to their school/ college in order to be eligible to request the pass/fail grading option.

Undergraduates may carry one course on a pass/fail basis per term and a maximum of 16 credits during their undergrad career. The summer sessions collectively count as a single term.

Required courses cannot be taken on a pass/fail basis. The student's school or college may review the request to take a course pass/fail and reject requests for nonelective work. It may be difficult for the school or college official to determine whether a course is an elective or being used to fulfill a requirement since a student's enrollment or the way a course is being used in the specific program of study may change. Ultimately it is the student's responsibility to be sure that the requested course is an elective. Students are strongly advised to consult with an academic advisor before taking a course pass/fail. Courses taken on a pass/fail basis will not count for nonelective requirements even if they would normally count toward such requirements.

Each school or college is responsible for clearly communicating to its students what the definition of "good academic standing" is and what a free elective is.

In each school or college, the office responsible for academic policy exceptions is authorized to make exceptions to the pass/fail policy.

## PROCESS FOR REQUESTING THE PASS/FAIL GRADING OPTION

Students indicate that they would like to have a course they are enrolled in graded on a pass/fail basis by completing a course change request via their Student Center (see Grade Change Request (https:// registrar.wisc.edu/course_change_request.htm) for detailed information). Students may submit pass/fail requests via their Student Center from the time that they enroll until midnight on the Friday at the end of the fourth week of fall and spring semesters. (For modular and summer session courses, pass/fail requests must be submitted by midnight Friday of the week in which the session is one-fourth completed).

The deadline for requesting the pass/fail grading option is posted on the Office of the Registrar website. These deadlines are based on the idea that the pass/fail option is intended to encourage students to explore educational opportunities that they might otherwise not be willing to attempt. Pass/fail is not intended as a way for students to avoid academic consequences.

Once the student has submitted the request to take a course on a pass/ fail basis the request is routed via ISIS workflow to an academic dean in the school or college for approval or further communication with the student. The school/college official must approve the request before the grading option is changed to pass/fail by the Office of the Registrar.

Students can see whether a course is being graded on a pass/fail basis in their Student Center.
${ }^{1}$ For study abroad programs operated by the College of Engineering, courses taken abroad toward an engineering major will be posted as pass/fail. This occurs automatically and is not a student option; this practice is not covered or affected by this policy.

## FAILURES

Every course grade of F counts as 0 grade points and remains permanently on the transcript. If the course is repeated, the original $F$ will remain on the transcript and will be included in computing the GPA.

## INCOMPLETES

An Incomplete may be reported for a student who has carried a subject with a passing grade until near the end of the semester. If a student is unable to take or complete the final examination because of illness or other circumstances beyond his or her control, the student may be granted an Incomplete. An Incomplete is not given to a student who stays away from a final examination except as indicated above. In the absence of such proof the grade shall be F; even with such proof, if the instructor is convinced that the student cannot pass, the grade shall be F .

Undergraduate students enrolled in the College of Letters \& Science must complete the course work for which they received the Incomplete by the end of the fourth week of classes of the their next term of enrollment at UW-Madison (exclusive of summer sessions). Failure to do so will result in a lapse into a grade of $F$, unless the time limit has been formally extended. Letters \& Science students should see the L\&S section on Incompletes (p.342) for important details.

Undergraduates enrolled in schools or colleges other than Letters \& Science must complete the course work for which they received the Incomplete by the end of the their next term of enrollment (exclusive of summer sessions). Incompletes incurred in the last term of enrollment may not be removed after five years of absence from the university without special advance permission of the student's associate or assistant dean. Such Incompletes remain on the record but do not lapse into a grade of $F$.

## AUDIT

Students may audit courses with instructor and advisor consent, and if no laboratory or performance skills are involved. Auditors may not recite or take examinations but are expected to attend classes regularly and do some assigned work. Although courses for which students enroll as an auditor are factored into tuition, such courses do not earn academic credit and do not count in determining full-time/part-time load for enrollment certification in an academic term. The deadline to change a course from credit to audit is the end of the fourth week of classes. School and college policies may vary from this description. Students are advised to consult with the instructor concerning specific course requirements that must be satisfied.

## CLASS STANDING

Students are classified by year according to the number of credits and grade points they have earned:

Freshman: less than 24 credits
Sophomore: at least 24 credits
Junior: at least 54 credits
Senior: at least 86 credits

## TUITION AND FEES

The UW System Board of Regents sets tuition and fee rates annually. Rates are subject to change without notice.

The tuition and fee schedule is available on the Office of the Registrar website (https://registrar.wisc.edu/tuition_\&_fees.htm). Students who enroll after the first Friday of the official first week of classes are assessed a late initial enrollment fee. Exception: Special and Guest students have until the Friday of the second week of classes to enroll.

For tuition rate questions, contact the Office of the Registrar Tuition Assessment Section.
tuition@em.wisc.edu
608-262-4031
333 East Campus Mall \#10301
Madison, WI 53715-1384
Enrolled students can view tuition charges/payments, financial aid (loans, grants, scholarships) received, and refunds on their My UW (https:// login.wisc.edu/idp/profile/SAML2/Redirect/SSO?execution=e5s1) Student Center, Tuition Account Summary); they can also access links to view and pay tuition eBills, set up Authorized Payers for tuition account access, and enroll for eRefund.

The Bursar's Office provides the tuition bill as an eBill which is published on the Tuition Account eBill/ePayment site. Students and their Authorized Payers receive an email alert when the eBill is available to view.

For tuition account activity and billing questions, contact the Bursar's Office.
tuition@bussvc.wisc.edu (include student ID and name)
608-262-3611
333 East Campus Mall \#10501
Madison, WI 53715-1383

## PAYMENT OF TUITION AND FEES

The UW-Madison Bursar's Office does not accept debit or credit cards, nor offer an installment plan. Tuition payment options are: make an ePayment; mail a check to the Bursar's Office at the address above; pay in person with check or cash at the Bursar's Office; or put a check in the first-floor lobby or 10th-floor dropbox. For detailed payment information, see Tuition \& Fee Payments (http://www.bussvc.wisc.edu/bursar/ tuitpay.html) on the bursar's website.

If tuition is not paid by the due date, a late fee is assessed and a hold is placed on the student account to prevent future enrollment and release of official transcripts and diplomas, until the account is paid.

## RESIDENCE FOR TUITION PURPOSES

Wisconsin Statutes, Section 36.27(2), governs resident status for tuition purposes at all University of Wisconsin System institutions. Students who do not qualify under one of the exceptions in the statute will be assessed nonresident tuition. In determining resident status for tuition purposes, standards are different from those used for voting, paying taxes, applying for various licenses, and the like. In general, a student must be a bona fide resident of Wisconsin for at least 12 months before enrollment for any term in order to be eligible for in-state tuition. However, a student who comes to Wisconsin primarily for educational reasons does not automatically qualify as a Wisconsin resident even after living in Wisconsin for a year or more.

For more information and the full text of Wisconsin Statutes, Section 36.27(2), see the Office of the Registrar website (https:// registrar.wisc.edu/residence.htm) or contact a residence counselor at 608-262-1355; res4tuition@em.wisc.edu.

## MINNESOTA RECIPROCITY FOR TUITION RATES

Minnesota residents who are certified by the Minnesota Office of Higher Education for the appropriate term to attend UW-Madison under the

Minnesota-Wisconsin Tuition Reciprocity Agreement will be assessed the approved reciprocity tuition rate, plus the segregated fees assessed all UW-Madison students. Students under this program will be classified as nonresidents of Wisconsin.

It is the student's responsibility to inquire about application procedures, deadline dates, and reapplication procedures. Students may apply online on the Minnesota Office of Higher Education website (http:// www.ohe.state.mn.us). Questions may be directed to the Minnesota Office of Higher Education:
1450 Energy Park Drive, Suite 350
St. Paul, MN 55108-5227
651-642-0567 or 1-800-657-3866
They may also be directed to the UW-Madison Office of the Registrar (https://registrar.wisc.edu), Tuition Assessment Section:
333 East Campus Mall \#10301
Madison, WI 53715-1384
tuition@em.wisc.edu
608-262-4031

## RULES, RIGHTS, AND RESPONSIBILITIES

## STUDENT PRIVACY RIGHTS (FERPA)

Students have the right to inspect and review most education records maintained about them by the University of Wisconsin-Madison and, in many cases, decide if a third person can obtain information from them. Students may challenge information in their records which they believe to be inaccurate, misleading, or inappropriate.

The university has adopted a policy statement implementing all provisions of the Family Educational Rights and Privacy Act (FERPA). A copy of this statement may be obtained at the Office of the Registrar (https://registrar.wisc.edu), 333 East Campus Mall \#10101. The university, in accordance with the act, has designated the following as "directory information," which is publicly available unless a student asks to have any or all of it withheld: name; postal address; telephone numbers; e-mail addresses; date of birth; major field(s) of study and number of academic credits earned toward degree; attendance status (including current year, credit load, and full-or part-time status); dates of attendance (matriculation and withdrawal dates); degrees and awards received (type of degree and date granted); previously attended educational agencies or institutions; participation in officially recognized activities; and participation in athletics and weight and height of athletes.

Students wishing to keep some or all of their "directory information" confidential should restrict their information in the Student Center in My UW (https://login.wisc.edu/idp/profile/SAML2/Redirect/SSO? execution=e6s1). Students with questions about the provisions of the act or who believe the university is not complying with the act may obtain assistance from the Office of the Registrar:
333 East Campus Mall \#10101
Madison, WI 53715-1384
reginfo@em.wisc.edu
608-262-3811
Students have the right to file complaints alleging university noncompliance with the act with the federal agency that enforces the act. The address is: The Family Educational Rights and Privacy Act (http://www2.ed.gov/policy/gen/guid/fpco/ferpa) Office, Department of Education, 330 Independence Avenue SW, Washington, DC 20201.

Information about the Family Educational Rights and Privacy Act of 1974, as amended, is distributed during Wisconsin Welcome and is available at: Office of the Registrar (https://registrar.wisc.edu)
333 East Campus Mall \#10101
Madison, WI 53715-1384

## AVAILABILITY OF ACADEMIC RECORD INFORMATION TO PARENTS OR GUARDIANS OR OTHERS

A student may authorize a third party (e.g., a parent, guardian, spouse, potential employer, etc.) access to academic record information. An authorization form is available at the Office of the Registrar's website, or by visiting the Office of the Registrar (https://registrar.wisc.edu), 333 East Campus Mall \#10101. The authorization form permits release of specified information on a one-time basis to the specified third party. If no authorization is on file, it will be assumed that the student does not wish to give a third party access to academic record information. This policy is designed to give students specific control over the parties to whom academic record information may be released.

Grade reports will not be sent by the university to parents or guardians. Students are urged to keep their parents informed of their academic progress

## ACADEMIC INTEGRITY

UW-Madison students have the obligation to conduct their academic work in a manner consistent with high standards of academic integrity. They also have the right to expect that they and other students will be graded fairly, and they have the rights of due process should they be accused of academic misconduct. Therefore, it is important that students:

- become familiar with the rules of academic misconduct (UWS Ch. 14);
- ask their instructors if they are unsure whether something is acceptable (for example, how to use sources in a paper or whether to work with another student on an assignment);
- let instructors know if they think they see incidents of misconduct;
- be aware that helping someone else cheat is a violation of the rules; and

For complete discussion of the rules regarding academic integrity, see the Dean of Students website (https://www.students.wisc.edu/doso), or contact the assistant dean for academic integrity at 608-263-5700 or Room 70 Bascom Hall.

## STUDENT RIGHTS AND RESPONSIBILITIES

Every member of the University of Wisconsin-Madison community has the right to expect to conduct his or her academic and social life in an environment free from threats, danger, or harassment. Students also have the responsibility to conduct themselves in a manner compatible with membership in the university and local communities. UWS Chapters 17 and 18 of the Wisconsin Administrative Code list the university policies students are expected to uphold and describes the procedures used when students are accused of misconduct. Chapter 17 also lists the possible responses the university may apply when a student is found to violate policy. The process used to determine any violations and disciplinary actions is an important part of UWS 17. For the complete
text of UWS Chapter 17, see this link (https://students.wisc.edu/student-conduct/nonacademic-misconduct), or contact the on-call dean in the Dean of Students Office, 608-263-5700, Room 70 Bascom Hall.

No student may be denied admission to, participation in or the benefits of, or discriminated against in any service, program, course or facility of the [UW] system or its institutions or centers because of the student's race, color, creed, religion, sex, national origin, disability, ancestry, age, sexual orientation, pregnancy, marital status or parental status.

## STUDENT GRIEVANCE PROCEDURE

Any student at UW-Madison who feels that he or she has been treated unfairly has the right to voice a complaint and receive a prompt hearing of the grievance. The basis for a grievance can range from something as subtle as miscommunication to the extreme of harassment.

Each school or college has a procedure to hear grievances. Generally the process involves an informal attempt to solve the problem, if appropriate. If not, more formal proceedings can be undertaken until a resolution is reached. Advisors and school or college offices have detailed information. For assistance in determining options, students can contact the on-call dean in the Dean of Students Office, 608-263-5700, Room 70 Bascom Hall, Monday-Friday, 8:30 a.m.-4:30 p.m.

## SEEKING ASSISTANCE

A student can seek help at many places on campus, for both personal and academic problems. For answers to general questions on many topics, a good place to start is Ask Bucky (https://info.wisc.edu/askbucky), which is an excellent general referral service.

For personal problems, Counseling Services, a unit of University Health Services (http://www.uhs.wisc.edu), offers a variety of individual, group and couple counseling services. Experienced counselors, psychologists, and psychiatrists are available to assist students in overcoming depression and managing anxiety, and in developing self-awareness and understanding, independence, and self-direction. The counseling staff is experienced and sensitive to students of diverse cultural and ethnic backgrounds. Counseling Services is located at 333 East Campus Mall; 608-265-5600. In addition, an on-call dean in Student Assistance and Judicial Affairs is usually available by telephone (608-263-5700) or on a walk-in basis (75 Bascom Hall) Monday-Friday, 8:30 a.m.-4:30 p.m.

For academic problems, many places can offer help. The student should first discuss the problem with the professor or TA. If the problem is not resolved at that time, the student can speak with an academic advisor or the chair of the department. If further assistance is needed, the student should contact one of the academic deans in the school or college.

## ALCOHOLEDU (HTTPS:// WWW.UHS.WISC.EDU/PREVENTION/ SUBSTANCE-ABUSE/ALCOHOLEDU)

AlcoholEdu is an online course overseen by University Health Services that educates students about the impacts of alcohol and provides them with the information to make healthy decisions. All incoming degree seeking undergraduate students-including first-year and transfer students--must complete AlcoholEdu. The program consists of two parts, both of which must be completed.

## STUDENT LIFE

Nine departments and programs, and one center work together to collaborate with many campus units and work with students during their time at UW-Madison. We know that the Wisconsin Experience (https://students.wisc.edu/wisconsin-experience) has the potential to be transformative. Therefore, we strive to develop world leaders, engaged citizens, and interesting people. We have high expectations for students.

To help students make the most of their Wisconsin Experience, we urge them to get involved in activities that matter, to consider themselves representatives of the university, to act with integrity in all that they do, and to show respect to everyone they encounter. Students should take pride in themselves as world citizens and as scholars, demonstrate a strong work ethic, and capitalize on their opportunities and challenges. In promoting this behavior, we encourage students to think not just about their future, but about their legacy.

That is what it means to be a student at Wisconsin. That is what it means to do things that matter and to have purpose. Badgers are here to make the world a better place.

## ASSOCIATED STUDENTS OF MADISON (ASM)

4301 Student Activity Center
333 East Campus Mall
608-265-4276 (265-4ASM)
Web: www.asm.wisc.edu (http://asm.wisc.edu)
Twitter: @ASMstudentgovt (https://twitter.com/search?q=
\%40ASMstudentgovt\&src=typd)

- Promotes student voice as it pertains to legislative, diversity, and university affairs
- Distributes funding for student activities, organizations, and events to maximize student involvement in shaping campus life
- Supports elected student representatives
- The Open Seat food pantry strives to alleviate the stresses of food insecurity for those who need support.


## CENTER FOR THE FIRST-YEAR EXPERIENCE

155 Middleton Building
1305 Linden Drive
608-263-0367
Email: newstudent@studentlife.wisc.edu
Web: newstudent.wisc.edu (http://newstudent.wisc.edu)
Facebook: UW First-Year Experience (https://www.facebook.com/ UWNewStudent)
Twitter: @UWNewStudent (https://twitter.com/search?q= \%40UWNewStudent\&src=typd)

- Collaborates with campus partners to plan and implement Student Orientation, Advising, and Registration (SOAR) for incoming undergraduates and their families
- Oversees the Transfer Transition Program, which provides preadvising services to prospective students and support services to new transfer students on campus
- Assists incoming students with the academic and social transitions to the university through direct and indirect programming
- Offers seminar courses on the Wisconsin Experience and provides consultation and support to faculty and graduate students who work with first-year students
- Facilitates Our Wisconsin (https://ourwisconsin.students.wisc.edu), an inclusion program designed to develop community and a sense of belonging among all students, regardless of their background or identity


## CENTER FOR LEADERSHIP \& INVOLVEMENT

Third Floor, Red Gym
716 Langdon Street
608-263-0365
Email: cfli@studentlife.wisc.edu
Web: cfli.wisc.edu (http://cfli.wisc.edu)
Facebook: UWCfLI (https://ourwisconsin.students.wisc.edu)
Twitter: @UWCfLI (https://twitter.com/search?q=\%40UWCfLI\&src=typd)

- Facilitates the registration and advising for more than 1,000 student organizations, including fraternities and sororities
- Hosts student organization fairs
- Supports the Adventure Learning Programs, Student Leadership Program, the Wisconsin Band, and the Wisconsin Singers
- Administers and confers UW-Madison Leadership Certificate


## DEAN OF STUDENTS OFFICE

70 Bascom Hall
500 Lincoln Drive
608-263-5700
Email: dean@studentlife.wisc.edu
Web: doso.students.wisc.edu/ (https://doso.students.wisc.edu)

- Provides walk-in or call-in assistance
- Provides crisis loans and referral services to campus and community resources
- Responsible for academic and nonacademic misconduct process
- Promotes academic integrity
- Works to assess potential threats and promote campus safety
- Supports faculty and staff who have concerns about students they teach or employ
- Bias Response Process: UW-Madison takes incidents of hate and bias seriously and will investigate and respond appropriately to reported or observed incidents of bias or hate


## INTERNATIONAL STUDENT SERVICES

217 Red Gym
716 Langdon Street
608-262-2044
Email: iss@studentlife.wisc.edu
Web: iss.wisc.edu (http://iss.wisc.edu)
Twitter: @UW_ISS (https://twitter.com/UW_ISS)

- Provides advising for more than 6,000 international students and their dependents
- Issues nonimmigrant student visa documents and provides information on immigration regulations and procedures
- Provides orientation for new arrivals, as well as continuing support services and programs for cultural adjustment and integration to campus and community life


## GENDER AND SEXUALITY CAMPUS CENTER

## 123 Red Gym

716 Langdon Street
Phone: 608-265-3344
Email: Igbt@studentlife.wisc.edu
Web: Igbt.wisc.edu (http://Igbt.wisc.edu)
Facebook: LGBT Campus Center (https://www.facebook.com/ Igbtcampuscenter)
Twitter: @LGBTCC (https://twitter.com/LGBTCC)

- Educates faculty, staff, and students about sexual orientation and gender identity via ally and topic-specific training
- Provides support to LGBTQ and ally communities as well as resource materials in the resource library, online, and through discussion groups
- Organizes the Queer Emerging Leaders Program, the LGBTQ Leadership Institute, and a mentoring program
- Coordinates identity- and community-building events, including Out and About Month and Coming Out Month


## MCBURNEY DISABILITY RESOURCE CENTER

702 West Johnson Street, Suite 2104
608-263-2741
Email: mcburney@studentlife.wisc.edu
Web: mcburney.wisc.edu (http://mcburney.wisc.edu)
Text: 608-225-7956

- Promotes accessible, open, and welcoming campus community for students with disabilities
- Works with students with a variety of disabilities such as psychological/mental health, learning, chronic health, ADHD, vision, hearing, mobility, etc.
- Develops individualized accommodation plan for students with disabilities and provides classroom accommodations to students with disabilities taking undergraduate, grauate, and professional school courses
- Provides information and referral services on disability issues for students, faculty, staff, and campus visitors
- Offers peer education and campus programming around disability issues and inclusive practices


## MULTICULTURAL STUDENT CENTER

## 249 Red Gym

716 Langdon Street
608-262-4503
Web: msc.wisc.edu (http://msc.wisc.edu)
Twitter. @UWMulticultural (https://twitter.com/@UWMulticultural)

[^0]- Hosts workshops and guest speakers on topics such as race and identity, allyship, supporting LGBTQ students of color, and creating a more inclusive campus
- Organizes the Multicultural Orientation and Reception and the Way Up Student Organization Festival
- Provides opportunities for leadership, skill development, and recognition through programs like the Multicultural Leadership Summit and the Multicultural Leadership Awards and Graduation Celebration
- In May 2016, more than 750 members of the campus community helped welome and open the Black Cultural Center, where people can learn about and engage with the rich history of Black Badgers at UWMadison


## OFFICE OF STUDENT CONDUCT AND COMMUNITY STANDARDS

70 Bascom Hall
500 Lincoln Drive
608-236-5700
Email: dean@studentlife.wisc.edu
Web: students.wisc.edu/student-conduct (http://students.wisc.edu/ student-conduct)

- Upholds every student's right to learn in a community that is safe
- Fosters integrity and accountability
- Provides leadership in reducing high-risk student drinking
- Partners with instructors to resolve academic misconduct incidents


## VETERAN SERVICES AND MILITARY ASSISTANCE CENTER

333 East Campus Mall, Suite 10301
Madison, WI 53715
608-265-4628
Email: veterans@wisc.edu (veterans@em.wisc.edu)
Web: veterans.wisc.edu/ (http://veterans.wisc.edu)

- A collaborative operation between the Office of the Registrar and the Division of Student Life
- Assists U.S. military veterans, current service members, and their dependents regarding benefits, enrollment (p. 8), (p. 8) and other activities pursuant to higher education
- Holds Veteran networking receptions and resume and interview workshop with local employers and students
- Advises the VETS student organization


## ACADEMIC CALENDAR

## ACADEMIC CALENDAR

Establishment of the academic calendar (https://www.secfac.wisc.edu/ academic-calendar.htm) for the University of Wisconsin-Madison falls within the authority of the faculty as set forth in Faculty Policies and Procedures. Construction of the academic calendar is subject to various rules and guidelines prescribed by the Board of Regents, the Faculty Senate and State of Wisconsin legislation. Approximately every five years, the Faculty Senate approves a new academic calendar which spans a future five-year period.

The current calendar was adopted by the Faculty Senate in September 2016.

## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES

The College of Agricultural and Life Sciences provides educational opportunities to students seeking a wide variety of occupations or careers. The men and women enrolled in the college come from diverse urban, farm, suburban, and rural nonfarm backgrounds, and they have an array of interests.

Students pursue careers in business or industry, biotechnology fields, technical services, teaching, communications, conservation and recreation, human nutrition, or public service, related to the agricultural, environmental, and biological sciences. Many students continue their education in graduate schools throughout the nation and world or enter professional schools in medicine or veterinary medicine.

## EQUIPPING STUDENTS FOR 21STCENTURY CAREERS

The college's goal is to ensure that every student develops:

- specialized knowledge in at least one discipline, along with an education broad enough to meet the challenges of changing careers and opportunities
- the ability to think critically and creatively. to synthesize, analyze, and integrate ideas for decision making and problem solving
- the ability to communicate effectively through writing and speaking by observing, reading, listening, and using appropriate information technologies
- a global perspective; an appreciation for the interdependencies among individuals and their workplaces, communities, environments, and world; and an understanding of the interrelationships between science and society
- the ability to work with others in small or large groups, to recognize civic and social responsibilities, and to appreciate the uses of public policy in a democracy
- a respect for truth, a tolerance for diverse views, and a strong sense of personal and professional ethics


## DEGREES/MAJORS/CERTIFICATES

The College of Agricultural and Life Sciences provides opportunities for study in a wide variety of department majors and interdisciplinary programs or specializations. In some instances, majors and degrees are offered cooperatively with other schools and colleges at UWMadison. Students are responsible for knowing academic requirements for graduation and should consult with an advisor regularly.

Freshmen are encouraged to declare a degree and major so that an advisor can be assigned in their area of interest, but students are encouraged to change majors if academic or professional goals change. However, incoming first-year students unsure about which CALS major to declare may opt to remain undeclared while exploring their options. Interested students should contact CALS Transitional Advising and Outreach Services (https://cals.wisc.edu/academics/ undergraduate-students/advising) for more information. In addition to
their major, students may also elect to complete one or more certificate programs. See the Certificate Programs Offered-Official List (http:// registrar.wisc.edu/documents/85_Official_Certificates.pdf) for a complete list. Some of the certificate programs offered in CALS are available to students across campus, regardless of their major.

- Agricultural and Applied Economics, B.S. (p. 42)
- Agricultural Business Management, B.S. (p. 46)
- Agronomy, B.S. (p. 66)
- Animal Sciences, B.S. (p. 72)
- Biochemistry, B.S. (CALS) (p. 109)
- Biological Systems Engineering, B.S. (p. 118)
- Biology, B.S. (CALS) (p. 82)
- Business Management for Agricultural and Life Sciences, Certificate (p. 50)
- Community and Environmental Sociology, B.S. (p. 133)
- Dairy Science, B.S. (p. 139)
- Development Economics, Certificate (p. 51)
- Entomology, B.S. (p. 144)
- Environmental Sciences, B.S. (CALS) (p. 206)
- Food Science, B.S. (p. 149)
- Food Systems, Certificate (p. 137)
- Forest Science, B.S. (p. 154)
- Genetics and Genomics, B.S. (p. 168)
- Global Health, Certificate (p. 185)
- Horticulture, B.S. (p. 174)
- Individual Major, B.S. (p. 53)
- Landscape Architecture, B.S. (p. 56)
- Landscape Architecture, BSLA (p. 60)
- Life Sciences Communication, B.S. (p. 181)
- Microbiology, B.S. (CALS) (p. 104)
- Nutritional Sciences, B.S. (p. 190)
- Nutritional Sciences, B.S. Dietetics (p. 195)
- Plant Pathology, B.S. (p. 200)
- Poultry Science, B.S. (p. 77)
- Science of Fermented Food and Beverages, Certificate (p. 153)
- Soil Science, B.S. (p. 214)
- Wildlife Ecology, B.S. (p. 162)


## PEOPLE

## CALS DEAN AND DIRECTOR

Kathryn VandenBosch
Meet the Dean's staff (http://www.cals.wisc.edu/departments/office-of-dean-and-director-2/dean)

## ACADEMIC DEAN'S OFFICE

CALS Office of Academic Affairs
116 Agricultural Hall
1450 Linden Drive
Madison, WI 53706
academicaffairs@cals.wisc.edu
608-262-3003

The Office of Academic Affairs is the academic dean's office for CALS undergraduate students. The office assists students with university and college policies and procedures such as changing a major, transferring into CALS, awarding dean's list, interpreting degree audit for graduation, student appeals, and more.

## ACADEMIC AND CAREER ADVISING

Academic and career advising is supported in CALS departments by faculty and academic staff. CALS Academic Affairs offers the following resources for all CALS students:

## TRANSITIONAL ADVISING AND OUTREACH SERVICES (TAOS)

CALS Transitional Advising and Outreach Services (TAOS) supports prospective, incoming, and continuing undergraduates to successfully transition into CALS. We do this through a variety of outreach, advising, and academic support initiatives. In addition to serving as the primary academic advising home for the CALS Undeclared Major (ALS 000), TAOS works with on- and off-campus students to explore academic opportunities in the college, oversees on-campus transfers, and coordinates CALS Student Orientation, Advising, and Registration (SOAR). In all of these efforts, TAOS supports CALS in creating a welcoming, inclusive learning environment for our diverse student body.

The undeclared major option (ALS 000) is primarily intended for first and second-year students who are unsure of which CALS major(s) they would like to pursue. CALS undeclared students must declare a major by their fourth semester on campus. Exceptions to these policies may be made when there are extenuating circumstances.

For more information on TAOS, transferring to CALS, or entering CALS as an undeclared first-year or continuing student, please contact the CALS Academic Affairs Office, 608-262-3003, academicaffairs@cals.wisc.edu.

## DEAN ON CALL

Dean on Call is available Monday through Friday in 116 Agricultural Hall from noon-3:30 p.m. Students with emergency situations or questions regarding academic policies or procedures are welcome to utilize Dean on Call on a drop-in, first come, first served basis. Students typically consult with their advisor prior to meeting with a Dean on Call.

## CAREER SERVICES

CALS Career Services provides resources and advising for students to explore career interests and develop skills as they seek employment or admission to graduate or professional programs. Advising appointment and programming information can be found on the Career Services website (https://cals.wisc.edu/academics/undergraduate-students/ career-services). Contact Career Services at career@cals.wisc.edu.

## ENTERING THE COLLEGE

## ADMISSION

Information on admission to the university as a freshman, transfer, or international student is available through the Office of Admissions and Recruitment (http://www.admissions.wisc.edu).

Prospective students with questions about study in the College of Agricultural and Life Sciences may contact the Office of Academic Affairs (http://www.cals.wisc.edu/academics) at 608-262-3003.

First-Year Summer Start (http://cals.wisc.edu/accelerate): Incoming firstyear CALS students can get a jump-start on their education by taking one or both of the following courses the summer prior to their first semester on campus: QuickStart (online first-year seminar) and Catalyst (in-person campus immersion experience). Participants will learn about campus resources and opportunities as well as develop a personalized roadmap to reach their academic, personal, and career goals.

## TRANSFER STUDENTS

Many students transfer into the College of Agricultural and Life Sciences from other schools and colleges at UW-Madison, from elsewhere in the UW System, or from other universities. The CALS Office of Academic Affairs can provide advice on transfer policies and degree requirements and help transfer students make plans to complete their education in the college. With some specialized majors in the college, (e.g., biological systems engineering) an early transfer is advisable. Students should check with the CALS Office of Academic Affairs, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003; see also this website (https://cals.wisc.edu/academics/prospective-students).

Some students transfer after their freshman year, some as late as junior year, although a minimum of 30 credits in residence is required for all students. Transfer credits are evaluated by the UW-Madison Office of Admissions after the student has been accepted to the university.

Students transferring to UW-Madison from other UW System campuses or from a Wisconsin Technical College can evaluate course transferability using the Transfer Information System (TIS) (http://www.uwsa.edu/tis).

## ON-CAMPUS TRANSFER

Students will be considered for transfer to the College of Agricultural and Life Sciences from other schools and colleges at UW-Madison if they

1. are in good academic standing with the college or school in which they are enrolled,
2. meet any special requirements as specified by the intended major, and
3. have earned fewer than 86 credits, which is the threshold for senior status.

Students who have been dropped by another college or school must be readmitted to that college or school before being considered for transfer into the College of Agricultural and Life Sciences. However, being readmitted for transfer purposes by another school or college does not guarantee acceptance by CALS.

Ideally, the transfer should be initiated in advance of the semester in which enrollment is planned. Students may initiate the transfer process at any time during the semester. However, the registrar's office determines when transfers may be completed; this window generally is open from approximately the second through the twelfth week of classes. Students may transfer during the summer session only if they are enrolled in summer courses. Consult the Office of Academic Affairs (http://www.cals.wisc.edu/academics) website or email (academicaffairs@cals.wisc.edu) for details.

## SPECIAL STUDENTS

There are two basic categories of Special students at UW-Madison:

1. the College Special, who is allied with a college and must obtain an "Academic Action" from the dean to enroll each semester, and
2. the University Special, who is a nondegree student not allied with a particular college or school and is admitted through the Division of Continuing Studies (http://guide.wisc.edu/nondegree).

The College of Agricultural and Life Sciences Special student classification is currently on hiatus. Information about the University Special student classification is available from the Division of Continuing Studies (http://continuingstudies.wisc.edu/advising/prospective.htm).

## WISCONSIN EXPERIENCE

From a first-year seminar course to completion of a culminating majorrelated capstone experience, CALS students have the opportunity to participate in multiple signature CALS experiences. These experiences are defined by high-impact experiential learning and serve as the foundation of a CALS education, regardless of a student's major.

Here are ten ways to get involved and begin to create your own legacy on campus:

1. First-Year Summer Start (https://cals.wisc.edu/quickstart). Incoming first-year CALS students can get a jump-start on their education by taking one or both of the following courses the summer prior to their first semester on campus: QuickStart (online first-year seminar) and Catalyst (in-person campus immersion experience). Participants will learn about campus resources and opportunities as well as develop a personalized roadmap to reach their academic, personal, and career goals.
2. First-Year Seminar (p. 33). All first-year CALS students are provided a seamless transition to college by enrolling in one of several seminars with typically fewer than 25 students, close interaction with the instructor, and the opportunity to participate in meaningful dialogue about their experiences at UW-Madison.
3. CALS Honors Program (https://cals.wisc.edu/academics/ undergraduate-students/outside-the-classroom/honors-program). Highly motivated students can pursue a more rigorous course of study and be recognized for their achievements.
4. International Experience (https://cals.wisc.edu/academics/ undergraduate-students/international-programs). Students can choose from short-term programs of a few weeks to a full semester abroad based on their interests and academic plans. Combined with the International Studies (p.33) requirement, CALS students develop the skills needed to successfully interact, motivate and work with a culturally diverse population.
5. Internships (https://cals.wisc.edu/academics/undergraduate-students/outside-the-classroom/internships). Real-world work or field experience will: (a) help students explore a career or job, (b) increase post-graduation employment opportunities, and (c) broaden professional networks.
6. Leadership and Student Organizations (https://cals.wisc.edu/ academics/undergraduate-students/outside-the-classroom/ leadership-programs). CALS has many opportunities for students to learn about and practice leadership including a leadership seminar, a leadership retreat, student organizations (over 30 in CALS and 1000 campuswide), and college committees.
7. Mentored Research / Independent Study (https://cals.wisc.edu/ academics/undergraduate-students/outside-the-classroom/ mentored-research-independent-studies). UW-Madison is known for
its cutting-edge research. Students have the opportunity to be part of the discovery process by earning academic credit.
8. Service (http://www.morgridge.wisc.edu). CALS students have a strong record of service to the local, state, and international communities. Visit the Morgridge Center for opportunities.
9. Facilities (https://cals.wisc.edu/about-cals/visit-cals). CALS has outstanding facilities for student housing, instruction, and research. From the Allen Centennial Garden with the former dean's residence to 13 Agricultural Research Stations, students experience hands-on and unique learning environments.
10. Capstone (p.33) . Students integrate and apply knowledge in a culminating learning experience designed to prepare them to address real-world problems after graduation.

The majority of CALS students complete several of the signature experiences above.

- $63 \%$ of CALS students complete internships or field experiences.
- $75 \%$ of CALS students complete community service or volunteer activities.
- $50 \%$ of CALS students complete mentored research experiences.


## POLICIES AND REGULATIONS

Policies may be found on the Office of Academic Affairs KnowledgeBase (https://kb.wisc.edu/cals/academicaffairs).

## REQUIREMENTS

All undergraduate students in CALS must satisfy a set of college and university requirements:

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Work ofUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |  |
| First Year Seminar (p. 33) |  | 1 |
| International Studies (p. 33) |  | 3 |
| Physical Science Fundamentals |  | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |  |
| Biological Science |  | 5 |
| Additional Science (Biological, Physical, or Natural) |  | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) |  | 3 |

CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33)

Students are advised to complete introductory and basic course requirements (i.e., biological and physical sciences, chemistry, mathematics, communications, etc.) early in their academic programs.

Students must also satisfy a minimum of 15 credits in the selected major (these 15 credits may not be double counted with CALS or General Education requirements) and a Capstone course that meets the stated criteria (and may be included in the 15 credits toward the major).

## CALS FIRST-YEAR SEMINAR REQUIREMENT

Courses meeting the CALS first-year seminar requirement must meet most of the following criteria:

- The course is designed specifically for first-year undergraduate students, to support their academic and personal transition to UW-Madison. For example, the course may acquaint students with academic, campus and community resources to assist in their transition through presentations, discussion, projects, or papers. Because students took this course, their transition to UW-Madison is more rapid and well supported.
- Course enrolls fewer than 25 students or a significant portion of the course meets in groups of fewer than 25 students. A larger lecture course will be considered if students interact regularly in sustained and substantive small groups with a faculty member or well-prepared graduate student or peer. This interaction must go beyond review of material and question and answer and be an on-going relationship.
- Students receive frequent feedback from the instructor(s) on their academic performance and receive a grade in the course.
- Students are put in circumstances that essentially demand they interact with faculty and peers about substantive matters. As a result of taking this course, students have gotten to know their instructor(s) and peers through meaningful course-related dialogue.
- Students will experience diversity through meaningful dialogue with people who are different from themselves and/or engage with diversity through course content which addresses inclusivity, diversity and identity.
- Students experience an integration of experiential and classroom learning. For example, students might be asked to attend a student organization meeting, meet with a faculty or staff member, or participate in research or service.
- Students have opportunities to integrate, synthesize and apply knowledge while exploring big questions and big ideas.
- The learning objectives for the course are aligned with the UW-Madison Essential Learning Outcomes (https:// assessment.provost.wisc.edu/uw-madison-essential-learningoutcomes).


## APPROVED FIRST-YEAR SEMINAR COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFROAMER 199 | Directed Study (Section 7, | $1-3$ |
|  | Multicultural Learning Community |  |
|  | Seminar) |  |


| BIOCHEM 100 | Biochemistry Freshman Seminar | 1 |
| :---: | :---: | :---: |
| BSE 170 | Product Design Practicum | 2 |
| INTEGSCI 100 | Exploring Biology | 2 |
| COUN PSY 115 | Human Resources Development: <br> Educational Effectiveness ${ }^{2}$ | 1 |
| INTEGSCI 375 | Special Topics in Integrated Science | 1-3 |
| COUN PSY 125 | A Wisconsin Experience Seminar | 1 |
| DY SCI 272 | Pre-Capstone Seminar | 1 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (GreenHouse Roots Seminar) | 1-4 |
| First Year Interest Groups (All) ${ }^{3}$ |  |  |
| F\&W ECOL 101 | Orientation to Wildlife Ecology | 1 |
| GENETICS 155 | Freshman Seminar in Genetics | 1 |
| INTER-AG 155 | Issues in Agriculture, Environment, and Life Sciences | 1 |
| INTER-AG 165 | Introduction to International Issues in Agricultural \& Life Sciences | 1 |
| INTER-AG 175 | WISE Seminar | 1 |
| INTER-HE 201 | Belonging, Purpose and the Ecology of Human Happiness: EcoYou | 3 |
| ILS 138 | CRC First-Year Seminar: Foundations of a Liberal Arts Education | 1 |
| MICROBIO 375 | Special Topics (Microbiology Freshman Seminar) | 1-4 |



Approved topics: BioHouse Seminar, Exploring Service, and Secrets of Science
2
Approved topics: UW Athletics Life Skills Academy and PEOPLE First Year Experience Seminar
3 For more information, see http://figs.wisc.edu/

## REQUEST TO CONSIDER COURSE FOR FIRST-YEAR SEMINAR REQUIREMENT

Faculty and staff interested in submitting a course to count for the FirstYear Seminar requirement may complete an online survey (https:// uwmadison.co1.qualtrics.com/jfe/form/SV_8vKNkjVTZsDzGfz) with the following information:

- Updated course syllabus
- Statement of how the course meets the criteria
- Contact information for the course coordinator


## CALS INTERNATIONAL STUDIES REQUIREMENT

Required of all CALS majors, the International Studies requirement is intended to: (1) increase students' understanding of contemporary global, socio-political, and scientific issues; (2) equip students to analyze these transnational issues critically and comparatively; and (3) inspire students to further engagement in international issues.

Courses that satisfy the 3-credit CALS International Studies requirement must meet at least two of the following criteria:

- include discussion of the role of the U.S. in world affairs;
- include comparative and/or multinational content;
- include substantial non-U.S. content (typically $>50 \%$ of the content or assignments or grade in the course).

Students: to request permission to count a course not listed here, please complete a Request for DARS Exception form (https://cals.wisc.edu/ wp-content/uploads/2017/04/darsexception_form.pdf) in consultation with your advisor. Requests will only be considered if the course meets the criteria above and the student has an extenuating circumstance warranting a substitution.

## APPROVED INTERNATIONAL STUDIES COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| AN SCI/DY SCI 370 | Livestock Production and Health in Agricultural Development | 3 |
| ANTHRO 100 | General Anthropology | 3 |
| ANTHRO 104 | Cultural Anthropology and Human Diversity | 3 |
| ANTHRO/ LINGUIS 430 | Language and Culture | 3-4 |
| ANTHRO 448 | Anthropology of Law | 3 |
| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| A A E/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| A A E/INTL ST 373 | Globalization, Poverty and Development | 3 |
| A A E/INTL ST 374 | The Growth and Development of Nations in the Global Economy | 3 |
| A A E 375 | Special Topics | 1-4 |
| A A E/ECON 473 | Economic Growth and Development in Southeast Asia | 3 |
| A A E/ECON 474 | Economic Problems of Developing Areas | 3 |
| A A E/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| AGRONOMY/ <br> BOTANY/ <br> SOIL SCI 370 | Grassland Ecology | 3 |
| ART HIST/LCA 379 | Cities of Asia | 3 |
| ART HIST 411 | Topics in Asian Art | 3-4 |
| ART HIST/LCA 428 | Visual Cultures of South Asia | 3 |
| ART HIST 500 | Proseminar: Special Topics in Art History | 3 |
| ART HIST/LCA 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| C\&E SOC/ENVIR ST/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| $\begin{aligned} & \text { DY SCI/AN SCI/ } \\ & \text { FOOD SCI/ } \\ & \text { SOIL SCI } 472 \\ & \text { \& DY SCI/AN SCI/ } \\ & \text { FOOD SCI/ } \\ & \text { SOIL SCI } 473 \end{aligned}$ | Animal Agriculture and Global Sustainable Development and International Field Study in Animal Agriculture and Sustainable Development | 3 |
| ECON 467 | International Industrial Organizations | 3-4 |


| ENTOM/ <br> ENVIR ST 201 | Insects and Human Culture-a Survey Course in Entomology | 3 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 371 \end{aligned}$ | Medical Entomology | 3 |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 337 | Nature, Power and Society | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 353 | Russia and the NIS-Topical Analysis | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes | 3 |
| GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| HISTORY/ <br> EASTDS 103 | Introduction to East Asian History. China | 3-4 |
| HISTORY/ <br> EA STDS 104 | Introduction to East Asian History: Japan | 3-4 |
| HISTORY 105 | Introduction to the History of Africa | 3-4 |
| HISTORY/ASIAN 108 | Introduction to East Asian History Korea | 3-4 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 124 | British History: 1688 to the Present | 4 |
| HISTORY 130 | An Introduction to World History | 3-4 |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY/E A STDS/ POLI SCI 255 | Introduction to East Asian Civilizations | 3-4 |
| HISTORY/ASIAN AM/ EASTDS 276 | Chinese Migrations since 1500 | 3-4 |

3

3

3

4

| HISTORY/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ POLISCI/SOC 277 | Africa: An Introductory Surve | 4 |
| :---: | :---: | :---: |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/E ASIAN/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY/ <br> ENVIR ST 328 | Environmental History of Europe | 3 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY/ <br> E A STDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY/ AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| HISTORY/CHICLA/ LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY/ EASTDS 363 | China and World War II in Asia | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 444 | History of East Africa | 3-4 |
| HISTORY 445 | History of Equatorial Africa | 3-4 |
| HISTORY/ <br> E A STDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY 514 | European Cultural History Since 1870 | 3-4 |
| HORT 376 <br> \& HORT 378 | Tropical Horticultural Systems and Tropical Horticultural Systems International Field Study | 3 |
| INTL BUS 200 | International Business | 3 |
| INTL BUS 365 | Contemporary Topics | 1-3 |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |


| INTL ST/A A E 373 | Globalization, Poverty and |
| :--- | :--- | ---: |
| Development |  |$\quad 3$


| POLI SCI 351 | Politics of the World Economy | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 401 | Selected Topics in Political Science 1 | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/ <br> GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
| $\begin{aligned} & \text { POLI SCI/ } \\ & \text { INTL ST } 434 \end{aligned}$ | The Politics of Human Rights | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI/ INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 601 | Proseminar. Topics in Political Science | 3 |
| POLI SCI/ RELIG ST 618 | Political Islam | 3-4 |
| POLI SCI 659 | Politics and Society: Contemporary Eastern Europe | 3-4 |
| POLI SCI/ JEWISH 665 | Israeli Politics and Society | 3-4 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| RELIG ST 101 | Religion in Global Perspective | 3 |
| Approved topics: Political Economy of Development, Comparative Foreign Policy, and German Politics |  |  |

## CALS CAPSTONE LEARNING EXPERIENCE REQUIREMENT

A CALS Capstone is a course in which students are required to integrate diverse bodies of knowledge to solve a problem or formulate a policy of societal importance with the intent of facilitating the transition to postbaccalaureate life.

A Capstone Experience should:

- Develop problem solving skills
- Expose student to multidisciplinary approach
- Develop teamwork and interpersonal skills, including the ability to communicate effectively to multiple audiences
- Develop skills in accessing and using information resources (e.g., electronic databases, library resources, national repositories)
- Address societal, economic, ethical, scientific, and professional issues
- Communicate and extend the capstone experience via written, oral, and/or multimedia reports by each student

The Capstone Experience will normally be completed during the student's final 2 or 3 semesters. The intent is to have the student utilize and
integrate their undergraduate learning into a culminating, or capstone, experience. Students should consult with their departmental faculty advisors for specific information regarding this requirement. Where appropriate, students should submit a copy of the final project materials to the campus library (via Minds@UW (http://uwdcc.library.wisc.edu/ minds/index.shtml) or similar).

## DEGREES OFFERED

The College of Agricultural and Life Sciences offers five bachelor of science (B.S.) degree programs:

## B.S. DEGREE

B.S.-AGRICULTURAL BUSINESS MANAGEMENT (P. 46)

## B.S.-BIOLOGICAL SYSTEMS ENGINEERING (P. 118) <br> B.S.-DIETETICS (P. 195) <br> B.S.-LANDSCAPE ARCHITECTURE (P. 60)

The B.S. degree program provides a broad and general foundation for two dozen majors in the college: agricultural and applied economics, agronomy, animal science, biochemistry, biology, community and environmental sociology, dairy science, entomology, environmental sciences, food science, forest science, genetics, horticulture, landscape architecture, life sciences communication, microbiology, nutritional sciences, poultry science, plant pathology, soil science, and wildlife ecology.

## MULTIPLE DEGREES OR MAJORS

Under certain circumstances it may be possible for a student to earn more than one undergraduate major or degree. It is expected that the programs be significantly different from each other and that approval be received prior to the student having earned 86 credits. More information is available below and via Academic Affairs in 116 Agricultural Hall.

## SECOND BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Those with a bachelor of science (B.S.) or bachelor of arts (B.A.) degree from the University of Wisconsin-Madison or other accredited institutions may, if eligible, pursue a second bachelor's degree from the College of Agricultural and Life Sciences.

Those who have been out of school for one semester or more must apply for admission (or readmission) with the regular undergraduate application. Continuing UW-Madison students do not need to submit this form. All candidates need a dean's permission from the Office of Academic Affairs to work toward a second bachelor's degree. A minimum of a 2.0 GPA is required. Several college majors require a higher GPA.

The following requirements for the second bachelor's degree must be met:

[^1]above. Students with their first B.S. degree from the college must select a new major or degree program

All second-degree candidates must be accepted by the department offering their program of interest and have their program approved by the college before beginning the program.

## EARNING TWO UNDERGRADUATE DEGREES SIMULTANEOUSLY

A student who wishes to earn two undergraduate degrees simultaneously (in contrast to earning two undergraduate majors simultaneously) should consult with the Office of Academic Affairs as early as possible in the academic career regarding feasibility.

If the two degrees to be earned are within the College of Agricultural and Life Sciences, at least 30 additional credits and all course and grade point requirements must be completed. Thus, a minimum of 150 credits (for most majors) would be required. Some courses may satisfy requirements for both degrees. A student must have an advisor in both major fields. To work on two degrees simultaneously within the college, a student should seek permission as early as possible to ensure that it is feasible to complete both degrees.

If the two degrees to be earned are from two different colleges (one degree in Agricultural and Life Sciences and one degree in another school or college on this campus), the undergraduate dean in both colleges must approve the student's plan. Note that not all colleges will allow dual degrees. Where allowed, the following academic policies shall be followed (additional policies may exist):

1. Admission into the other college or school shall be based on that particular college or school admission criteria.
2. A student may seek two baccalaureate degrees simultaneously (in contrast to two majors), each from a different college, provided that the two degree programs differ sufficiently so that the combined total requirements for the two degrees are at least 150 credits and that the student's program is approved by both colleges before the student has earned 86 credits. The degrees from each college will be awarded simultaneously.

Special applications and additional information pertaining to the earning of two undergraduate degrees simultaneously are available from the Office of Academic Affairs, 116 Agricultural Hall.

## EARNING TWO UNDERGRADUATE MAJORS SIMULTANEOUSLY

CALS permits undergraduates to pursue two CALS majors simultaneously. The following policies and procedures have been established for this program:
a. The student must have approval in advance from their CALS major advisor, the advisor of their desired second major, and the Associate Dean for Academic Affairs in the Office of Academic Affairs in CALS. This approval must be granted before the student has earned 86 credits.
b. The student must satisfy all requirements of both majors. The student must meet all CALS general course requirements and the degree program requirements, as well as all major field requirements.

The diploma awarded will be based on the certification of completion of the degree. The transcript of grades will note the completion of requirements for two or more majors.

## EARNING A LETTERS AND SCIENCE MAJOR WHILE COMPLETING A DEGREE PROGRAM IN THE COLLEGE OF AGRICULTURAL AND LIFE SCIENCES

The College of Letters \& Science (L\&S) permits undergraduates currently enrolled in the College of Agricultural and Life Sciences to complete an additional undergraduate major offered by L\&S and have this fact noted on the transcript.

The following policies and procedures have been established for this program:

1. The student must have advance approval from their CALS major advisor, their L\&S major advisor, and the Associate Dean for Academic Affairs in the Office of Academic Affairs in CALS. This approval must be granted before the student has earned 86 credits.
2. The L\&S major is not to substitute for any major in CALS.
3. The student must satisfy all requirements of the L\&S major, both the requirements established by the department (i.e., certain courses) and those established by L\&S (e.g., 15 credits of advanced work in the major in residence at UW-Madison). The student must meet all CALS general course requirements and the degree program requirements, as well as all major field requirements.
4. Requests for substitutions or other modifications of the requirements of a given L\&S major must be acted on by an L\&S dean, in consultation with the Associate Dean for Academic Affairs in CALS, before enrollment in the course.

## FARM AND INDUSTRY SHORT COURSE

The Farm and Industry Short Course (FISC) (http://guide.wisc.edu/ nondegree/shortcourse) is a non-degree course of instruction at the University of Wisconsin-Madison, intended to prepare students for careers in production agriculture and agribusiness. The 16 -week session is comprised of two 8-week terms that begin in late fall and end in early spring to coincide with the non-growing season in Wisconsin.

Instructors consist of CALS professors and industry professionals who teach over 30 courses in the areas of soils, crops, dairy, meat animals, agricultural engineering, agribusiness, human relations, marketing, and communications. A complete list of courses is available online (https:// fisc.cals.wisc.edu/prospective-students/courses-and-certificates).

## All students earn a first-year certificate in Foundations of Farm

Management and can return for an optional second year to earn one of five specialty certificates:

1. Crops and Soils Management
2. Dairy Farm Management
3. Farm and Equipment Operations
4. Meat Animal Farm Management
5. Diversified Agricultural Operations

More than 100 CALS scholarships are available to FISC students, with about $\$ 150,000$ awarded each academic year. The range of scholarship funds given per student is $\$ 500-\$ 2,000$. See the program's website (https://fisc.cals.wisc.edu/prospective-students/funding-your-education) for more information about funding a FISC education.

FISC graduates pursue a variety of agriculture-related careers. More information about employment opportunities can been found on the website (https://fisc.cals.wisc.edu/jobs-careers). CALS Career Services provides information about job opportunities to FISC students and a
weekly email from the FISC staff highlights additional opportunities to current students.

For more information, contact the Farm \& Industry Short Course at e-mail (fisc@cals.wisc.edu) or 608-263-3918.

## SPECIAL SHORT COURSES

The College of Agricultural and Life Sciences, largely through University of Wisconsin-Extension, sponsors and conducts many special short courses for specific training or retraining in various phases of agriculture and agribusiness. There are institutes, conferences, and workshops that vary in length from one day to two weeks. Many are held on campus; others are held at various locations around the state.

The CALS Conference Services Office (http://www.cals.wisc.edu/ccs), 620 Babcock Drive, 608-263-1672, has information about many of these special sessions.

## RESOURCES

## STUDENT SERVICES

Staff in the Office of Academic Affairs provide a variety of services. They certify students for their respective degrees upon graduation, maintain student records, administer scholastic policies, administer college scholarships and loans, coordinate development of curricula, act on student withdrawals, counsel students about career and study opportunities, host interviews and career-related events and workshops, oversee two undergraduate housing units, operate the Farm and Industry Short Course, assist with degree audit reports, help departments plan and assess educational programs, and coordinate and maintain programs for students and staff. Special counseling is available for interested minority or disadvantaged students, students with disabilities, and students with unusual circumstances or needs.

## STUDENT ADVISING

Every student enrolled in the college has an assigned advisor. Students are expected to consult their advisors before each registration period, and are encouraged to consult their advisors throughout the year. Faculty/department staff advisors help students plan their coursework to meet their educational objectives. When students enroll in the college as beginning freshmen or as transfer students, they are assigned an advisor in their major field of study. Advisors will talk with students about educational and career objectives and counsel them about meeting degree requirements and planning their educational programs.

Once students have decided on an area of study, their advisors will guide them toward courses in that area and advise them on how to fulfill university and college requirements. Students can change their advisor if they change their major or if they find a different advisor with interests more similar to their own. The change is made through the department or through the Office of Academic Affairs.

Students are encouraged to seek advice from university faculty and staff, in addition to their assigned advisor. There are many people on campus who are willing and able to help students; however, it is the student's responsibility to seek advice.

## CAREER SERVICES

The College of Agricultural and Life Sciences provides resources and advising for students to explore career interests and develop skills as they seek employment or admission to graduate or professional
programs. CALS Career Services, located in 116 Agricultural Hall, assists students with the full time and internship search process by helping them learn how to articulate their skills and abilities to future employers and graduate/professional schools. The career services team manages the campus wide career and internship fairs held twice per year. They also arrange workshops and classroom visits on a variety of career development topics and host recruiters for networking events, oncampus interviews, and industry panel discussions. Many students secure internships and full time employment through connections with employers on campus. Students are encouraged to utilize CALS Career Services early in their undergraduate experience. See CALS Career Services (https://cals.wisc.edu/academics/undergraduate-students/ career-services) for more information.

The Career Services Office is operated as a service to students. The college cannot guarantee job placement.

## INTERNATIONAL ACADEMIC OPPORTUNITIES

Today's college graduates must be prepared for the international community in which they will live and work. Study and research abroad programs offer students unique experiences, which cannot be replicated on the UW-Madison campus. The College of Agricultural and Life Sciences (CALS) offers 35+ short and long-term programs in more than 20 countries, the majority of which are open to students from across campus. All programs carry UW-Madison academic credit and many fulfill the field experience requirement for the undergraduate certificate in global health (p. 185). International academic opportunities allow students to enrich their education by experiencing other cultures and broadening their understanding of agricultural and life sciences outside the United States. CALS programs address topics such as food security and sustainable food systems, agriculture and nutrition, health care, environmental health, and climate change, among others. Students may also receive academic credit for participating in study abroad programs administered by UW's International Academic Programs (IAP) office. To search CALS and IAP programs, please visit Study Abroad (http:// www.studyabroad.wisc.edu).

The CALS study abroad team, including student peer advisors, is located in the Office of Academic Affairs, 116 Agricultural Hall. Students are welcome to stop by for more information or contact us via email at studyabroad@cals.wisc.edu.

## FINANCIAL RESOURCES

In addition to university scholarships, grants, loans, and employment available at the Office of Student Financial Aid (https:// financialaid.wisc.edu) (333 East Campus Mall), scholarships and loans are available to qualified students in the College of Agricultural and Life Sciences.

## AGRICULTURAL AND LIFE SCIENCES SCHOLARSHIPS

CALS has an extensive scholarship program. All CALS students must apply every year to be considered for a scholarship. One application allows consideration for any scholarships administered by the college. The application cycle runs from early November to early February every year. Selection of recipients is determined by the CALS Scholarships and Loans Committee.

The scholarship application is available through Scholarships@UWMadison (http://scholarships.wisc.edu/Scholarships), which can be found through the Student Services tab in MyUW or through the Finances
section of Student Center. Applicants must follow all prompts to ensure completion of the application process.

Scholarships with a financial need component require a current Free Application for Federal Student Aid (FAFSA (http://www.fafsa.ed.gov)) on file with the university.

## AGRICULTURAL AND LIFE SCIENCES LOANS

Several short-term loan funds have been established for students in the college. Students may borrow money for up to six months at no interest, or very low interest, provided the money is repaid when due. Students must be able to provide a specific plan for loan repayment. No prior authorizations are needed, and the loan amount is available from the Bursar's Office on the same day the application is approved. Applications for these short-term loans are available in the Office of Academic Affairs.

## STUDENT EMPLOYMENT

Many College of Agricultural and Life Sciences students gain valuable experience by working part-time in jobs related to their interests. Working in a laboratory is often the first step for students who are interested in conducting their own research.

Some students are hired directly by specific departments as a result of the students' interests and experience. Also, the university maintains a Student Job Center (http://jobcenter.wisc.edu) in the Office of Student Financial Aid, 333 East Campus Mall, to help students find part-time work.

## AGRICULTURAL AND LIFE SCIENCES STUDENT ORGANIZATIONS

Agricultural and Life Sciences students will find many organizations and clubs to meet their professional interests. Student organizations provide a vehicle for students to gain leadership experience and develop professional skills. For more information see the Registered Student Organization (RSO) Directory (https://win.wisc.edu/organizations) and CALS Student Organizations and Clubs (http://www.cals.wisc.edu/ academics/undergraduate-programs/get-involved/student-organization).

## PREPARATION FOR PROFESSIONAL CAREERS IN VETERINARY MEDICINE AND MEDICINE

For information about preparation for professional careers in veterinary medicine and medicine, visit the Center for Pre-Health Advising (http:// www.prehealth.wisc.edu).

## FACILITIES

The College of Agricultural and Life Sciences has outstanding facilities for student housing, instruction, and research.

The college operates two residence halls, Jorns and Humphrey halls. Those interested in this housing option should call 608-262-2270 or visit FISC Housing (http://fisc.cals.wisc.edu/housing).

Staff and students also make extensive use of off-campus sites such as the University Arboretum and 13 Agricultural Research Stations located throughout the state. The college includes many specialized instructional and research facilities. On-campus animal research facilities include the Biotechnology, Microbial Sciences and Biochemistry buildings, a livestock laboratory, instructional greenhouses, and a number of instructional computer labs.

The Steenbock Memorial Library (http://steenbock.library.wisc.edu) serves the College of Agricultural and Life Sciences with a collection of more than 600,000 books, bound journals, and government publications, and a variety of seating and study rooms for individual and group use. The library operates a public-access computer facility with a wide range of hardware and software. The building is a memorial to biochemist Harry Steenbock for his outstanding contributions to Wisconsin and to the health of humanity. Steenbock Library has received awards for its design and for its service to students, faculty, and academic staff. Steenbock Library staff help students and faculty locate reference material for their research through workshops on using the library and through personal assistance with search strategies.

## HONORS

## DEAN'S LIST

Students who achieve at a high level academically are recognized by the dean. Selections to the Dean's List are announced at the close of each semester. The student's achievement for only the single semester is considered and is noted on the transcript. To be placed on the Dean's List, a student must have achieved at least a 3.5 GPA or above for the semester's study load of not less than 12 credits, on a regular grade basis (A, $A B, B, B C, C, D, F)$, regardless of overall grade point average, and must not have received a grade of $F$ or an Incomplete for any course, or a U (for a pass/fail course) or an $N$ (for Credit/No Credit graded course that was not passed).

## CRITERIA FOR "GRADUATED WITH DISTINCTION" AND "GRADUATED WITH HIGHEST DISTINCTION"

Students who have a cumulative GPA that places them in the top 20 percent of the graduating class in the college will graduate with "Distinction"; those in the upper 5 percent, with "Highest Distinction." These students must have at least 60 credits on the Madison campus. The notations on the student's transcript will read "Graduated with Distinction" or "Graduated with Highest Distinction." The registrar determines which students meet these criteria.

## DISTINCTIVE SCHOLASTIC ACHIEVEMENT

A preliminary list of those degree candidates who may be eligible for Graduation with Distinction is prepared by the registrar prior to commencement. These students are eligible to wear a cardinal stole with their caps and gowns at commencement. Inclusion on the Distinctive Scholastic Achievement list does not guarantee Graduation with Distinction, which is determined after final grades are awarded.

## HONORS PROGRAM

Students in the College of Agricultural and Life Sciences who want a challenging and intellectually rewarding undergraduate experience should consider the Honors Program. The program has flexibility to meet the unique needs of each student, challenge the mind of the independent thinker, and stimulate the curiosity needed for continued learning. The program was established to provide challenging and relevant experiences for high-achieving students. The objective of the program is to help students develop critical thinking abilities through specialized courses and the challenges of designing, conducting and reporting research in collaboration with faculty from one of the world's leading research institutions. Students who complete the program successfully receive an

Honors designation on their diploma and wear a white stole with cardinal bars with their caps and gowns at commencement.

The CALS Honors Program (http://www.cals.wisc.edu/academics/ undergraduate-programs/get-involved/honors-program) offers two different ways to earn an Honors degree designation:

1. Honors in Research or
2. Honors in the Major

For complete information contact the Office of Academic Affairs, 116 Agricultural Hall, 608-262-3003.

## AGRICULTURAL AND APPLIED ECONOMICS

The Department of Agricultural and Applied Economics (AAE) at the University of Wisconsin-Madison was founded in 1909 and was the first department of agricultural economics in the United States. The department offers two undergraduate programs-agricultural and applied economics (p. 42) and agricultural business management (http:// guide.wisc.edu/undergraduate/agricultural-life-sciences/agricultural-applied-economics/business-management-abm). Both majors will give students a strong base in economics and how it is applied to real-world situations. The teaching and research in AAE focuses on the areas of development economics, environmental economics and managerial economics.

The department also offers two certificates to undergraduate students enrolled at the University of Wisconsin-Madison: the certificate in business management for agricultural and life sciences (p.50) and the certificate in development economics (p.51).

## DEGREES/MAJORS/CERTIFICATES

- Agricultural and Applied Economics, B.S. (p. 42)
- Agricultural Business Management, B.S. (p. 46)
- Business Management for Agricultural and Life Sciences, Certificate (p. 50)
- Development Economics, Certificate (p. 51)


## PEOPLE

## PROFESSORS

Barham, Bradford
Chavas, Jean-Paul
Coxhead, Ian
Deller, Steven
Foltz, Jeremy (Chair)
Gould, Brian
Mitchell, Paul
Phaneuf, Daniel
Provencher, R. William
Rutherford, Thomas
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Tjernstroem, Emilia

## FACULTY ASSOCIATES

Beach, Jeremy
Dong, Fengxia
Reynolds, Anne

## UNDERGRADUATE ADVISOR

Davis, Linda
*AAE Affiliate Faculty

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS

The Department of Agricultural and Applied Economics offers a number of scholarships to students declared in both of our majors, agricultural \& applied economics and agricultural business management. Students in either of our majors or who have declared the certificate in business management for agricultural \& life sciences (p. 50) are also eligible to apply for the Renk Scholarship Program (https://renk.aae.wisc.edu/renkscholarship), which can provide increasing scholarships for up to three years. The Renk Scholarship Program is part of the Renk Agribusiness Institute (https://renk.aae.wisc.edu) and emphasizes leadership in contemporary agricultural issues and activities linked to agribusiness.

## RESOURCES

The Agricultural Business Management Club at UW-Madison is a group of motivated students interested in careers involving agriculture and/ or business. The club offers members the opportunity to learn more about the agribusiness industry and make connections through career speakers, field trips and social events.

There are a number of other student organizations of interest to students in our majors. For more information, please visit the CALS Student Organization (https://cals.wisc.edu/academics/undergraduate-students/ outside-the-classroom/student-organizations/\#association-of-women-inagriculture) website.

## AGRICULTURAL AND APPLIED ECONOMICS, B.S.

Students develop and use economic data and models to analyze and understand a wide range of issues-including environmental problems, world hunger, energy and climate change, business economics and finance, economic development, globalization and trade, biotechnology, land-use management, and community development. Course subjects
include economics, environmental economics, managerial economics, financial management, commodities and futures markets, the global economy, development in Latin America, Africa, and Asia, cooperatives, international trade, pollution, and regulation. Students acquire the necessary skills to pursue a rewarding career in consulting, government, business, or international organizations, or a graduate degree in economics, public policy, business or law.

Major requirements usually met in the freshman and sophomore years are: A A E 215, ECON 102, an elementary course in statistics, and one semester of calculus (MATH 211, MATH 217 or MATH 221).

Other major requirements are: ECON 301 and ECON 302, A A E 500 (a "capstone" course), and a minimum of 15 additional credits in AAE courses. Students may select an area of concentration within the major from four choices: Applied Economics, Development Economics, Environmental Economics or Managerial Economics. These 15 credits are selected by the student with the assistance of an advisor and must be at the 200 level or above (does not include A A E 215, A A E 299 or A A E 500).

Students completing the agricultural and applied economics major are awarded the bachelor of science degree.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

Code
Title
Credits
Mathematics and Statistics

This major requires calculus. Prerequisites may need to be taken before enrollment in calculus.

| Select one of the following: | 5 |
| :--- | :--- |
| MATH 211 | Calculus |
| MATH 217 | Calculus with Algebra and |
|  | Trigonometry II |
| MATH 221 | Calculus and Analytic Geometry 1 |

Select one of the following: 3-6

| ECON 310 | Statistics: Measurement in <br> Economics |
| :--- | :--- | :--- |
| STAT 301 | Introduction to Statistical Methods |


| Applied Economics |
| :--- |
| Development Economics |
| Environmental Economics |
| Managerial Economics |
| Capstone |
| A A E $500 \quad$ Senior Capstone Experience |
| Total Credits |
| A A E 215 Introduction to Agricultural and Applied |
| Economics satisfies QR-B credit. |
| A A E 215 Introduction to Agricultural and Applied |
| Economics, A A E 299 Independent Study and A A E 500 Senior |
| Capstone Experience may not count toward the 15 credits required in |
| the major. |

## CONCENTRATIONS WITHIN THE MAJOR APPLIED ECONOMICS

| Code | Title | Credits |
| :--- | ---: | ---: |
| AAE courses, 200 level and above ${ }^{1}$ | 15 |  |
| Total Credits | 15 |  |

1 AAE courses 200 level and above may not include A A E 215 Introduction to Agricultural and Applied Economics, A A E 299 Independent Study or A A E 500 Senior Capstone Experience.

## DEVELOPMENT ECONOMICS

Code
Title
Credits
Select any of the following courses:

| A A E/INTL ST 373 | Globalization, Poverty and <br> Development | 3 |
| :--- | :--- | :---: |
| A A E/INTL ST 374 | The Growth and Development of <br> Nations in the Global Economy | 3 |
| A A E/ECON/ | Latin American Economic <br> Development | 3 |
| A A E/ECON 473 | Economic Growth and Development <br> in Southeast Asia | 3 |
| A A E/ECON 474 | Economic Problems of Developing <br> Areas | 3 |
| A E/ECON 477 | Agricultural and Economic <br> Development in Africa | 3 |

AAE courses, 200 level and above ${ }^{1}$
1 AAE courses 200 level and above may not include A A E 215 Introduction to Agricultural and Applied EconomicsIntroduction to Agricultural and Applied Economics, A A E 299 Independent Study or A A E 500 Senior Capstone Experience.

## ENVIRONMENTAL ECONOMICS

Code Title Credits

Select any of the following courses:

| A A E/ENVIR ST 244 | The Environment and the Global <br> Economy | 3 |
| :--- | :--- | ---: |
| A A E 246 | Climate Change Economics and <br> Policy | 3 |
| A A E/ECON/ | Environmental Economics | 4 |

ENVIR ST 343
A A E/ECON/
Natural Resource Economics
3
F\&W ECOL 531
A A E/ECON/ Energy Economics 3
ENVIR ST/
URB R PL 671
AAE courses, 200 level and above ${ }^{1}$
1 AAE courses 200 level and above may not include A A E 215 Introduction to Agricultural and Applied EconomicsIntroduction to Agricultural and Applied Economics , A A E 299 Independent Study or A A E 500 Senior Capstone Experience.

## MANAGERIAL ECONOMICS

## Code Title

Credits

| A A E 320 | Farming Systems Management | 3 |
| :--- | :--- | :--- |
| A A E 322 | Commodity Markets | 3 |
| A A E 419 | Agricultural Finance | 3 |
| A A E/ECON 421 | Economic Decision Analysis | 4 |

AAE courses, 200 level and above ${ }^{1}$
1 AAE courses 200 level and above may not include A A E 215 Introduction to Agricultural and Applied EconomicsIntroduction to Agricultural and Applied Economics, A A E 299 Independent Study or A A E 500 Senior Capstone Experience.

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Wuality of |
| Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Use economic concepts to better understand real-world problems.
2. Use appropriate quantitative techniques to analyze economic problems.
3. Use computer systems to effectively analyze economic problems.
4. Communicate results effectively in writing.
5. Communicate results effectively orally.
6. Think critically about economic issues.
7. Contribute to public policy debates.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE AGRICULTURAL \& APPLIED ECONOMICS FOURYEAR PLAN

Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 211 or $221^{1}$ | 5 COMM B | 3 |
| COMM A $^{2}$ | 3 Chemistry Course | $4-5$ |
| A A E 215 or ECON $101^{3}$ | $3-4$ CALS Science | 3 |


| First Year Seminar | Electives $^{4}$ | 6 |
| :--- | :---: | ---: |
|  | $12-13$ | $16-17$ |
| Total Credits 28-30 |  |  |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| ECON 102 | 3 ECON 301 | 4 |
| Statistics Course | 3 Electives | $9-12$ |
| CALS Science | 5 |  |
| Requirement | 4 |  |
| Elective | 15 | $13-16$ |

Total Credits 28-31

| Junior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| Concentration Courses | 6 Concentration Courses | 3 |
| ECON 302 | 4 Electives | 12 |
| Electives | 6 | 15 |
|  | 16 |  |

Total Credits 31
Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| Concentration Courses | 6 Capstone Course | 3 |
| Electives | 9 Electives | 12 |
|  | 15 | 15 |

Total Credits 30
1 Students must complete MATH 211 or MATH 217 or MATH 221. Students may satisfy the required level of math proficiency through the math placement exam. On the other hand, this level of competence may require as many as three semesters of coursework in mathematics.
The communications requirement includes Communication Parts A \& B. Completing this requirement early will help the students with written and oral assignments in future courses.
3 Students should complete the basic courses in economics early in their programs so that they can have greater choice in courses in the major.
4
Students should choose electives that satisfy one of the UW requirements (ethnic studies or social sciences or humanities) or the college requirements. See Requirements tab for details.

## ADVISING AND CAREERS

For more information or to declare a major in agricultural and applied economics, contact:

## Linda Davis

Department of Agricultural and Applied Economics
University of Wisconsin-Madison
424 Taylor Hall
608-262-9488
linda.davis@wisc.edu

## CAREERS

Students with a degree in agricultural and applied economics may specialize in international development, environmental policy, or managerial economics. They often find careers in policy analysis, environmental management, business analysis, trade or consulting. They can find employment with a variety of employers such as nonprofit organizations, government agencies, co-operatives, multinational firms, agribusiness companies, financial institutions and the food or retailing industry. Many students pursue graduate degrees in economics, business, public policy, law or other areas.

Students can use the services provided by the CALS Career Services Office (https://cals.wisc.edu/academics/undergraduate-students/careerservices), which include help with creating a resume or cover letter and mock interviews. CALS students also have access to BuckyNet (https:// cals.wisc.edu/academics/undergraduate-students/career-services/ buckynet), an online job/internship posting tool that provides students with hundreds of job and internship listings.

## PEOPLE

## PROFESSORS

Barham, Bradford Chavas, Jean-Paul Coxhead, Ian
Deller, Steven Foltz, Jeremy (Chair) Gould, Brian
Mitchell, Paul Phaneuf, Daniel Provencher, R. William Rutherford, Thomas
Stiegert, Kyle

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Johnston, Craig*
Parker, Dominic
Tjernstroem, Emilia

## FACULTY ASSOCIATES

Beach, Jeremy
Dong, Fengxia
Reynolds, Anne
UNDERGRADUATE ADVISOR
Davis, Linda

## *AAE Affiliate Faculty

## WISCONSIN EXPERIENCE

## CAPSTONE

Students with a major in agricultural and applied economics (AAE) must all complete the senior capstone requirement. For our majors, the capstone is a specific class which offers students the opportunity to work in a group with other students in their area of interest to produce a final project and present it to their fellow students and AAE faculty. Students will have the opportunity to demonstrate how the concepts they have learned in their AAE classes are applied to real-world situations.

## STUDY ABROAD

Many students with a major in agricultural and applied economics choose to study abroad. Study abroad programs offer students the opportunity to gain an international perspective and can prepare students to participate in today's global economy. International Academic Programs (IAP) (https://www.studyabroad.wisc.edu) serves as the primary study abroad office on campus, offering over 200 programs in over 60 countries around the world. IAP program offerings, available to all majors, range from short-term, faculty-led opportunities to intensive language study, internships, a semester or a year at a university overseas, service learning, and programs with special themes. There are also international programs offered through the College of Agricultural and Life Sciences (CALS) (https://cals.wisc.edu/academics/undergraduate-students/international-programs). Study abroad programs in CALS cover a variety of content areas such as sustainable development, food systems, agriculture, health and wellness, and community and economic development.

## RENK SCHOLARSHIP PROGRAM

Agricultural and applied economics majors are eligible to apply for the Renk Scholarship Program (https://renk.aae.wisc.edu/renkscholarship), which can provide increasing scholarships for up to three years. The Renk Scholarship Program is part of the Renk Agribusiness Institute (https://renk.aae.wisc.edu) and emphasizes leadership in contemporary agricultural issues and activities linked to agribusiness.

## INDEPENDENT STUDY

Students in the agricultural and applied economics major may have the opportunity to work with an AAE faculty member on an independent study project. They will work with one of our faculty and engage in independent reading and research for credit. Students will have the opportunity to experience the excitement and frustrations of doing research, while learning techniques that might prove useful in future projects.

## RESOURCES AND SCHOLARSHIPS

The Department of Agricultural and Applied Economics offers a number of scholarships to students declared in both of our majors, agricultural \& applied economics and agricultural business management. Students in either of these majors or who have declared the certificate in business management for agricultural and life sciences (p. 50) are also eligible to apply for the Renk Scholarship Program (https://renk.aae.wisc.edu/ renk-scholarship), which can provide increasing scholarships for up to three years. The Renk Scholarship Program is part of the Renk Agribusiness Institute (https://renk.aae.wisc.edu) and emphasizes
leadership in contemporary agricultural issues and activities linked to agribusiness.

The Agricultural Business Management Club at UW-Madison is a group of motivated students interested in careers involving agriculture and/ or business. The club offers members the opportunity to learn more about the agribusiness industry and make connections through career speakers, field trips and social events.

## AGRICULTURAL BUSINESS <br> MANAGEMENT, B.S.

Today's businesses and industries in the agricultural and food sectors of the economy are growing rapidly. Agribusiness industries, such as those that supply farm inputs or process and market agricultural products, need staff who are educated in both business and agriculture. Students in agricultural business management also find employment in companies specializing in biological systems engineering, landscape architecture, biotechnology, food technology, food science, food marketing, and largescale farm enterprises.

The bachelor of science degree program in agricultural business management enables students to obtain a strong foundation in economics to learn how businesses make decisions and minimize risk and how to use applied mathematics and statistics to analyze prices and markets. Agricultural and applied economics (AAE) courses constitute a substantial segment of the curriculum for the B.S. degree in agricultural business management. In addition to general college requirements, a major in ABM includes courses in economics, math, and statistics. ABM students will also take a minimum of 12 credits from the School of Business. (See Requirements tab for more information.)

Agricultural business management emphasizes coursework in the functional areas of the business school: accounting, finance, marketing, management, and human resources.

| Code Title Credits |
| :--- |
| Students will learn: |
| Skills for running a business |
| Finance and economic decision analysis |
| Analytical and managerial tools |
| Organization of the food system |
| Commodity markets |
| Senior capstone project integrates learning from major <br> coursework |

A degree in agricultural business management prepares students for a career in agribusiness or other fields of business. The Department of Agricultural and Applied Economics may be consulted for specific career information for the major.

Students completing the agricultural business management major are awarded the Bachelor of Science-Agricultural Business Management degree.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information
about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

Code Title Credits

Mathematics and Statistics
This major requires calculus. Prerequisites may need to be taken before enrollment in calculus.
Select one of the following:


| ECON 302 | Intermediate Macroeconomic <br> Theory | 4 |
| :--- | :--- | :--- |
| or ECON 312 | Intermediate Macroeconomic Theory - Advanced <br> Treatment |  |
| A A E 320 | Farming Systems Management | 3 |
| A A E 322 | Commodity Markets | 3 |
| A A E 419 | Agricultural Finance | 3 |
| AA E/ECON 421 | Economic Decision Analysis |  |
| ACCT IS 100 | Introductory Financial Accounting ${ }^{2}$ | 4 |
| or ACCT IS 300 Accounting Principles | 3 |  |
| Select three of the following: |  |  |


| ECON/FINANCE | Introduction to Finance |
| :--- | :--- |
| 300 | Business Law |
| GEN BUS 301 | Fundamentals of Accounting and <br> GEN BUS 310 |
| GEN BUS 311 | Fundamentals of Management and <br> Marketing for Non-Business Majors |
| MARKETNG 300 | Marketing Management |
| M H R 300 | Managing Organizations |
| M H R 305 | Human Resource Management |
| ACCT I S 211 | Introductory Managerial Accounting |


| Capstone |  |  |
| :--- | ---: | ---: |
| A A E 500 | Senior Capstone Experience | 3 |
| Total Credits |  | $50-52$ |

1 ACCT IS 100 is a prerequisite for ACCT I S 211.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Use economic concepts to better understand real-world problems.
2. Use appropriate quantitative techniques to analyze economic problems.
3. Use computer systems to effectively analyze economic problems.
4. Communicate results effectively in writing.
5. Communicate results effectively orally.
6. Think critically about economic issues.
7. Contribute to public policy debates.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

## SAMPLE AGRICULTURAL BUSINESS MANAGEMENT FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 211 or $221^{1}$ | 5 COMM B | $3-4$ |
| COMM A | 3 Chemistry Course | $4-5$ |
| A A E 215 or ECON 101 | 3 |  |
|  | $3-4$ CALS Science | 3 |
| First Year Seminar | Requirement |  |
| Electives | 1 Electives | 3 |
|  | 3 | $13-15$ |

Total Credits 28-31

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| ECON 102 | 3 ECON 301 | 4 |
| Statistics Course | 3 ACCT I 100 or 300 | 3 |
| CALS Biological Science | 3 CALS Biological Science | 3 |
| Requirement | Requirement |  |
| Electives | 6 Electives | 4 |
|  | 15 | 14 |

Total Credits 29

## Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| A A E 320 | 3 Business Core Course | 6 |
| ECON 302 | 4 A A E 322 | 3 |
| Business Core Course ${ }^{5}$ | 3 Electives | 6 |
| Electives | 6 |  |
|  | 16 | 15 |

Total Credits 31

## Senior

Fall Credits Spring Credits
A AE419 3 Capstone Course 3

| A A E/ECON 421 | 4 Electives | 12 |
| :--- | :---: | :---: |
| Electives | 8 |  |
|  | 15 | 15 |

## Total Credits 30

1 Students must complete MATH 211 Calculus or MATH 217 or MATH 221. Students may satisfy the required level of math proficiency through the math placement exam. On the other hand, this level of competence may require as many as three semesters of coursework in mathematics.

The communications requirement includes Communication Parts $A$
\& B. Completing this requirement early will help the students with written and oral assignments in future courses.
Students should complete the basic courses in economics early in their programs so that they can have greater choice in courses in the major.
4

5
Students should choose electives that satisfy one of the UW requirements (ethnic studies or social sciences or humanities) or the college requirements. See Requirements tab for details.
ABM students are required to take 9 credits from FINANCE/ ECON 300, GEN BUS 301, GEN BUS 310, GEN BUS 311, MARKETNG 300, M H R 300 (Organizational Behavior), M H R 305 (Human Resources), and ACCT I S 211.

## ADVISING AND CAREERS

For more information or to declare a major in agricultural business management, contact:

## Linda Davis

Department of Agricultural and Applied Economics
University of Wisconsin-Madison
424 Taylor Hall
608-262-9488
linda.davis@wisc.edu

## CAREERS

Students with a degree in agricultural business management often find careers in areas such as banking and finance, business analysis, marketing, management, commodities trading, sales or consulting.

Types of employers:

- Agribusiness firms
- Financial institutions, banks or investment firms
- Local, state or federal government agencies
- Co-operatives
- Retail food companies
- Tech companies

Students can use the services provided by the CALS Career Services Office (https://cals.wisc.edu/academics/undergraduate-students/careerservices), which include help with creating a resume or cover letter and mock interviews. CALS students also have access to BuckyNet (https:// cals.wisc.edu/academics/undergraduate-students/career-services/ buckynet), an online job/internship posting tool that provides students with hundreds of job and internship listings.

## PEOPLE

## PROFESSORS

Barham, Bradford
Chavas, Jean-Paul
Coxhead, Ian
Deller, Steven
Foltz, Jeremy (Chair)
Gould, Brian
Mitchell, Paul
Phaneuf, Daniel

Provencher, R. William
Rutherford, Thomas
Stiegert, Kyle

## ASSOCIATE PROFESSORS

Alix-Garcia, Jennifer
Du, Sheldon
Grainger, Corbett
Fletcher, Jason*
Hueth, Brent
Schechter, Laura
Shi, Guanming

## ASSISTANT PROFESSORS

Conroy, Tessa*
Dower, Paul
Johnston, Craig*
Parker, Dominic
Tjernstroem, Emilia

## FACULTY ASSOCIATES

Beach, Jeremy
Dong, Fengxia
Reynolds, Anne

## UNDERGRADUATE ADVISOR

Davis, Linda

## *AAE Affiliate Faculty

## WISCONSIN EXPERIENCE

## CAPSTONE

Students with a major in agricultural business management (ABM) must complete the senior capstone requirement. For our majors, the capstone is a specific class which offers students the opportunity to work in a group with other students in their area of interest to produce a final project and present it to their fellow students and Agricultural \& Applied Economics faculty. Students will have the opportunity to demonstrate how the concepts they have learned in their ABM classes are applied to real-world situations.

## INTERNSHIP

Internships allow students to gain professional experience and skills that future employers value. Agricultural business management students are encouraged to complete an internship during their undergraduate years and some of them choose to receive academic credit for their internship. An internship lets you experience a career to see if it's the right one for you, allows you to gain useful skills, and provides an opportunity to make connections with professionals in the industry. Students usually complete an internship during the summer after their sophomore or junior year.

## RENK SCHOLARSHIP PROGRAM

Agricultural business managemnt majors are eligible to apply for the Renk Scholarship Program (https://renk.aae.wisc.edu/renkscholarship), which can provide increasing scholarships for up to three years. The Renk Scholarship Program is part of the Renk Agribusiness Institute (https://renk.aae.wisc.edu) and emphasizes leadership in contemporary agricultural issues and activities linked to agribusiness.

## STUDY ABROAD

Students with a major in agricultural business management may choose to study abroad. Study abroad programs offer students the opportunity to gain an international perspective and can prepare students to participate in today's global economy. International Academic Programs (IAP) (https://www.studyabroad.wisc.edu) serves as the primary study abroad office on campus, offering over 200 programs in over 60 countries around the world. IAP program offerings, available to all majors, range from short-term, faculty-led opportunities to intensive language study, internships, a semester or a year at a university overseas, service-learning, and programs with special themes. There are also international programs offered through the College of Agricultural and Life Sciences (CALS) (https://cals.wisc.edu/academics/undergraduate-students/international-programs). Study abroad programs in CALS cover a variety of content areas such as sustainable development, food systems, agriculture, health and wellness, and community and economic development.

## RESOURCES AND SCHOLARSHIPS

The Department of Agricultural and Applied Economics offers a number of scholarships to students declared in both of our majors, agricultural \& applied economics and agricultural business management. Students in either of our majors or who have declared the certificate in business management for agricultural and life sciences (p.50) are also eligible to apply for the Renk Scholarship Program (https://renk.aae.wisc.edu/ renk-scholarship), which can provide increasing scholarships for up to three years. The Renk Scholarship Program is part of the Renk Agribusiness Institute (https://renk.aae.wisc.edu) and emphasizes leadership in contemporary agricultural issues and activities linked to agribusiness.

The Agricultural Business Management Club at UW-Madison is a group of motivated students interested in careers involving agriculture and/ or business. The club offers members the opportunity to learn more about the agribusiness industry and make connections through career speakers, field trips, and social events.

## BUSINESS MANAGEMENT <br> FOR AGRICULTURAL AND LIFE SCIENCES, CERTIFICATE

Basic business literacy can benefit all graduates, no matter what their field or intended career. When entering the professional world, CALS students are increasingly confronted with contexts that require an understanding of basic business and management concepts. The certificate in business management for agricultural and life sciences can provide students with the business skills that employers value.

The certificate offers students in the College of Agricultural and Life Sciences (CALS) the opportunity to gain business knowledge and have it recorded on their transcript. The certificate is designed specifically for students intending to pursue careers in agriculture and life sciences, and enrollment is open only to undergraduates currently enrolled in CALS. This professional credential is offered by the Department of Agricultural and Applied Economics, the Department of Life Sciences Communication, and the Renk Agribusiness Institute, with the collaboration of the School of Business.

## HOW TO GET IN

To declare this certificate, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32). Contact the advisor listed under the Advising and Careers tab for more information or to declare the certificate.

## REQUIREMENTS

| Code |  | Credits |
| :---: | :---: | :---: |
| Completion of the certificate requires a total of 18 credits. |  |  |
| The following four courses are required: |  |  |
| A A E 215 | Introduction to Agricultural and Applied Economics | 3 |
| LSC 270 | Communication in Life Science Industries | 3 |
| GEN BUS 310 | Fundamentals of Accounting and Finance for Non-Business Majors | 3 |
| GEN BUS 311 | Fundamentals of Management and Marketing for Non-Business Majors | 3 |
| Select six credits from | the following classes: | 6 |
| A A E 319 | The International Agricultural Economy |  |
| A A E 320 | Farming Systems Management |  |
| A A E 322 | Commodity Markets |  |
| A A E 323 | Cooperatives |  |
| A A E 419 | Agricultural Finance |  |
| A A E/ECON 421 | Economic Decision Analysis |  |
| A A E/ECON 526 | Quantitative Methods in Agricultural and Applied Economics |  |
| A A E/M HR 540 | Intellectual Property Rights, Innovation and Technology |  |
| DY SCI 233 | Dairy Herd Management I |  |
| DY SCI 234 | Dairy Herd Management II |  |
| DY SCI 535 | Dairy Farm Management Practicum |  |
| LSC 250 | Research Methods in the Communication Industry |  |
| LSC 251 | Science, Media and Society |  |
| LSC 431 | Advertising in the Life Sciences |  |
| LSC 432 | Social Media for the Life Sciences |  |
| LSC 435 | Theory and Practice of Integrated Marketing Communication |  |
| No substitutions are allowed for the core courses. Students may count no more than two courses toward both their major requirements and these certificate requirements. |  |  |
| CERTIFICATE COMPLETION |  |  |
| REQUIREMENT |  |  |
| This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate. |  |  |

No substitutions are allowed for the core courses. Students may count no more than two courses toward both their major requirements and these ertificate requirements

## CERTIFICATE COMPLETION REQUIREMENT

 the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.
## LEARNING OUTCOMES

1. Understand general business concepts.
2. Understand business management fundamentals in an agricultural and life sciences context.
3. Understand economics, marketing and communication as they relate to business management in agricultural and life science industries.

## ADVISING AND CAREERS

For more information or to declare the certificate in business management for agricultural and life sciences, contact:

Linda Davis
Department of Agricultural and Applied Economics
University of Wisconsin-Madison
424 Taylor Hall
608-262-9488
linda.davis@wisc.edu

## CAREERS

Students pursing the certificate in business management for agricultural and life sciences are often interested in careers such as running a research lab, managing the books on their family farm, banking, business analysis, marketing, or management and sales, depending on their major. When combined with their major, the certificate can provide a basic background in business management that many employers find valuable.

Students can use the services provided by the CALS Career Services Office (https://cals.wisc.edu/academics/undergraduate-students/careerservices), which include help with creating a resume or cover letter and mock interviews. CALS students also have access to BuckyNet (https:// cals.wisc.edu/academics/undergraduate-students/career-services/ buckynet), an online job/internship posting tool that provides students with hundreds of job and internship listings.

## PEOPLE

## FACULTY

Conroy, Tessa
Du, Sheldon
Foltz, Jeremy (Chair)
Gould, Brian
Mitchell, Paul
Stiegert, Kyle

## FACULTY ASSOCIATES

Beach, Jeremy

## UNDERGRADUATE ADVISOR

Davis, Linda

## WISCONSIN EXPERIENCE

## INTERNSHIPS

Students declared in the certificate in business management for agricultural and life sciences may choose to do an internship to get some experience in their field of interest. They can use the services provided by the CALS Career Services Office (https://cals.wisc.edu/academics/ undergraduate-students/career-services) to help find an internship, including BuckyNet (https://cals.wisc.edu/academics/undergraduate-students/career-services/buckynet), an online job/internship posting tool that provides students with hundreds of job and internship listings.

## RENK SCHOLARSHIP PROGRAM

Students declared in the certificate in business management for agricultural and life sciences are eligible to apply for the Renk Scholarhsip Program (https://renk.aae.wisc.edu/renk-scholarship), which can provide increasing scholarships for up to three years. The Renk Scholarship Program is part of the Renk Agribusiness Institute (https://renk.aae.wisc.edu) and emphasizes leadership in contemporary agricultural issues and activities linked to agribusiness.

## AGRICULTURAL BUSINESS MANAGEMENT CLUB

The Agricultural Business Management Club at UW-Madison is a group of motivated students interested in careers involving agriculture and/ or business. The club offers members the opportunity to learn more about the agribusiness industry and make connections through career speakers, field trips, and social events.

## RESOURCES AND SCHOLARSHIPS

## RENK SCHOLARSHIP PROGRAM

Students delcared in the certificate for business management for agricultural and life dciences are eligible to apply for the Renk Scholarship Program (https://renk.aae.wisc.edu/renk-scholarship), which can provide increasing scholarships for up to three years. The Renk Scholarship Program is part of the Renk Agribusiness Institute (https://renk.aae.wisc.edu) and emphasizes leadership in contemporary agricultural issues and activities linked to agribusiness.

## AGRICULTURAL BUSINESS MANAGEMENT CLUB

The Agricultural Business Management Club at UW-Madison is a group of motivated students interested in careers involving agriculture and/ or business. The club offers members the opportunity to learn more about the agribusiness industry and make connections through career speakers, field trips and social events.

## DEVELOPMENT ECONOMICS, CERTIFICATE

The certificate in development economics gives students a solid foundation of analytical skills that will enable them to better understand the challenges created by world poverty. They will learn how economics can be used to address the problems of poverty and the impact of globalization on growth and development. Students will focus on such issues as: the relationship between population growth and economic growth, the major debates about food self-sufficiency and food security,
how child labor and gender discrimination limit economic development and what environmental problems are posed by economic development.

The certificate in development economics is open to any undergraduate student enrolled at the University of Wisconsin-Madison.

## HOW TO GET IN

The certificate in development economics is open to any undergraduate student enrolled at the University of Wisconsin-Madison. In order to declare the certificate, the student must have successfully completed A A E 215 Introduction to Agricultural and Applied Economics, ECON 101 Principles of Microeconomics, or ECON 111 Principles of EconomicsAccelerated Treatment or a comparable introductory economics course. Contact the advisor listed under the Advising and Careers tab for more information or to declare the certificate.

## REQUIREMENTS

Code Title

In order to declare the certificate, the student must have successfully completed one of the following:

| A A E 215 | Introduction to Agricultural and Applied Economics |
| :---: | :---: |
| ECON 101 | Principles of Microeconomics |
| ECON 111 | Principles of EconomicsAccelerated Treatment |
| Code | Title Credits |
| The certificate requires five courses. |  |
| Complete two core courses: |  |
| A A E/ECON 474 | Economic Problems of Developing <br> Areas |
| A A E/INTL ST 373 | Globalization, Poverty and Development |
| or A A E/ INTL ST 374 | The Growth and Development of Nations in the Global Economy |

Select one course from the following:

| A AE 319 | The International Agricultural Economy |  |
| :---: | :---: | :---: |
| A A E/ <br> AGRONOMY/ <br> INTER-AG/ <br> NUTR SCI 350 | World Hunger and Malnutrition |  |
| A A E/ INTL ST 373 | Globalization, Poverty and Development |  |
| A A E/ <br> INTL ST 374 | The Growth and Development of Nations in the Global Economy |  |
| A A E/ECON/ INTL BUS 462 | Latin American Economic Development |  |
| A A E/ECON 473 | Economic Growth and Development in Southeast Asia |  |
| A A E/ECON 477 | Agricultural and Economic Development in Africa |  |
| Select one course from | the following: | 3 |


| C\&E SOC/ <br> POP HLTH/ | Contemporary Population Problems <br> for Honors |
| :--- | :--- |
| C\&E SOC/ | Sociology of International <br> ENVIR ST/ <br> SOc 540 |
| Development, Environment, and  <br> C\&E SOC/ Sustainability |  |
| SOC 630 | Third World |

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Understand the impacts of global economic processes, such as trade foreign investment, and migration, on growth and development.
2. Understand the contributions of private and public investments in areas such as agriculture, education, environmental resources, health care, industrialization, and technology adoption to growth and development, and the methods for measuring those effects.

## ADVISING AND CAREERS

For more information or to declare the certificate in development economics, contact:

Linda Davis
Department of Agricultural and Applied Economics

University of Wisconsin-Madison
424 Taylor Hall
608-262-9488
linda.davis@wisc.edu

## CAREERS

Students pursuing the certificate in development economics are often interested in careers in international development. Depending on their major, they often find careers in policy analysis, consulting, or working abroad. They can find employment with a variety of employers such as nonprofit organizations, government agencies, cooperatives, or multinational firms. Many students pursue graduate degrees in economics, public policy, law, or other areas.

## PEOPLE

## PROFESSORS

Barham, Bradford
Coxhead, Ian
Foltz, Jeremy (chair)
Rutherford, Thomas

## ASSOCIATE PROFESSORS

Schechter, Laura

ASSISTANT PROFESSORS<br>Tjernstroem, Emilia

## UNDERGRADUATE ADVISOR

Davis, Linda
*AAE Affiliate Faculty

## WISCONSIN EXPERIENCE

## STUDY ABROAD

Many students declared in the certificate in development economics choose to study abroad. Study abroad programs offer students the opportunity to gain an international perspective and can prepare them to participate in today's global economy. International Academic Programs (IAP) (https://www.studyabroad.wisc.edu) serves as the primary study abroad office on campus, offering more than 200 programs in more than 60 countries around the world. IAP program offerings, available to all majors, range from short-term, faculty-led opportunities to intensive language study, internships, a semester or a year at a university overseas, service learning, and programs with special themes. There are also international programs offered through the College of Agricultural and Life Sciences (CALS) (https://cals.wisc.edu/academics/undergraduate-students/international-programs). Study abroad programs in CALS cover a variety of content areas such as sustainable development, food systems, agriculture, health and wellness, and community and economic development.

# AGRICULTURAL AND LIFE SCIENCES COLLEGE-WIDE 

## DEGREES/MAJORS/CERTIFICATES

- College of Agricultural and Life Sciences Honors (http:// guide.wisc.edu/undergraduate/agriculturallife-sciences/college-wide/college-agricultural-life-sciences-honors)
- Individual Major, B.S. (p. 53)
- Landscape Architecture, B.S. (p. 56)
- Landscape Architecture, BSLA (p. 60)


## INDIVIDUAL MAJOR, B.S.

The individual major is a flexible program for undergraduates in the College of Agricultural and Life Sciences who want to attain a specific academic goal that is not easily attained through a major in one or more departments. The major must involve courses from several departments, must be at least as rigorous as a regular departmental major, and must be targeted at a special intellectual problem or academic need identified by the student. The individual major must be approved by a faculty committee and the CALS Curriculum Committee. Approval is not guaranteed, so students should be prepared to pursue alternative options and are encouraged to discuss these with their advisor.

The individual major is available in the bachelor of science degree program. The transcript will indicate "Individual Major" until the degree is awarded. It will then show the exact name of the approved "individual major."

Students are strongly encouraged to consult with an assistant dean in the CALS Office of Academic Affairs early in their undergraduate career to discuss the process, planning, and feasibility of completion.

## HOW TO GET IN

The individual major must be approved by a faculty committee and the CALS Curriculum Committee. Students are strongly encouraged to consult with an assistant dean in the Office of Academic Affairs early in their undergraduate career to discuss the process, planning, and feasibility of completion. The process to request to pursue an individual major is outlined below.

The student selects a three-person faculty committee from departments offering courses in the proposed major. The major advisor is from a CALS department that offers many of the courses in the proposed individual major. No more than two members of the committee can be from a single department. The student must submit a proposed plan of study to the committee for review and approval. The faculty committee must consult with the department with the most courses in the proposed major. The plan should include: the title of the proposed major; the rationale for the major; learning outcomes for the major and a brief assessment plan; the list of courses and the reasons for including each course in the major; and a semester plan for degree completion. The student is required to earn at least 30 credits after the term in which the proposal is approved. Thus, early planning is essential.

If the faculty committee approves the plan, the student should work with CALS Academic Affairs to submit the plan of study to the CALS Curriculum Committee along with a letter of support from the major advisor and a summary of the department discussion of the plan. The student and faculty advisor will meet with the Curriculum Committee to present the proposal. The Curriculum Committee may approve the proposal, reject the proposal, or ask for further clarification and resubmission. The decision of the Curriculum Committee is final. Any changes in the major must be approved by the faculty advisor and reported to the Office of Academic Affairs, and any changes that significantly affect the nature or rigor of the program must be reviewed and approved by the Curriculum Committee.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly,
courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## INDIVIDUAL MAJOR REQUIREMENTS DEVELOPMENT OF THE INDIVIDUAL MAJOR

Students are strongly encouraged to consult with an assistant dean in the Office of Academic Affairs early in their undergraduate career to discuss the process, planning, and feasibility of completion. Development of the individual major is the responsibility of the student. The student should identify a faculty major advisor from the CALS department that offers many of the courses in the proposed individual major. In addition, the student should select two additional faculty from departments offering the courses in the proposed major to serve on the faculty committee. The student should consult with the faculty members and an assistant dean in Academic Affairs as a plan of study is developed. The plan of study must include the following:

- title of proposed major
- rationale for the major (what specific goal does the major achieve that cannot be achieved through one or more existing majors? what is the targeted intellectual problem? why is the major necessary for achieving the student's academic and career goals?)
- 3-5 learning outcomes for the major with a brief explanation of how learning will be assessed
- list of courses, including the reason for including each course in the major (how does each course contribute to the major learning outcomes?)
- semester plan for degree completion and estimated graduation term (if graduation exceeds four total years, include a justification for the extended time-to-degree; note that the student must earn at least 30 credits after the term in which the proposal is approved)


## APPROVAL OF THE INDIVIDUAL MAJOR

Once the plan of study is developed, the student submits the plan to the faculty committee for review and approval. The faculty committee must consult with the department with the most courses in the proposed
major. The faculty committee may require revisions prior to approval. Once approved, the student should work with CALS Academic Affairs to submit the plan of study to the CALS Curriculum Committee along with a letter of support from the major advisor and a summary of the department discussion of the plan. The student and faculty advisor will meet with the curriculum committee to present the proposal. The curriculum committee may approve the proposal, reject the proposal, or ask for further clarification and resubmission. The decision of the curriculum committee is final. Any changes in the major must be approved by the faculty advisor and reported to the Office of Academic Affairs, and any changes that significantly affect the nature or rigor of the program must be reviewed and approved by the curriculum committee.

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of 30 } \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes }\end{array}
$$ <br>

UW-Madison courses offered in distance or online\end{array}\right\}\)| Quality offormats and credits earned in UW-Madison Study |
| :--- |
| Abroad/Study Away programs. | | Undergraduate students must maintain the minimum |
| :--- |
| Grade point average specified by the school, college, or |
| academic program to remain in good academic standing. |
| Students whose academic performance drops below |
| these minimum thresholds will be placed on academic |

## LEARNING OUTCOMES

Students will develop learning outcomes as part of the individual major proposal process in consultation with their faculty mentors and an assistant dean. Review the Provost's website (https:// assessment.provost.wisc.edu/student-learning-outcomes/writing-student-learning-outcomes) for guidelines on developing learning outcomes.

## FOUR-YEAR PLAN

Students will develop a semester-by-semester plan as part of the proposal process for the individual major, in consultation with their faculty mentors and an assistant dean. Review the Four-Year Plans available for similar or related majors in the Guide to begin planning. Students should submit the proposal early in their academic career but no later than achieving senior standing ( 86 credits) to ensure timely progress to degree completion.

## ADVISING AND CAREERS

Students are strongly encouraged to consult with an assistant dean in the Office of Academic Affairs early in their undergraduate career to discuss the process, planning, and feasibility of completion.

Students are required to identify a faculty advisor as part of the process for requesting approval to pursue an individual major. The faculty advisor serves as the student's academic advisor along with support from the other members of the student's faculty committee. Additionally, students must work closely with an assistant dean in Academic Affairs throughout development and completion of the major.

## WISCONSIN EXPERIENCE

From a first-year seminar course to completion of a culminating, majorrelated capstone experience, CALS students have the opportunity to participate in multiple signature CALS experiences. These experiences are defined by high-impact experiential learning and serve as the foundation of a CALS education, regardless of a student's major.

Here are ten ways to get involved and begin to create your own legacy on campus:

1. First-Year Seminar (p. 33): All incoming CALS students are provided a seamless transition to college by enrolling in one of several seminars with typically fewer than 25 students, close interaction with the instructor, and the opportunity to participate in meaningful dialogue about their experiences at UW-Madison.
2. CALS Honors Program (https://cals.wisc.edu/academics/ undergraduate-students/outside-the-classroom/honors-program): Highly motivated students can pursue a more rigorous course of study and be recognized for their achievements.
3. International Experience (https://cals.wisc.edu/academics/ undergraduate-students/international-programs): Students can choose from short-term programs of a few weeks to a full semester abroad based on their interests and academic plans. Combined with the International Studies (p.33) requirement, CALS students develop the skills needed to successfully interact, motivate, and work with a culturally diverse population.
4. Internships (https://cals.wisc.edu/academics/undergraduate-students/outside-the-classroom/internships): Real-world work or field experience will: (a) help students explore a career or job, (b) increase postgraduation employment opportunities, and (c) broaden professional networks.
5. Leadership Education (https://cals.wisc.edu/academics/ undergraduate-students/outside-the-classroom/leadershipprograms): CALS has many opportunities for students to learn about and practice leadership including a leadership seminar, a leadership retreat, student organizations, and college committees.
6. Mentored Research / Independent Study (https://cals.wisc.edu/ academics/undergraduate-students/outside-the-classroom/ mentored-research-independent-studies): UW-Madison is known for its cutting-edge research. Students have the opportunity to be part of the discovery process by earning academic credit.
7. Service (http://www.morgridge.wisc.edu): CALS students have a strong record of service to the local, state, and international communities. Visit the Morgridge Center (https:// morgridge.wisc.edu) for opportunities.
8. Student Organizations (https://cals.wisc.edu/academics/ undergraduate-students/outside-the-classroom/studentorganizations): CALS has more than 30 student organizations, and there are more than 1,000 campus-wide.
9. Facilities (https://cals.wisc.edu/about-cals/visit-cals): CALS has outstanding facilities for student housing, instruction, and research. From the Allen Centennial Garden with the former dean's residence to

13 Agricultural Research Stations, students experience hands-on and unique learning environments.
10. Capstone (p. 33): Students integrate and apply knowledge in a culminating learning experience designed to prepare them to address real-world problems after graduation.

## The majority of CALS students complete several of the signature experiences above.

- $63 \%$ of CALS students complete internships or field experiences.
- $75 \%$ of CALS students complete community service or volunteer activities.
- $50 \%$ of CALS students complete mentored research experiences.


## LANDSCAPE ARCHITECTURE, B.S.

Admissions to the Landscape Architecture B.S. has been suspended as of spring 2019 and will be discontinued as of fall 2019. If you have any questions, please contact the department (academicaffairs@cals.wisc.edu).

The bachelor of science program with a major in landscape architecture provides students with a solid foundation to pursue careers in landscape planning and conservation. It emphasizes problem-solving skills and critical thinking based on ecological principles, societal needs and cultural foundations. Landscape planning focuses on strategies to integrate human activities with landscape resources in order to achieve healthy living environments through sustainable and livable community development. Landscape conservation is concerned with achieving healthy ecosystems and in cultural and natural resource preservation.

The curriculum includes courses on theory and process and on techniques for data gathering and manipulation with an emphasis on geospatial information systems and interdisciplinary perspectives as well as on ensuring public participation in making planning and conservation decisions.

This major is of particular interest to students interested in ecological restoration and preservation and environmental planning. It prepares students for graduate work in such fields as restoration ecology, landscape architecture, urban and regional planning, architecture, law, environmental studies, and environmental design.

## HOW TO GET IN

Admissions to the Landscape Architecture B.S. has been suspended as of spring 2019 and will be discontinued as of fall 2019. If you have any questions, please contact the department (academicaffairs@cals.wisc.edu).

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code Title Credits

Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33)
International Studies (p. 33)
Physical Science Fundamentals

| CHEM 103 | General Chemistry I |
| ---: | :--- |
| or CHEM 108 | Chemistry in Our World |
| or CHEM 109 | Advanced General Chemistry |
| Biological Science |  |

Additional Science (Biological, Physical, or Natural)
Science Breadth (Biological, Physical, Natural, or Social)
CALS Capstone Learning Experience: included in
the requirements for each CALS major (see "Major
Requirements") (p. 33)

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere.

ENVIR ST/GEOG 127 Physical Systems of the Environment is recommended to fulfill the CALS International Studies requirement.

| Code |  | Credits |
| :---: | :---: | :---: |
| Mathematics and Statistics |  |  |
| Select one of the following (or may be satisfied by placement exam): |  | 5-6 |
| MATH 112 <br> \& MATH 113 | Algebra and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| Select one of the following: |  | 3-5 |
| MATH 211 | Calculus |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| STAT 301 | Introduction to Statistical Methods |  |
| Biology |  |  |
| Select one of the following: |  | 5-6 |
| Option 1: |  |  |
| BOTANY/ BIOLOGY 130 | General Botany |  |
| Option 2: |  |  |
| BOTANY 100 | Survey of Botany |  |
| And select one of the following: |  |  |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology |  |
| HORT 227 | Propagation of Horticultural Plants |  |
| or another 2 cred horticulture, agro | s of lab or field-based botany, omy, or landscape architecture |  |
| Select one of the fol | wing: | 3-4 |
| BOTANY/ <br> ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology |  |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin |  |
| BOTANY/ <br> F\&W ECOL/ ZOOLOGY 460 | General Ecology |  |

## Core

34-5CHEM 103 General Chemistry I or CHEM 108 Chemistry in Our World
or CHEM 109 Advanced General Chemistry

LAND ARC 211

|  | Methods |
| :--- | :--- |
| LAND ARC 260 | History of Landscape Architecture |
| LAND ARC/ | Applications of Geographic |
| ENVIR ST/ | Information Systems in Natural |
| SOIL SCI 695 | Resources |
| or URB R PL/ | Applications of Geographic Information Systems |
| LAND ARC 622 | in Planning |

HISTORY/ENVIR ST/ American Environmental History 4 GEOG 460
or ART HIST 457 History of American Vernacular Architecture and Landscapes
URB R PL/LAND ARC Evolution of American Planning 3
463

| URB R PL 601 | Site Planning | 3 |
| :--- | :--- | :--- |
| LAND ARC 375 | Special Topics (minimum total of 3 | 3 |

## Specialization

Select one of the following: 18-22
Specialization 1: Cultural and Historic Landscapes
Specialization 2: Environmental Planning
Specialization 3: Ecological Restoration

## Capstone

Select one of the following:

| LAND ARC 691 | Senior Thesis |
| :--- | :--- |
| \& LAND ARC 692 | and Senior Thesis |
| LAND ARC 699 | Special Problems-Landscape <br>  <br>  <br> Architecture |

Total Credits
68-77
1 Students who completed LAND ARC 201 do not need to complete LAND ARC 210 Introduction to Landscape Architecture Design.
Note: Restoration students are encouraged to select BOTANY/ BIOLOGY 130 General Botany, BOTANY/ENVIR ST/ZOOLOGY 260 Introductory Ecology or BOTANY/F\&W ECOL/ZOOLOGY 460 General Ecology, and STAT 301 Introduction to Statistical Methods or equivalent under college and university requirements.

## SPECIALIZATIONS WITHIN THE MAJOR <br> SPECIALIZATION 1: CULTURAL AND HISTORIC LANDSCAPES

| Code | Title | Credits |
| :--- | :--- | ---: |
| LAND ARC 677 | Cultural Resource Preservation and <br> Landscape History | 3 |
| Select one of the following: | 3 |  |
| FOLKLORE 320 | Folklore of Wisconsin |  |
| FOLKLORE 439 | Foodways |  |


| FOLKLORE/ <br> LIS 490 | Field Methods and the Public Presentation of Folklore |
| :---: | :---: |
| FOLKLORE/ ANTHRO/MUSIC/ THEATRE 539 | The Folklore of Festivals and Celebrations |
| FOLKLORE 540 | Local Culture and Identity in the Upper Midwest |
| Select one of the following: 3-4 |  |
| HISTORY 201 or HISTORY 403 | The Historian's Craft Immigration and Assimilation in American History |
| Select one of the following: 3-4 |  |
| ANTHRO/AMER IND 353 | Indians of the Western Great Lakes |
| ANTHRO/AMER IND 354 | Archaeology of Wisconsin |
| ANTHRO/AMER IND 431 | American Indian Folklore |
| AMER IND 250 | Indians of Wisconsin |
| AMER IND/LSC <br> 444 | Native American Environmental Issues and the Media |
| ANTHRO/ AMER IND/ BOTANY 474 | Ethnobotany |
| AMER IND/C\&E SOC/SOC 578 | Poverty and Place |
| Select one of the following: |  |


| ART HIST/ | Dimensions of Material Culture |
| :--- | :--- |
| ANTHRO/DS/ |  |
| HISTORY/ |  |
| LAND ARC 264 | Topics in Architectural History |
| ART HIST 449 | History of American Vernacular  <br> ART HIST 457 Architecture and Landscapes |
| ART HIST/DS/ | Dimensions of Material Culture |
| HISTORY 464 |  |


| Select one of the following: |  | 3-4 |
| :---: | :---: | :---: |
| GEOG 301 | Geography of Social Organization |  |
| GEOG/ <br> URB R PL 305 | Introduction to the City |  |
| GEOG/ <br> ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG/C\&E SOC/ ENVIR ST 434 | People, Wildlife and Landscapes |  |
| GEOG 501 | Space and Place: A Geography of Experience |  |
| URB R PL 711 | Planning for Food Systems and Marketplaces |  |
| Total Credits |  | 18-21 |

## SPECIALIZATION 2: ENVIRONMENTAL PLANNING

| Code | Title | Credits |
| :--- | :--- | ---: |
| ECON 101 | Principles of Microeconomics | 4 |
| SOC/C8E SOC 210 | Surver | $3-4$ |


| or SOC/ <br> C\&ESOC 211 | The Sociological Enterprise |  |
| :---: | :---: | :---: |
| GEOG/URB R PL 305 or URB R PL 590 | Introduction to the City <br> Contemporary Topics in Urban and Regional Planning | 3-4 |
| C\&E SOC/URB R PL 617 | Community Development | 3 |
| Select one of the following: |  | 3-4 |
| URB R PL/ ENVIR ST 668 | Green Politics: Global Experience, American Prospects |  |
| F\&W ECOL/ ENVIR ST 515 | Natural Resources Policy |  |
| ECON/URB R PL 449 | Government and Natural Resources |  |
| Select one of the following: |  | 3-4 |
| REAL EST/URB R PL 306 | The Real Estate Process |  |
| REAL EST/URB R PL 420 | Urban and Regional Economics |  |
| A A E/ECON/ ENVIR ST 343 | Environmental Economics |  |

Total Credits 19-23

## SPECIALIZATION 3: ECOLOGICAL RESTORATION

| Code | Title | Credits |
| :--- | :--- | ---: |
| BOTANY 400 | Plant Systematics | 4 |
| or BOTANY 401 | Vascular Flora of Wisconsin |  |
| BOTANY/ | The Vegetation of Wisconsin |  |
| F\&W ECOL 455 |  | 4 |
| LAND ARC 353 | Landscape Architectural <br> Technology I | 3 |
| LAND ARC 668 | Restoration Ecology | 3 |
| Select one of the following: | $3-4$ |  |


| ENVIR ST/ | Conservation Biology |
| :--- | :--- |
| BOTANY/ |  |
| F\&W ECOL/ |  |
| ZOOLOGY 651 |  |

GEOG/ Environmental Conservation
ENVIR ST 339
ENVIR ST/ Extinction of Species
F\&W ECOL/
ZOOLOGY 360
Select one of the following: 2-3
AGRONOMY/ Grassland Ecology
BOTANY/
SOIL SCI 370
LAND ARC/ Wetlands Ecology
ENVIR ST 361
SOIL SCI/ Soil Biology
PL PATH 323
ZOOLOGY/ Limnology-Conservation of Aquatic
ENVIR ST 315 Resources
LAND ARC 399 Coordinative Internship/Cooperative 1-8 Education
or LAND ARC 699 Special Problems-Landscape Architecture Total Credits

20-29

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
|  | Abroad/Study Away programs. |
| Quality of | Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or |
| Work | academic program to remain in good academic standing. <br> Students whose academic performance drops below |
| these minimum thresholds will be placed on academic |  |

## LEARNING OUTCOMES

1. Integrate social, cultural, ecological and technological dimensions in solving novel problems concerning the conservation or management of sustainable natural and cultural landscapes.
2. Demonstrate critical thinking and the ability to explore ideas and synthesize information, both independently and in collaboration with interdisciplinary team members.
3. Demonstrate competence and critical judgment in applying the intellectual and technical skills necessary for site and landscape-scale natural and cultural resource conservation planning and management; in particular the skills of: site inventory and analysis, spatial and temporal analysis; geographic information systems; programming; synthesis; communication; implementation; and evaluation.
4. Understand, apply and evaluate the principles, theories and recent research findings underlying at least one of the following fields of landscape studies, in particular cultural and historic landscapes, environmental planning, and ecological restoration.
5. Demonstrate advanced communication skills, including visual, verbal, and written presentation skills.
6. Be able to perform as a member of a public or private natural or cultural resources conservation or preservation office or agency.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE LANDSCAPE ARCHITECTURE FOUR-YEAR PLAN-BACHELOR OF SCIENCE DEGREE

## Freshman

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| LAND ARC 210 | 4 LAND ARC 211 | 4 |
| LAND ARC $250{ }^{1}$ | 3 MATH 113 | 3 |
| CHEM 108 | 5 BOTANY/BIOLOGY 130 | 5 |
| MATH 112 | 3 COMM A Course | 3 |
| First Year Seminar | 1 Electives ${ }^{3}$ | 3 |
|  | 16 | 18 |

Total Credits 34

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| Biological Science | 5 LAND ARC 260 | 3 |
| Course |  |  |
| SOIL SCI 301 | 4 BOTANY/ENVIR ST/ | $3-4$ |
|  | ZOOLOGY 260, 455, or |  |
|  | 460 |  |
| Electives | 6 Math / Statistics Course | 3 |
|  | Electives | 6 |
|  | 15 | $15-16$ |

Total Credits 30-31

Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| Landscape Architecture | 6 LAND ARC/ENVIR ST/ | 3 |
| Core Elective Courses | SOIL SCI 695 |  |
| Specialization Courses | 6 ENVIR ST/GEOG 127 | 5 |
| Elective Course | 3 Specialization Course | 3 |
|  | Elective Course | 4 |
|  | 15 | 15 |

Total Credits 30

Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| LAND ARC 691 | 4 Specialization Course | 3 |
| (Capstone) | 6 Elective Courses | 12 |
| Specialization Courses | 6 | 15 |
| Elective Courses | 16 |  |
|  |  |  |

## Total Credits 31

1 Must be taken during semester shown to stay on track.
2 Electives must be chosen to include completion of UW and CALS requirements. See Requirements tab for details.

## ADVISING AND CAREERS

Students are assigned to a faculty advisor once they declare the major. Prospective students should contact the academic coordinator, Debi Griffin (dagriffin@wisc.edu, 608-263-7301) for more information.

This major is of particular interest to students interested in ecological restoration and preservation and environmental planning. It prepares students for graduate work in such fields as restoration ecology, landscape architecture, urban and regional planning, architecture, law, environmental studies, and environmental design.

PEOPLE

## PROFESSORS

Gilmore, Harrington, Howell, Silbernagel

## ASSOCIATE PROFESSORS

Bart, Dennis

## ASSISTANT PROFESSOR

Thorleifsdottir
FACULTY ASSOCIATES
Flohr, Kelly

SENIOR LECTURERS<br>Hadley, Steiner

## LANDSCAPE ARCHITECTURE, BSLA

Admissions to the Landscape Architecture BSLA have been suspended as of spring 2018 and will be discontinued as of fall 2021. If you have any questions, please contact the department. (academicaffairs@cals.wisc.edu)

The department of Planning and Landscape Architecture offers a Bachelor of Landscape Architecture (p. 1188), first available for declaration Fall 2018.

Students who enjoy art, science, technology, problem-solving, and design should consider a career in landscape architecture. Graduates in landscape architecture influence the design and management of cities, parks, and open spaces. They often advise park managers, citizen groups, landowners, and state agencies. Landscape architects design public and private outdoor spaces, restore and help preserve natural areas, develop and implement regional planning and public policy, and revitalize urban neighborhoods. The Professional Landscape Architecture degree program focuses on form-giving design, design implementation, and professional practice. Emphasis is placed on principles of design theory and process; problem solving in relationship to human needs and aspirations, and environmental awareness and stewardship; and on the development of technical proficiencies required of professional practice. Students learn site analysis, graphic communication, design synthesis, construction technology, and planting design.

The Professional Landscape Architecture degree program provides professional education accredited by the American Society of Landscape Architects (ASLA). Completion of this program is the first step in
becoming a licensed landscape architect. The program emphasizes the exploration and understanding of design processes and graphic and verbal communication skills. The program also develops a student's sensitivity to natural, physical, historical, and cultural contexts of landscape design.

Students completing the requirements for this program are granted a Bachelor of Science-Landscape Architecture degree.

## HOW TO GET IN

Admissions to the Landscape Architecture BSLA have been suspended as of spring 2018 and will be discontinued as of fall 2021. If you have any questions, please contact the department. (academicaffairs@cals.wisc.edu)

All students interested in enrolling in the professional degree program are enrolled as pre-landscape architecture majors. Admission to the professional program is on a competitive basis.

1. Admission to the Pre-Landscape Architecture Program. Applicants must satisfy the admission policies for the college (apply to the UW-Madison Office of Admissions and Recruitment); entering freshmen follow the instructions on the admissions application and list landscape architecture as their intended major. During the first year the student enrolls as a pre-landscape architecture student (PLA-1 classification) and concentrates on the completion of the prerequisite courses and university/college degree requirements.
2. Eligibility for Consideration into the Landscape Architecture Accredited Professional Program. Eligibility for consideration into the Landscape Architecture Accredited Professional Program (landscape architecture degree program) depends on fulfillment of these requirements: students may apply for formal admission to the program during the spring semester of each academic year. Selections are made only once a year for the fall semester. The first round of selections takes place in early summer. All students will be notified of their status at least two weeks before the start of the fall semester. Students who plan to complete their prerequisite courses during the summer session must so indicate on their application. The department will admit up to a maximum of 22 students, as resources permit. Selection will be based on a letter of intent, written by the applicant, which addresses her or his reasons for wanting to enter the major, and on grades earned in the following six prerequisite courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| LAND ARC 250 | Survey of Landscape Architecture <br> Design (fall semester) | 3 |
| LAND ARC 210 | Introduction to Landscape <br> Architecture Design 1 | 4 |
| LAND ARC 211 | Landscape Inventory and <br> Evaluation Methods |  |
| M E 160 | Architectural Graphics | 4 |
| Select one of the following: | 3 |  |
| ART 102 | Two-Dimensional Design | 3 |
| ART 112 | Drawing I |  |
| DS 120 | Design: Fundamentals I |  |

1 Prior to fall 2018, LAND ARC 201 and 312 were required for admission. LAND ARC 210 Introduction to Landscape Architecture Design is a combination of these two courses.

Students who already completed LAND ARC 201 or 312 should talk with their advisor regarding options.

AND the applicant must have completed at least 24 credit hours. Cumulative GPA will be considered.
Note: Application forms for consideration of admission to the Landscape Architecture professional program are available from the Department of Landscape Architecture, 1 Agricultural Hall, 1450 Linden Drive.
3. Selection Policies. On-campus selections for admission will be made as soon as possible after spring semester grades are received. Advanced-standing transfer students and second degree majors must have their final transcripts on file (in Room 116 Agricultural Hall) as soon as possible after the close of their spring term, but no later than June 15. The department must be notified immediately if a grade report is incorrect, as selections must be made on the basis of information available at the time of selection.
4. Notification of Status. Applicants who have completed their prerequisite courses at the end of spring semester will be notified of their status between June 1 and July 1 of each year for fall semester admission. Decisions on those applicants completing prerequisites during summer session will be made as soon as grades are received. Note: Students not selected for admission may enroll for a second time with a pre-landscape architecture classification (PLA-2) and seek admission for the following fall by reapplying during the spring semester. If not selected after a second application, students will need to transfer to another program on the Madison campus or to another institution. Students will not be able to register in prelandscape architecture for a third year.
5. Appeal Procedures. An appeal to the department's curriculum committee may be presented to clarify an error of fact or extenuating circumstances.
6. Reentering Landscape Architecture Students. Note: Those students who are accepted and enroll in LAND ARC 261 Principles of Landscape Architecture Design and Graphics and drop the course during the fall semester must reapply for admission by April 15 if they wish to be considered for the following fall.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code Title Credits

Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33) 1
International Studies (p. 33) 3
Physical Science Fundamentals 4-5
$\left.\begin{array}{lll}\text { CHEM 103 } & \text { General Chemistry I } \\ \text { or CHEM } 108 & \text { Chemistry in Our World } \\ \text { or CHEM } 109 & \text { Advanced General Chemistry }\end{array}\right] 5$

## MAJOR REQUIREMENTS

Courses may not double count within the degree (unless specifically noted otherwise), but courses counted toward the degree requirements may also be used to satisfy a university requirement and/or a college
requirement. A minimum of 15 credits must be completed in the degree that are not used elsewhere.

| Code |  | Credits |
| :---: | :---: | :---: |
| Mathematics and Statistics |  |  |
| Select one of the following (or may be satisfied by placement exam): |  | 5-6 |
| MATH 112 <br> \& MATH 113 | Algebra and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| Select one of the following: |  | 3-5 |
| MATH 211 | Calculus |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| STAT 301 | Introduction to Statistical Methods |  |
| Biology |  |  |
| Select one of the following options: |  | 5-6 |
| Option 1: |  |  |
| BOTANY/ BIOLOGY 130 | General Botany |  |
| Option 2: |  |  |
| BOTANY 100 | Survey of Botany |  |
| And select one of the following: |  |  |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology |  |
| HORT 227 | Propagation of Horticultural Plants |  |
| or another 2 cred horticulture, agro | s of lab or field-based botany, omy, or landscape architecture |  |
| Select one of the fo | owing: | 3-4 |
| BOTANY/ <br> ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology |  |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin |  |
| BOTANY/ <br> F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology |  |

## Foundation

| Engineering |  |
| :--- | :--- |
| BSE 201 | Land Surveying Fundamentals |

Select one of the following (or equivalent): 3-4

| LAND ARC/ | Applications of Geographic |
| :--- | :--- |
| ENVIR ST/ | Information Systems in Natural <br> SOIL SCI 695 |
| Resources |  |
| GEOG/CIV ENGR/ | An Introduction to Geographic <br> Information Systems |
| URB R PL 590 577 | Contemporary Topics in Urban <br> and Regional Planning (GIS for <br> Planners) |
| Soil Science | General Soil Science |
| SOIL SCI 301 |  |
| or SOIL SCI/ | Soil: Ecosystem and Resource |
| ENVIR ST/ |  |
| GEOG 230 | 4 |
| Additional Foundation Courses | 4 |
| ENVIR ST/GEOG 127 | Physical Systems of the |

Environment

| DS 221 | Person and Environment <br> Interactions |
| :--- | :--- |

Select 3 credits from any Art History class designated 3
humanities
Select 3 credits from any ANTHRO course, GEOG courses 3
listed below, any HISTORY course, any PHILOS course,
any PSYCH course, any SOC course
Core

| LAND ARC 260 | History of Landscape Architecture | 3 |
| :---: | :---: | :---: |
| LAND ARC 261 | Principles of Landscape <br> Architecture Design and Graphics | 4 |
| HORT/LAND ARC 263 | Landscape Plants I | 3 |
| LAND ARC 351 | Housing and Urban Design | 4 |
| LAND ARC 353 | Landscape Architectural Technology I | 3 |
| LAND ARC 354 | Landscape Architectural Technology II | 3 |
| LAND ARC 365 | Planting Design I | 3 |
| LAND ARC 451 | Open Space Planning and Design | 3 |
| LAND ARC 563 | Designing Sustainable and Resilient Regions | 4 |
| LAND ARC 550 | Professional Practice in Landscape Architecture | 3 |
| LAND ARC 610 | Landscape Architecture Seminar | 3 |


| GEOG/ | Introduction to the City |
| :--- | :--- |
| URB R PL 305 |  |
| LAND ARC/ | Evolution of American Planning |
| URB R PL 463 |  |

Select one of the following:

| LAND ARC 375 | Special Topics (2-3 credits <br> required) |
| :--- | :--- |
| LAND ARC 651 | Plant Community Restoration and <br> Management Workshop |
| LAND ARC 668 | Restoration Ecology |
| LAND ARC 675 | Historic Preservation Planning Field <br> Workshop |
| LAND ARC 677 | Cultural Resource Preservation and <br> Landscape History |
| URB R PL 590 | Contemporary Topics in Urban and <br> Regional Planning |
| FOLKLORE 439 | Foodways |
| FOLKLORE/ | The Folklore of Festivals and |
| ANTHRO/MUSIC/ Celebrations |  |
| THEATRE 539 |  |

Breadth or Depth Requirement

| LAND ARC 321 | Environment and Behavior Studio <br> - Designing Health Promoting <br> Environments | 3 |
| :--- | :--- | :--- |
| Select 3 crs from option A, B, or C (see below) | 3 |  |

Capstone
LAND ARC 551 Senior Project in Landscape 4
Architecture
Total Credits
87-94

| ADDITIONAL FOU | JNDATION GEOGRAPHY COUR |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/HISTORY/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| GEOG/AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> HISTORY/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| GEOG/AFRICAN/ AFROAMER/ ANTHRO/HISTORY/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG 302 | Economic Geography: Locational Behavior | 4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 342 | Geography of Wisconsin | 3 |
| GEOG 344 | The American West | 3 |
| GEOG 348 | Latin America | 4 |
| GEOG 349 | Europe | 3 |
| GEOG 353 | Russia and the NIS-Topical Analysis | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG 501 | Space and Place: A Geography of Experience | 3 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |
| GEOG 508 | Landscape and Settlement in the North American Past | 3 |
| GEOG 510 | Economic Geography | 4 |
| GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |

## BREADTH OR DEPTH REQUIREMENT

Must complete a professional depth or breadth requirement. Choose option $A, B$, or $C$, and select one course from the list of courses provided (Option A has six possible paths).

## OPTION A

Choose one course from one of the following specialty areas:
Cultural and Historic Landscapes
Code Title Credits

Select one of the following: 3
$\begin{array}{ll}\text { LAND ARC } 677 & \begin{array}{l}\text { Cultural Resource Preservation and } \\ \text { Landscape History }\end{array}\end{array}$

| FOLKLORE 399 | Directed Study in Folklore for <br> Undergraduates |
| :--- | :--- |
| FOLKLORE/ Field Methods and the Public <br> LIS 490 Presentation of Folklore |  |
| FOLKLORE/ <br> ANTHRO 639 | Field School: Ethnography of <br> Wisconsin Festivals |
| GEOG 501 | Space and Place: A Geography of <br> Experience |
| HISTORY/ | American Environmental History |
| ENVIR ST/ |  |
| GEOG 460 | The American West Since 1850 |
| HISTORY/ |  |
| CHICLA 462 |  |


| Land-Use Planning and Sustainable Development |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select one of the following: |  |  |
| C\&E SOC/SOC/ URB R PL 617 | Community Development |  |
| ENVIR ST/ <br> F\&W ECOL/ ZOOLOGY 360 | Extinction of Species |  |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact |  |
| F\&W ECOL 375 | Special Topics |  |
| GEOG/ <br> ENVIR ST 339 | Environmental Conservation |  |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics |  |
| SOC/C\&E SOC/ URB R PL 645 | Modern American Communities |  |
| SOIL SCI/ <br> ENVIR ST/ <br> LAND ARC 695 | Applications of Geographic Information Systems in Natural Resources |  |
| URB R PL 590 or URB R PL 6 | Contemporary Topics in Urban and Regional Planning <br> 1 Urban Design: Theory and Practice |  |


| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| BOTANY/ <br> AGRONOMY/ <br> SOIL SCI 370 | Grassland Ecology |  |
| BOTANY 400 | Plant Systematics |  |
| BOTANY 401 | Vascular Flora of Wisconsin |  |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology |  |
| BOTANY 403 | Field Collections and Identification |  |
| BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach |  |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin |  |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring |  |
| BOTANY 575 | Special Topics |  |


| BOTANY/ | Adaptive Restoration Lab |
| :--- | :--- |
| LAND ARC 670 |  |
| ENTOM/BOTANY/ <br> ZOOLOGY 473 |  |
| LAND ARC/ | Wetlands Ecology |
| ENVIR ST 361 |  |
| LAND ARC 651 | Plant Community Restoration and |
| LAND ARC 668 | Restoration Ecology |
| SOIL SCI/ | Soil Biology |
| PL PATH 323 |  |


| Ornamental Plants and Landscape Maintenance |  |  |
| :---: | :---: | :---: |
| Select one of the follo | wing: | 3 |
| AGRONOMY/ <br> HORT 328 | Integrated Weed Management |  |
| HORT 227 | Propagation of Horticultural Plants |  |
| HORT/ <br> PLPATH 261 | Sustainable Turfgrass Use and Management |  |
| HORT/F\&W ECOL/ LAND ARC/ <br> PLPATH 309 | Diseases of Trees and Shrubs |  |
| HORT 320 | Environment of Horticultural Plants |  |
| HORT/ AGRONOMY/ SOIL SCI 326 | Plant Nutrition Management |  |
| HORT/ <br> SOIL SCI 332 | Turfgrass Nutrient and Water Management |  |

## Site Inventory Analysis

Code Title
Credits
Select one of the following:
ENVIR ST 375 Field Ecology Workshop
ENVIR ST/ Assessment of Environmental
SOIL SCI 575 Impact
GEOG/ Analysis of the Physical
ENVIR ST 325 Environment
Design and Artistic Expression

| Code | Title |
| :--- | ---: |$\quad$ Credits


| ART 214 | Sculpture I |
| :--- | :--- |
| ART 328 | The Computer in the Visual Arts |
| ART 428 | Digital Imaging Studio |
| ART 608 | Interdisciplinary Critique in the <br> Visual Arts |
| ART HIST 468 | Frank Lloyd Wright |
| DS 220 | Design: Fundamentals II |
| DS 320 | Design: Sketching and Rendering |
| DS 323 | Computer Aided Design: |

## OPTION B: SECOND MAJOR OR CERTIFICATE IN A RELATED FIELD

A student who is pursuing a double major or a certificate in a related field (horticulture, art history, art business, etc.) has the option to use
the completion of the second major or certificate to fulfill the landscape architecture breadth or depth requirement.

## OPTION C: ADVISOR-APPROVED BREADTH OR DEPTH AREA

In special circumstances students may request a substitution for the additional breadth/depth course. The course may come from any department but must relate to some aspect of the profession. The course must be approved by the student's advisor and by the Landscape Architecture Curriculum Committee. Students must provide an explanation of why they want to make the substitution.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |
| Quality of | Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  | Students whose academic performance drops below |
| these minimum thresholds will be placed on academic |  |
| probation. |  |

## LEARNING OUTCOMES

1. Integrate social, cultural, ecological and technological dimensions in solving novel design and planning problems concerning the betterment of rural and urban natural and cultural landscapes.
2. Demonstrate critical thinking and the ability to explore ideas and synthesize information, both independently and in collaboration with interdisciplinary team members.
3. Demonstrate competence, creativity, and critical judgment in applying the intellectual and technical skills necessary to the professional practice of landscape architecture; in particular the skills of problem\# solving surrounding spatial, three\#dimensional design of outdoor spaces, including, in particular: site inventory and analysis; community participation; programming; synthesis; communication; implementation; evaluation; and management.
4. Apply and evaluate the components of a professional curriculum as defined by the Landscape Architecture Accreditation Board, the accrediting organization for landscape architecture programs.
5. Understand, apply and evaluate the principles, theories and recent research findings in the field of landscape architecture.
6. Demonstrate advanced communication skills, including graphic, verbal, and written presentation skills.
7. Be able to perform as an entry-level landscape architect in a public or private office or agency setting.

FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE LANDSCAPE ARCHITECTURE FOUR-YEAR PLAN-PROFESSIONAL DEGREE
Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| LAND ARC 250 | 3 LAND ARC 211 | 4 |
| LAND ARC 210 | 4 DS 120, ART 102, or ART |  |
|  | $112^{2}$ | 3 |
| M E 160 |  |  |
|  | 3 BOTANY/BIOLOGY 130 <br> or 100 | $3-5$ |
| GEOG/ENVIR ST 127 | 5 MATH 113 |  |

Total Credits 32-34

## Sophomore

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| LAND ARC $261{ }^{1}$ | 4 LAND ARC $353{ }^{1}$ | 3 |
| HORT/LAND ARC $263{ }^{1}$ | 3 LAND ARC 260 | 3 |
| DS $221^{2}$ | 3 SOIL SCI 301 ${ }^{2}$ | 4 |
| BSE $201{ }^{1}$ | 1 CHEM 108 or 103 ${ }^{4}$ | 5 |
| COMM A Course | 3 LAND ARC 321 or 375 | 3 |
|  | 14 | 18 |

Total Credits 32

## Junior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| LAND ARC $365{ }^{1}$ | 3 LAND ARC $351{ }^{1}$ | 4 |
| LAND ARC $354{ }^{1}$ | 3 LAND ARC $451{ }^{1}$ | 3 |
| MATH 211 or STAT 301 | 3 LAND ARC/ENVIR ST/ SOIL SCI 695, GEOG 377, or URB R PL 590 | 3 |
| GEOG/URB R PL 305 | 3 Professional Breadth Course | 3 |
| Art History Elective | 3 Social Science Elective Course | 3 |
| BOTANY/ENVIR ST/ ZOOLOGY $260^{2}$ | 3 |  |
|  | 18 | 16 |

## Total Credits 34

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| LAND ARC 610 $^{1}$ | 3 LAND ARC 551 | 4 |
| (Capstone 1) $^{1}$ | (Capstone 2) |  |
| LAND ARC 550 |  |  |


| Botany / Horticulture / 2 Ethnic Studies Course | 3 |
| :--- | :--- | :--- |
| Agronomy Course |  |


| Elective | 3 |  |
| ---: | ---: | ---: |
|  | 15 | 13 |

## Total Credits 28

Must be taken in semester shown to stay on track
Must be taken during year shown to stay on track
3 If taking BOTANY 100 Survey of Botany, a 2-credit lab or field course in botany, horticulture, or agronomy must also be taken prior to graduation.
4 Consult advisor about options for completing the chemistry requirement
5 Required if students take BOTANY 100 Survey of Botany
6 Also counts as COMM-B

## ADVISING AND CAREERS

Students are assigned to a faculty advisor once they declare the major. Prospective students should contact the academic coordinator, Debi Griffin (dagriffin@wisc.edu, 608-263-7301) for more information.

The Professional Landscape Architecture degree program provides professional education accredited by the American Society of Landscape Architects (ASLA). Completion of this program is the first step in becoming a licensed landscape architect.

## PEOPLE

## PROFESSORS

Harrington, Howell, Silbernagel

## ASSOCIATE PROFESSORS

Bart, Dennis (chair), Gilmore

## ASSISTANT PROFESSOR

Thorleifsdottir

## FACULTY ASSOCIATES

Flohr, Kelly

## SENIOR LECTURERS

Hadley, Steiner

## ACCREDITATION

## Accreditation

Landscape Architecture Accreditation Board (https://www.asla.org/ AccreditationLAAB.aspx)

Accreditation status: Accredited. Next accreditation review: 2019.
Certification/Licensure
Landscape Architecture Registration Exam (http://www.clarb.org)

## AGRONOMY

Agronomy is plant biology striving to meet the world's expanding need for food, fiber, and fuel in an efficient, environmentally sound, and sustainable manner.

An undergraduate student majoring in agronomy earns a bachelor of science degree. The agronomy curriculum offers undergraduate and graduate studies in plant biotechnology, breeding, genetics, physiology, crop management and protection strategies, agroecology, and sustainable agriculture. Agronomy undergraduate students concentrate on plant science courses but also select related courses in soil science, genetics, economics, business, engineering, entomology, and the animal sciences, depending upon their interests.

The current demand for agronomy graduates exceeds supply, and we expect the demand to increase. Career possibilities include biotechnology, research, agri-business, resource conservation, and crop production and management. In addition to classroom learning, students gain practical experience in their area of interest and earn degree credit at the same time through internships and independent study. The agronomy major also serves as an excellent foundation for students interested in pursuing advanced studies in plant biotechnology, breeding, genetics, physiology, crop management, agroecology, or sustainable agriculture. Graduate programs are described in the Graduate Guide.

## DEGREES/MAJORS/CERTIFICATES

- Agronomy, B.S. (p. 66)


## PEOPLE

## PROFESSORS

Albrecht, Ken (kaalbrec@wisc.edu) Ané, Jean-Michel (jeanmichel.ane@wisc.edu)
Casler, Mike (mdcasler@wisc.edu)
Conley, Shawn (spconley@wisc.edu)
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Stoltenberg, Dave (destolte@wisc.edu)
Tracy, William (wftracy@wisc.edu) (chair)
Undersander, Dan (djunders@wisc.edu)

## ASSOCIATE PROFESSORS

Kaeppler, Heidi (hfkaeppl@wisc.edu)
Renz, Mark (mrenz@wisc.edu)

## ASSISTANT PROFESSORS

Gutierrez, Lucia (gutierrezcha@wisc.edu)
Mahalingam, Mali (mali.mahalingam@ars.usda.gov)
Picasso, Valentin (picassorisso@wisc.edu)

## RESOURCES AND SCHOLARSHIPS

The Department of Agronomy is proud to participate in the CALS Scholarship Program, which awards thousands of dollars to undergraduate scholars every year. The majority of our students have some form of financial aid through CALS, the university, or work-study or laboratory jobs.

## AGRONOMY, B.S.

## CREATING A HEALTHIER, MORE PRODUCTIVE, MORE RESILIENT AGRICULTURE FOR WISCONSIN AND THE WORLD.

That is the challenge taken up by the faculty, staff and students of the Department of Agronomy.

We generate and apply knowledge about the plants that feed and benefit humankind. Agronomic crops are typically grown for grain to feed people and livestock, or are processed into products. Feed crops are grown specifically to meet the nutritional needs of livestock. Forage crops are grown for their stems, leaves, and other edible plant parts.

We find and implement solutions to problems and opportunities concerning efficiency and sustainability of crop production and in safe and environmentally sound ways.

We generate knowledge on the genetics, genomics, biochemistry, and physiology of plants.

We study the interactions among cropping systems, climate, and the environment. We emphasize sustainable agriculture, whether precision, traditional or organic, in order to reduce the impact on the environment and the inhabitants of our planet.

We work to ensure that agricultural systems and products in Wisconsin and the world are able to meet rapidly-changing needs and those of future generations.

Undergraduates in the Department of Agronomy earn a bachelor of science degree to prepare them for everything from pursuit of a graduate degree to careers in science, education, agriculture, agribusiness, and environment and conservation.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code Title Credits

Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33)

International Studies (p. 33) 3
Physical Science Fundamentals 4-5
\(\left.\begin{array}{llr}CHEM 103 \& General Chemistry I <br>
or CHEM 108 \& Chemistry in Our World <br>

or CHEM 109 \& Advanced General Chemistry\end{array}\right]\)|  |
| :--- |
| Biological Science |

## MAJOR REQUIREMENTS



Code
Title
Credits
Mathematics and Statistics
Select one of the following (or may be satisfied by 5-6
placement exam):

| MATH 112 | Algebra |
| :--- | :--- |
| \& MATH 113 | and Trigonometry |
| MATH 114 | Algebra and Trigonometry |
| MATH 171 | Calculus with Algebra and |
|  | Trigonometry I |
| MATH 211 | Calculus |
| MATH 221 | Calculus and Analytic Geometry 1 |

Select one of the following: 3

STAT 301 Introduction to Statistical Methods
STAT 371 Introductory Applied Statistics for
the Life Sciences
STAT/B M I 541 Introduction to Biostatistics
STAT/F\&W ECOL/ Statistical Methods for Bioscience I
HORT 571
Chemistry
Select one of the following: 5-9
CHEM 103 General Chemistry I
\& CHEM 104 and General Chemistry II
CHEM 109 Advanced General Chemistry
Biology
Select one of the following options:
Option 1:

| BOTANY/ | General Botany |
| :--- | :--- |
| BIOLOGY 130 |  |
| ZOOLOGY/ | Animal Biology |
| BIOLOGY 101 |  |
| ZOOLOGY/ | Animal Biology Laboratory |
| BIOLOGY 102 |  |
| Option 2: |  |
| BIOLOGY/ | Introductory Biology |
| BOTANY/ | and Introductory Biology |
| ZOOLOGY 151 |  |
| \& ZOOLOGY/ |  |
| BIOLOGY/ |  |
| BOTANY 152 |  |

Option 3:
BIOCORE 381 Evolution, Ecology, and Genetics

| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| :---: | :---: | :---: |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| Economics |  |  |
| Select one of the following: |  | 3-4 |
| A A E 215 | Introduction to Agricultural and Applied Economics |  |
| ECON 101 | Principles of Microeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment |  |
| Foundation |  |  |
| Select 8 credits from any foundation category |  | 8 |
| Core |  |  |
| AGRONOMY 100 | Principles and Practices in Crop Production | 4 |
| SOIL SCI 301 | General Soil Science | 4 |
| PL PATH 300 | Introduction to Plant Pathology | 4 |
| Select one of the following: |  | 3 |
| GENETICS 466 | Principles of Genetics |  |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology |  |
| Select one of the follo | wing: | 3-4 |
| ENTOM/ <br> ZOOLOGY 302 | Introduction to Entomology |  |
| ENTOM 351 | Principles of Economic Entomology |  |
| Select one of the follo | wing: | 3-4 |
| AGRONOMY/ <br> BOTANY/SOIL SCI $370$ | Grassland Ecology |  |
| BOTANY/F\&W ECOL 455 | The Vegetation of Wisconsin |  |
| BOTANY/F\&W <br> ECOL/ZOOLOGY <br> 460 | General Ecology |  |
| ENTOM 342 | Insect Ecology |  |
| ENVIR ST/LAND ARC 361 | Wetlands Ecology |  |
| Electives within the Major |  |  |
| Select 14 additional credits of Agronomy courses ${ }^{1}$ |  | 14 |
| Capstone |  |  |
| AGRONOMY 500 | Senior Capstone Experience | 2 |
| Total Credits |  | 71-79 |
| 1 No more than 3 credits total in AGRONOMY 299 Independent Study, AGRONOMY 399 Coordinative Internship/Cooperative Education, AGRONOMY 699 Special Problems. Credits used to satisfy the Capstone experience may not count here. |  |  |

## FOUNDATION COURSES

ag social science
Code Title
A A E 319
The International Agricultural Economy
A A E 320
Farming Systems Management

Credits
33

| A A E 322 | Commodity Markets | 3 |
| :--- | :--- | ---: |
| A A E 323 | Cooperatives | 3 |
| A A E/ECON 421 | Economic Decision Analysis | 4 |
| A A E/ECON 474 | Economic Problems of Developing <br> Areas | 3 |
| C\&E SOC/SOC 140 | Introduction to Community and | 3 |
| C\&E SOC/SOC 222 | Environmental Sociology | Food, Culture, and Society |
| C\&E SOC/ | Agriculture and Social Change in <br> HIST SCI 230 | Western History |
| C\&E SOC/AMER IND/ Poverty and Place | 3 |  |
| SOC 578 |  | 3 |
| C\&E SOC/SOC 650 | Sociology of Agriculture | 3 |

## ANIMAL SCIENCE

| Code | Title | Credits |
| :---: | :---: | :---: |
| AN SCI/DY SCI 101 | Introduction to Animal Sciences | 4 |
| AN SCI 200 | The Biology and Appreciation of Companion Animals | 3 |
| AN SCI 250 | Horse Science and Management | 3 |
| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| AN SCI 430 | Sheep Production | 3 |
| AN SCI 431 | Beef Cattle Production | 3 |
| AN SCI 432 | Swine Production | 3 |
| DY SCI 205 | Dairy Cattle Improvement Programs | 2 |
| DY SCI 305 | Lactation Physiology | 3 |
| DY SCI/AN SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| DY SCI/AN SCI 363 | Principles of Animal Breeding | 2 |
| DY SCI/AN SCI 370 | Livestock Production and Health in Agricultural Development | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology | 4 |
| ENTOM 351 | Principles of Economic Entomology | 3 |

## ATMOSPHERIC SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN 100 | Weather and Climate | 3 |
| ATM OCN/ | Global Change: Atmospheric Issues | $2-3$ |
| ENVIR ST 171 | and Problems |  |

## BIOLOGICAL SYSTEMS ENGINEERING

| Code | Title | Credits |
| :--- | :--- | ---: |
| BSE 201 | Land Surveying Fundamentals | 1 |
| BSE 243 | Operating and Management | 3 |

## FOOD SCIENCE

## Code

FOOD SCI 120
FOOD SCI 440
A A E/C\&E SOC/
SOC 340

Title
Credits
Science of Food
Principles of Food Engineering 3

## NUTR SCI/ BIOCHEM 510 MANAGEMENT

| Code | Title | Credits |
| :---: | :---: | :---: |
| ACCT IS 211 | Introductory Managerial Accounting | 3 |
| ACCT I S 301 | Financial Reporting I | 3 |
| ACCT I S 302 | Financial Reporting II | 3 |
| A A E 320 | Farming Systems Management | 3 |
| A AE 322 | Commodity Markets | 3 |
| A AE 323 | Cooperatives | 3 |
| A A E 419 | Agricultural Finance | 3 |
| A A E/ECON 421 | Economic Decision Analysis | 4 |
| A AE/ECON 474 | Economic Problems of Developing Areas | 3 |
| GEN BUS 301 | Business Law | 3 |
| GEN BUS 302 | Business Organizations and Negotiable Instruments | 3 |
| FINANCE/ECON 300 | Introduction to Finance | 3 |
| INTL BUS 200 | International Business | 3 |
| MARKETNG 305 | Consumer Behavior | 3 |
| MARKETNG 310 | Marketing Research | 3 |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MARKETNG 460 | Marketing Strategy | 3 |
| MARKETNG 635 | Sales Management | 3 |
| MARKETNG 640 | Strategic Retailing | 3 |
| M H R 420 | Managing Change and Organizational Effectiveness | 3 |
| M HR 422 | Entrepreneurial Management | 3 |
| M HR 612 | Labor-Management Relations | 3 |
| R M I 300 | Principles of Risk Management | 3 |

## NUTRITIONAL SCIENCE

Code Title Credits

NUTR SCI 132 Nutrition Today 3
NUTR SCI/AN SCI/ Comparative Animal Nutrition 3
DY SCI 311

| NUTR SCI 332 | Human Nutritional Needs | 3 |
| :--- | :--- | :--- |
| NUTR SCI/A A E/ | World Hunger and Malnutrition | 3 |

AGRONOMY/INTER-
AG 350
NUTR SCI 540
Community Nutrition Programs and Policy Issues

## SOIL SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOIL SCI/ | Soils and Environmental Quality | 3 |
| ENVIR ST 324 |  |  |
| SOIL SCI 325 | Soils and Landscapes | 3 |

## BACTERIOLOGY, BIOCHEMISTRY, GENETICS

## Code

Title
Credits
MICROBIO 101
General Microbiology
MICROBIO 102 General Microbiology Laboratory 2

| MICROBIO 303 | Biology of Microorganisms | 3 |
| :--- | :--- | :--- |
| MICROBIO 304 | Biology of Microorganisms <br> Laboratory | 2 |
| MICROBIO/ | Food Microbiology Laboratory | 2 |
| FOOD SCI 324 | Food Microbiology | 3 |
| MICROBIO/ | Introduction to Biochemistry | 3 |
| FOOD SCI 325 | PIOCHEM 501 | Principles of Genetics |

## ECOLOGICAL SCIENCES

| Code | Title | Credits |
| :--- | :--- | ---: |
| F\&W ECOL 100 | Introduction to Forestry | 2 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| F\&W ECOL/ | The Vegetation of Wisconsin | 4 |
| BOTANY 455 |  | 4 |
| F\&W ECOL/BOTANY/ | General Ecology |  |
| ZOOLOGY 460 |  | 3 |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Articulate the role of biological processes, management systems, environmental influences, and economic and social factors on world food, feed, and fiber production. Specific topics that all students should have knowledge of include: photosynthesis, nutrient cycling, genetic inheritance, and management and uses of primary U.S. crop species.
2. Develop a global perspective and appreciate the interdependencies among individuals and their workplaces, communities, environments, and the planet; and an understanding of the role of science in society.
3. Communicate effectively through writing and speaking, and will be able to identify and critically evaluate available sources of information.
4. Demonstrate the ability to critically and creatively analyze problems and evaluate systems.

| FOUR-YEAR PLAN |  |  |
| :---: | :---: | :---: |
| FOUR-YEAR PLAN |  |  |
| SAMPLE AGRONOMY FOUR-YEAR PLAN |  |  |
| Freshman |  |  |
| Fall | Credits Spring | Credits |
| AGRONOMY 100 | 4 BOTANY/BIOLOGY 130 | 5 |
| CHEM 103 or 109 | 4-5 CHEM 104 (or Elective) | 5 (3) |
| MATH 112, 114, or $171{ }^{1}$ | 3-5 Elective | 3 |
| COMM A | $\begin{aligned} & 3 \text { ECON 101, 111, or A A E } \\ & 215 \end{aligned}$ | 3-4 |
| First Year Seminar | 1 |  |
|  | 15-18 | 11-17 |

Total Credits 26-35

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| Foundation Course ${ }^{2}$ | 3 Foundation Courses | 5 |
| ZOOLOGY/BIOLOGY 101 | 2-3 Social Science Course | 3 |
| or 102 |  |  |
| Statistics Course | 3 Agronomy Course | 3 |
| Ethnic Studies Course | 3 COMM B | 3 |
|  | $11-12$ | 3 |

Total Credits 25-26
Sophomore
Summer
Internship or Agronomy
Credits

Independent Study

|  |  | 1-3 |
| :---: | :---: | :---: |
| Total Credits 1-3 |  |  |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| Agronomy Courses | $\begin{aligned} & 6 \text { ENTOM/ZOOLOGY } 302 \\ & \text { or } 351 \end{aligned}$ | 3-4 |
| GENETICS 466 | 3 Agronomy Course | 3 |
| SOIL SCI 301 | 4 International Studies Course | 3 |
| Elective | 3 Humanities Elective Course | 3 |
|  | Elective | 3 |
|  | 16 | 15-16 |

Total Credits 31-32

Junior
Summer
Internship or Agronomy
Credits

Independent Study

## Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| Agronomy Course | 3-4 Agronomy Courses | 6-7 |
| ZOOLOGY/BOTANY/ <br> F\&W ECOL 460 | 4 Capstone | 2 |
| PL PATH 300 | 4 Electives | 6-9 |
| Humanities Course | 3 |  |
| Elective | 3 |  |
|  | 17-18 | 14-18 |
| Total Credits 31-36 |  |  |
| Determined by placement exam. Consult SOAR advisor. <br> 2 Eight (8) credits of Foundation courses required. See Requirements tab for details. |  |  |
| ADVISING AND CAREERS |  |  |
| ADVISING |  |  |
| The Department of Agronomy is faculty-advised, meaning that faculty members take on the responsibility of guiding and advising undergraduates through graduation. Students and faculty are matched as closely as possible by interest. All new freshmen and transfer students are temporarily advised by the student services coordinator until the advising relationship between professor and student is established. If you would like to have a conversation about joining the agronomy department, please contact Joanna Schuth. |  |  |
| Joanna Schuth <br> Student Services Coo <br> 608-262-1390 <br> jschuth@wisc.edu |  |  |

## FACULTY UNDERGRADUATE ADVISORS

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## CAREERS

An agronomy degree is an open door to careers in many related fields such as biotechnology, plant genetics, crop management, agricultural financial management, farming, seed sales, crop consulting, Certified Crop Advising, Certified Professional Agronomy, agribusiness,
extension agronomy, agricultural education, government work, and international agronomy.

## GENETICS

The fastest growing sector of agriculture is plant breeding, genetics, and genomics. Plant scientists are working at the field, plant, cellular, and molecular level to create cultivars that are hardier, disease resistant nutritious, and affordable. The industry's growth is currently outstripping the rate of graduation; graduates can take their pick of interesting, fulfilling careers in the public and private sectors.

## BIOFUELS

The biofuel industry is also experiencing rapid growth, with research and development being focused on sugar-based biofuels, cellulosic biofuels, and biodiesels, made from plants as varied as switchgrass, sugar cane, corn, and wood pulp. These energy crops are harvested and processed into alternatives to fossil fuels.

## AGRIBUSINESS

In agribusiness agronomists take data and translate it into real world applications. They sell tools for crop production, provide agricultural loans, consult on crops, manage businesses, and much more. They are often responsible for translating technical research data into applications. Numerous agronomy graduates are also involved in the sale of agricultural products, which are vital to today's economy. Other successful agronomists serve as crop advisers, farm managers, consultants, bank loan specialists, managers, and much more.

## RESEARCH/EDUCATION AND EXTENSION

Agronomic educators specialize in teaching and working with high school and college students. They also teach and advise students who chose advanced studies for a master's degree and/or Ph.D. They are extensively involved in research, publishing findings on a regular basis and making scientific advances

Extension agronomists usually work for a state, local, or national government; they consult with farmers and others to help find answers to their specific problems and help farmers translate research results into usable management practices. Government-employed agronomists also work with farmers and ranchers to plan for soil and water conservation so crops and land can be managed efficiently and with minimal impact to the environment

## PEOPLE

## DEPARTMENT MANAGER

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## ADMINISTRATIVE SERVICES

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## Valentin Picasso

picassorisso@wisc.edu

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in agronomy, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- Badger Crops Club (https://www.facebook.com/badgercropsclub), a professional, social, and educational group for agronomy students and students in related fields interested in any aspect of crop production.
- Collegiate FFA (http://collegiateffamadison.weebly.com), an official collegiate chapter of the National FFA organization.
- AWA (http://awamadison.org)-the Association of Women in Agriculture, a professional student organization for young women with a passion for agriculture.
- WISELI (http://wiseli.engr.wisc.edu)-Women in Science and Engineering Leadership Institute, a research center aiming to increase the representation, advancement, and satisfaction of women faculty and members of groups currently underrepresented on the faculty and in leadership at UW-Madison.
- Study Abroad: Agronomy majors have the opportunity to go on experiential study abroad programs, where students can immerse themselves in research or global agronomy field experiences. Students can review the International Academic Programs website (https://www.studyabroad.wisc.edu/programs/results.asp? region=\&country=any\&duration=any\&language=any\&opento=any\&searc and the CALS study abroad advising page (https://cals.wisc.edu/ academics/undergraduate-students/international-programs/study-abroad-advising) for information on these and other programs, as well as requirements that can typically be fulfilled abroad and things to consider when fitting study abroad into an academic plan.
- Research/Lab experience: Students are encouraged to get involved in research, whether in the agronomy department or through other plant-, soil-, or ecology-related departments. Research can be performed for either course credit or pay, depending on the opportunity. Research opportunities can primarily be found by inquiring with faculty members.


## ANIMAL SCIENCES

The Department of Animal Sciences was formed as the union of the departments of Meat and Animal Science and Poultry Science in 1996. Majors in both animal sciences and poultry science are available.

## DEGREES/MAJORS/CERTIFICATES

- Animal Sciences, B.S. (p. 72)
- Poultry Science, B.S. (p. 77)


## PEOPLE

## PROFESSORS

Albrecht, Claus, Crenshaw (chair), Khatib, Kirkpatrick, Parrish, Reed, Richards, Rosa, Schaefer

## ASSOCIATE PROFESSOR

Sindelar (Extension)

## ASSISTANT PROFESSOR

Shanmuganayagam

## INSTRUCTIONAL STAFF

Barry, Kean, Monson, O'Rourke, Russell, Sandberg

## ANIMAL SCIENCES, B.S.

Animal science students focus on the biology of domesticated animals, including cattle, goats, horses, poultry, sheep, swine, as well as meat derived from the traditional meat animal species. Some attention is directed toward the companion animal species, including dogs and cats. The major emphasizes integration of biological principles from the gene to the organ to the herd or flock. Core courses in the major include animal breeding, veterinary genetics, animal physiology, reproductive physiology, comparative animal nutrition, animal health, and meat science. Additional courses include career orientation, animal handling, assessing animal welfare, biology of companion animals, composition of meat animals, human/animal symbiosis, ruminant nutrition, monogastric nutrition, beef cattle production, swine production, equine business, livestock production in agricultural development, and laboratory techniques in mammalian gamete and embryo biology.

The major offers a science track which includes math, physics, organic chemistry and biochemistry for students with interests in postgraduate
 programs. The major also offers a business emphasis which includes economics, accounting, marketing, farm management, commodity markets, agricultural finance, and other courses from the School of Business.

A student majoring in animal sciences is placed in the bachelor of science degree program. Completion of the degree program in four years is the norm.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core
of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |

CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33)

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics and Statistics |  |  |
| Select one of the following (or may be satisfied by placement exam): ${ }^{1}$ |  | 5-6 |
| MATH 112 <br> \& MATH 113 | Algebra and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| Select one of the following: |  | 3-4 |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| STAT/F\&W ECOL/ HORT 571 | Statistical Methods for Bioscience I |  |
| Chemistry |  |  |
| Select one of the following: |  | 5-10 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II |  |
| Biology |  |  |
| Select one of the following: |  | 13 |
| Option 1: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| ZOOLOGY/ BIOLOGY/ BOTANY 152 | Introductory Biology |  |
| Option 2: |  |  |
| ZOOLOGY/ <br> BIOLOGY 101 | Animal Biology |  |
| ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology Laboratory |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany |  |
| Option 3: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| GENETICS 466 | Principles of Genetics | 3 |
| Animal Sciences Core ${ }^{2}$ |  |  |
| AN SCI/DY SCI 101 | Introduction to Animal Sciences | 4 |


| AN SCI/FOOD SCI 305 | Introduction to Meat Science and Technology | 4 |
| :---: | :---: | :---: |
| AN SCI/DY SCI/NUTR SCl 311 | Comparative Animal Nutrition | 3 |
| AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| Select one of the following: |  | 2 |
| AN SCI/DY SCI 362 | Veterinary Genetics |  |
| AN SCI/DY SCI 363 | Principles of Animal Breeding |  |
| Select one of the following: |  | 3 |
| AN SCI/DY SCI 373 | Animal Physiology |  |
| AN SCI/DY SCI 434 | Reproductive Physiology |  |
| Animal Science Depth |  |  |
| Select 12 credits from animal science depth courses ${ }^{2}$ |  | 12 |
| Emphasis |  |  |
| Select an emphasis |  |  |
| Capstone |  |  |
| AN SCI 435 | Animal Sciences Proseminar | 2 |
|  |  |  |
| Science Emphasis students may choose to complete MATH 171 Calculus with Algebra and Trigonometry I and MATH 217 Calculus with Algebra and Trigonometry II in place of MATH 114 Algebra and Trigonometry and MATH 221 Calculus and Analytic Geometry 1. |  |  |
| A course cannot be used for credit in both the Core and Depth within major sections. |  |  |

## DEPTH COURSES

Code
Title
Credits
Select 12 credits from the following:

| AN SCI 220 | Growth, Composition and <br> Evaluation of Meat Animals | 4 |
| :--- | :--- | ---: |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| AN SCI/DY SCI 370 | Livestock Production and Health in <br>  <br> Agricultural Development ${ }^{1}$ | 3 |
| AN SCI/DY SCI 362 | Veterinary Genetics |  |
| or AN SCI/DY SCI <br> 363 | Principles of Animal Breeding | 2 |


| Select one of the following: | 3 |  |
| :--- | :--- | ---: |
| AN SCI/DY SCI | Animal Physiology ${ }^{2}$ |  |
| 373 | Reproductive Physiology |  |


| AN SCI 431 | Beef Cattle Production | 3 |
| :--- | :--- | :--- |
| AN SCI 432 | Swine Production | 3 |
| AN SCI 433 | Equine Business \& Management | 3 |
| AN SCI/FOOD SCI <br> 515 | Commercial Meat Processing | 2 |
| Up to 3 credits from courses listed below can go toward <br> the required 12 credits of depth: | 3 |  |


| AN SCI 399 | Coordinative Internship/Cooperative <br> Education |
| :--- | :--- |
| AN SCI 681 | Senior Honor Thesis |
| AN SCI 682 | Senior Honors Thesis |
| AN SCI 699 | Special Problems |

1 Meets CALS International Studies requirement.
2 ANAT\&PHY 335 Physiology can substitute for AN SCI/DY SCI 373 Animal Physiology in the An Sci Depth section only.

## EMPHASIS COURSES

## SCIENCE EMPHASIS

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| or MATH 217 | Calculus with Algebra and Trigonometry II |  |
| PHYSICS 103 | General Physics | 4 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| BIOCHEM 501 or BMOLCHEM 503 | Introduction to Biochemistry 3Human Biochemistry | 3 |
| Select 9 credits from | e following: | 9 |
| CHEM 344 | Introductory Organic Chemistry Laboratory |  |
| CHEM 345 | Intermediate Organic Chemistry |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| MICROBIO 304 | Biology of Microorganisms Laboratory |  |
| M M \& I/ MICROBIO/PATHBIO 528 | Immunology |  |
| PHYSICS 104 | General Physics |  |
| PSYCH 449 | Animal Behavior |  |
| Total Credits |  | 24 |

## BUSINESS EMPHASIS

Up to two courses may be applied to Certificate in Business Mgmt. for Ag. \& Life Sciences.

| Code | Title | Credits |
| :---: | :---: | :---: |
| A A E 215 | Introduction to Agricultural and Applied Economics ${ }^{1}$ | 3 |
| or ECON 101 | Principles of Microeconomics |  |
| A A E 320 | Farming Systems Management | 3 |
| A A E 322 | Commodity Markets | 3 |
| Select one of the following: |  | 3 |
| M H R 305 | Human Resource Management |  |
| GEN BUS 310 | Fundamentals of Accounting and Finance for Non-Business Majors |  |


| GEN BUS 311 | Fundamentals of Management and Marketing for Non-Business Majors |  |
| :---: | :---: | :---: |
| Select one of the follo | wing: | 3 |
| BMOLCHEM 314 | Introduction to Human Biochemistry |  |
| CHEM 341 | Elementary Organic Chemistry |  |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| Select 9 credits from | the following: | 9 |
| A A E 419 | Agricultural Finance |  |
| $\begin{aligned} & \text { ACCT I S } 100 \\ & \text { or ACCT I S } 300 \end{aligned}$ | Introductory Financial Accounting Accounting Principles |  |
| AGRONOMY/ <br> HORT/SOIL SCI $326$ | Plant Nutrition Management |  |
| $\begin{aligned} & \text { ECON/FINANCE } \\ & 300 \end{aligned}$ | Introduction to Finance |  |
| M H R 300 | Managing Organizations |  |
| MARKETNG 300 | Marketing Management |  |
| MATH 217 | Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| MICROBIO 304 | Biology of Microorganisms Laboratory |  |
| PHYSICS 103 | General Physics |  |
| SOIL SCI 301 | General Soil Science |  |

Total Credits
1 A A E 215 Introduction to Agricultural and Applied Economics not accepted as a prerequisite for some advanced Business courses. A A E 215 carries only QR-B credit if taken fall 2011 or later.

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take AN SCI 681 Senior Honor Thesis and AN SCI 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http:// www.cals.wisc.edu/academics/undergraduate-programs/get-involved/ honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. 3

Quality of Work

1. (Knowledge and comprehension) Develop the working vocabulary of an animal scientist, a working knowledge of the basic anatomy, biochemistry, physiology, and genetics of animal and meat biology, and the applied nutrition, breeding, product harvest and processing skills, necessary to manage animal production systems. Demonstrate knowledge through rigorous examination and demonstration through hands-on instructional laboratory activities.
2. (Analytical processing) Develop the ability to reduce complex datasets and scientific information into meaningful relationships and correlations, and using the scientific literature, develop hypotheses to test the cause of predicted relationships using the scientific method. Demonstrate skills through a senior capstone experience and through individualized research opportunities and instructional activities.
3. (Integration for application) Apply knowledge to develop solutions to real world problems. Identify problems yet to be investigated and in need of advanced study. Ability to integrate and apply knowledge is demonstrated through our internship programs, animal related job experiences, club activities, and problems sets that students solve in exams and laboratory settings.
4. (Critical thinking) Find their sources of information using peer reviewed research articles. Learn not only to question popular press, but understand that even in the scientific literature there are contradictory findings. Capacity to synthesize scientific literature such that they can communicate a position backed with strong scientific support. Skills are demonstrated through the reading, writing and discussion of sciencebased papers in key courses during their educational process and through an oral presentation in their capstone course.
5. (Effective communication) Communicate, both in writing and orally, the science behind the biology and management of domestically farmed animals. Communications provide new insights into animal production, and are explained in a manner fitting with the audience. Ability to communicate is measured by their effectiveness in presenting research posters and presentations, their analysis of the literature in papers and presentations in class and during their senior capstone course.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN <br> SAMPLE ANIMAL SCIENCES FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| AN SCI/DY SCI 101 | 4 CHEM 104 | 5 |
| CHEM 103 | 4 Social Science | $3-4$ |
| MATH 114 or 112 | 3-5 AN SCI Elective | $1-3$ |
| COMM-A | 3 MATH 113 (or Elective) | 3 |


| First-Year Seminar | 1 Humanities | 3 |
| :---: | :---: | :---: |
|  | 15-17 | 15-18 |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| ZOOLOGY/BIOLOGY/ BOTANY 151 | 5 Emphasis Course | 3 |
| Emphasis Course ${ }^{2}$ | 3 Emphasis or Depth Course | 3 |
| Ethnic/International Studies | 3 AN SCI/FOOD SCI 305 | 4 |
| Emphasis or Depth Course | 3-4 ZOOLOGY/BIOLOGY/ BOTANY 152 | 5 |
|  | 14-15 | 15 |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| Emphasis Course | 3 AN SCI/DY SCI/ NUTR SCI 311 | 3 |
| STAT 371 | 3 An Sci Depth ${ }^{3}$ | 3 |
| AN SCI/DY SCI 434 | 3 AN SCI/DY SCI 320 | 3 |
| GENETICS 466 | 3 Emphasis Course | 3 |
| Emphasis Course | 3 Select one of the following | 4 |
|  | AN SCI/DY SCI 361 \& AN SCI/DY SCI 362 |  |
|  | AN SCI/DY SCI 361 \& AN SCI/DY SCI 363 |  |
|  | 15 | 16 |


|  |  | 16 |
| :--- | :---: | ---: |
| Senior | Credits Spring | Credits |
| Fall | 2 An Sci Depth | 6 |
| AN SCI 435 | 3 Independent Study |  |
| An Sci Depth | 4 Electives | $1-3$ |
| Emphasis Course | 3 | 6 |
| Humanities | 3 | $13-15$ |
| COMM-B | 15 |  |

## Total Credits 118-126

1 If placed into MATH 112 Algebra, you must defer CHEM 103 General Chemistry I until spring semester.

Choose Science or Business Emphasis; see Requirements tab for details.
312 credits required; see Requirements tab for options.
4 Select from AN SCI 289 Honors Independent Study, AN SCI 699 Special Problems, AN SCI 681 Senior Honor Thesis, AN SCI 682 Senior Honors Thesis, AN SCI 299 Independent Study, or AN SCI 399 Coordinative Internship/Cooperative Education.

## ADVISING AND CAREERS

All students receive individualized advising from their academic advisor. Students are assigned an academic advisor upon declaration of the major and are expected to meet with their advisor each semester before registering for courses in the upcoming semester. Academic advisors will assist students in developing an individualized, four-year curricular plan. Internships and research experience are encouraged.

Numerous graduates have completed double majors with Life Sciences Communication, Poultry Science, Genetics , and departments outside of CALS such as Spanish, according to the interests and aspirations of the student. Interested students should contact Kathy Monson (kamonson@wisc.edu) (608-263-5225) with questions.

Career opportunities exist in the meat, reproductive technology, feed, agribusiness, agri-marketing, and biotechnology industries. Occasionally, students have found positions within zoos. Many students pursue graduate education in veterinary medicine, animal science, medicine, or other programs.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Recommended Animal Science Electives |  |  |
| AN SCI 110 | Animal Handling |  |
| AN SCI 150 | Career Orientation Animal/Poultry Sciences |  |
| AN SCI 200 | The Biology and Appreciation of Companion Animals |  |
| AN SCI 221 | Advanced Meat Animal Evaluation Lab |  |
| AN SCI 250 | Horse Science and Management |  |
| AN SCI 299 | Independent Study |  |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { FOOD SCI } 321 \end{aligned}$ | Food Laws and Regulations |  |
| AN SCI 375 | Special Topics |  |
| AN SCI 400 | Study Abroad in Animal Sciences |  |
| AN SCI 444 | Laboratory Techniques in Mammalian Gamete and Embryo Biology |  |

## PEOPLE

## PROFESSORS

Albrecht, Claus, Crenshaw (chair), Khatib, Kirkpatrick, Parrish, Reed, Richards, Rosa, Schaefer

## ASSOCIATE PROFESSOR

Sindelar (Extension)

## ASSISTANT PROFESSOR

Shanmuganayagam

## INSTRUCTIONAL STAFF

Barry, Kean, Monson, O'Rourke, Russell, Sandberg

## WISCONSIN EXPERIENCE

## Undergraduates majoring in animal sciences at UW-Madison will

 find an inclusive, welcoming community where professors know their students and are able to provide guidance based on students' specific academic and career goals. There are numerous opportunities to conduct research with faculty and to take part in the Wisconsin Idea, whereby faculty and students extend the knowledge developed at the university to stakeholders in Wisconsin and beyond for the betterment of society.Students majoring in animal sciences are involved in a wide variety of opportunities across campus. Students are highly encouraged to
complement their coursework with out-of-classroom experiences such as clubs, research, volunteering, internships, and study abroad.

By joining one of the several clubs listed below, majors get to know their fellow students outside the classroom. The following opportunities can help students connect with other students interested in animal sciences and other biological science majors, build relationships with faculty and staff, and contribute to out-of-classroom learning.

- Pre Vet Club (https://prevetassociation.weebly.com)
- Poultry Club (https://win.wisc.edu/organization/poultryclub)
- Badger Meat Science Club (https://win.wisc.edu/organization/ badgermeatscienceclub)
- Saddle and Sirloin Club (https://win.wisc.edu/organization/ saddleandsirloin)
- Hoofer Riding Club (https://win.wisc.edu/organization/ hooferridingclub)
- Badger Dairy Club (https://win.wisc.edu/organization/ badgerdairyclub)
- Collegiate FFA (http://collegiateffamadison.weebly.com)
- Association of Women in Agriculture (http://awamadison.org)
- Meat Lab/Bucky's Butchery: Interested in meat science? The meatprocessing facilities within the animal sciences department apply many food science principles and provide a unique opportunity for students to get hands-on experience with all aspects of meat production.
- Study Abroad: Animal science majors have the opportunity to go on experiential study abroad programs, where they can immerse themselves in research or global, animal field experiences. Students can review the International Academic Programs website (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/animal-sciences/animal-sciences-bs/\ https:// www.studyabroad.wisc.edu) and the CALS study abroad advising page (https://cals.wisc.edu/academics/undergraduate-students/ international-programs/study-abroad-advising) for information on these and other programs, as well as requirements that can typically be fulfilled abroad and things to consider when fitting study abroad into an academic plan.
- Research/Lab Experience: Students are encouraged to get involved in research, whether in the animal sciences department or through other biology -elated departments. Research can be performed for either course credit or pay, depending on the opportunity. Research opportunities can be found primarily by contacting faculty members.

Students are also involved in prehealth organizations, volunteer and shadowing opportunities, publishing in an undergraduate science journal, biotechnology and agricultural internships, and other related experiences on and off campus.

## POULTRY SCIENCE, B.S.

Poultry science students focus on the biology of domestic birds, including chickens, turkeys, ducks and geese. Courses cover physiology, nutrition, and health, as well as husbandry and business management related to poultry. Processing of meat and eggs and their role as healthy foods are important aspects included in the major. The poultry science curriculum is useful for any student who wants to learn the basics of bird biology and/or poultry production.

Career opportunities for poultry science graduates exceed the number of graduates and may be found in production, marketing, sales, and technical services for the live bird industry or its food products (meat or eggs). The Department of Animal Sciences may be consulted for specific career information and information about courses required for the Bachelor of Science degree program.

Many courses for the poultry science major are offered only during summer, when students from around the Midwest travel to UW-Madison to take poultry science courses unavailable at their home schools. The course offerings reflect the role of the UW poultry science program and its collaboration with the Midwest Poultry Consortium. Faculty from many midwestern universities assist in teaching the summer courses.

The department has numerous poultry-related scholarships available, and internships with poultry companies are strongly suggested.

A student majoring in poultry science is placed in the bachelor of science degree program. This program is flexible enough to meet the individual needs and interests of the student.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) |  |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement.

A minimum of 15 credits must be completed in the major that are not used elsewhere.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics and Statistics |  |  |
| Select one of the following (or may be satisfied by placement exam): ${ }^{1}$ |  | 5-6 |
| MATH 112 <br> \& MATH 113 | Algebra and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| Select one of the following: |  | 3 |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| STAT/F\&W ECOL/ HORT 571 | Statistical Methods for Bioscience I |  |
| Chemistry |  |  |
| Select one of the following: |  | 5-10 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II |  |
| Biology |  |  |
| Select one of the following options: |  | 13 |
| Option 1: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| ZOOLOGY/ BIOLOGY/ BOTANY 152 | Introductory Biology |  |
| Option 2: |  |  |
| ZOOLOGY/ BIOLOGY 101 | Animal Biology |  |
| ZOOLOGY/ BIOLOGY 102 | Animal Biology Laboratory |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany |  |
| Option 3: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| GENETICS 466 | Principles of Genetics | 3 |
| Poultry Science Core |  |  |
| AN SCI/DY SCI 101 | Introduction to Animal Sciences | 4 |
| AN SCI 314 | Poultry Nutrition ${ }^{2}$ | 3 |
| AN SCI 315 | Poultry Enterprise Management ${ }^{2}$ | 3 |
| AN SCI 503 | Avian Physiology ${ }^{2}$ | 3 |
| AN SCI 508 | Poultry Products Technology ${ }^{2}$ | 3 |
| AN SCI 511 | Breeder Flock and Hatchery Management ${ }^{2}$ | 3 |
| AN SCI 512 | Management for Avian Health ${ }^{2}$ | 3 |



## DEPTH COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select 12 credits from the following: |  | 12 |
| AN SCI 220 | Growth, Composition and Evaluation of Meat Animals | 4 |
| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { FOOD SCI } 321 \end{aligned}$ | Food Laws and Regulations | 1 |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| AN SCI/DY SCI 362 or AN SCI/ DY SCI 363 | Veterinary Genetics <br> Principles of Animal Breeding | 2 |
| AN SCI/DY SCI 370 | Livestock Production and Health in Agricultural Development ${ }^{1}$ | 3 |
| AN SCI/DY SCI 373 <br> or AN SCI/ <br> DY SCI 434 | Animal Physiology ${ }^{2}$ <br> Reproductive Physiology | 3 |
| AN SCI 415 | Application of Monogastric Nutrition Principles | 2 |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { FOOD SCI } 515 \end{aligned}$ | Commercial Meat Processing | 2 |
| AN SCI/F\&W ECOL/ ZOOLOGY 520 | Ornithology | 3 |
| AN SCI/F\&W ECOL/ ZOOLOGY 521 | Birds of Southern Wisconsin | 3 |
| FOOD SCI 512 | Principles of Food Chemistry-Lab | 2 |
| M M \& I/MICROBIO/ PATH-BIO 528 | Immunology | 3 |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory | 2 |
| ZOOLOGY/ENTOM/ M M \& I/PATHBIO 350 | Parasitology | 3 |
| Up to 3 credits from courses listed below can go toward the 12 credits required: |  |  |
| AN SCl 399 | Coordinative Internship/Cooperative Education |  |


| AN SCI 681 | Senior Honor Thesis |
| :--- | :--- |
| AN SCI 682 | Senior Honors Thesis |
| AN SCI 699 | Special Problems |
| 1 | Meets CALS International Studies requirement. |
| 2 | ANAT\&PHY 335 Physiology can substitute for AN SCI/DY SCI 373 |
| Animal Physiology. |  |

## EMPHASIS COURSES

## SCIENCE EMPHASIS

| Code | Title | Credits |
| :---: | :---: | :---: |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| PHYSICS 103 | General Physics | 4 |
| Select 9 credits from the following: |  | 9 |
| CHEM 344 | Introductory Organic Chemistry Laboratory |  |
| CHEM 345 | Intermediate Organic Chemistry |  |
| FOOD SCI 410 | Food Chemistry |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| MICROBIO 304 | Biology of Microorganisms Laboratory |  |
| M M \& I/ <br> MICROBIO/PATH- <br> BIO 528 | Immunology |  |
| PHYSICS 104 | General Physics |  |
| Total Credits |  | 24 |

## BUSINESS EMPHASIS

| Code | Title | Credits |
| :--- | :--- | ---: |
| A A E 215 | Introduction to Agricultural and <br> Applied Economics 1 | 3 |
| or ECON 101 | Principles of Microeconomics |  |
| A A E 320 | Farming Systems Management |  |
| A A E 322 | Commodity Markets | 3 |
| M H R 305 | Human Resource Management | 3 |
| BMOLCHEM 314 | Introduction to Human <br> Biochemistry | 3 |
| Select 9 credits from the following: | 3 |  |
| A A E 419 | Agricultural Finance | 9 |
| ACCT I S 300 | Accounting Principles |  |
| AGRONOMY/ | Plant Nutrition Management |  |
| HORT/SOIL SCI |  |  |
| 326 |  |  |
| ECON/FINANCE | Introduction to Finance |  |
| 300 |  |  |
| MARKETNG 300 | Marketing Management |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |

SOIL SCI 301
General Soil Science
Total Credits

1 A A E 215 Introduction to Agricultural and Applied Economics not accepted as a prerequisite for some advanced business courses.

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take AN SCI 681 Senior Honor Thesis and AN SCI 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http:// www.cals.wisc.edu/academics/undergraduate-programs/get-involved/ honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. }\end{array} \\
& \begin{array}{l}\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of 30 } \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |

## LEARNING OUTCOMES

1. (Knowledge and comprehension) Develop the working vocabulary of an animal scientist, a working knowledge of the basic anatomy, biochemistry, physiology, and genetics of animal and meat biology, and the applied nutrition, breeding, product harvest and processing skills, necessary to manage animal production systems. Demonstrate their knowledge through rigorous examination and demonstration through hands\#on instructional laboratory activities.
2. (Analytical processing) Develop the ability to reduce complex datasets and scientific information into meaningful relationships and correlations, and using the scientific literature, they can develop hypotheses to test the cause of predicted relationships using the scientific method. Demonstrate these skills through a senior capstone experience and through individualized research opportunities and instructional activities.
3. (Integration for application) When faced with real world problems which they have never confronted, our students are able to apply their knowledge to develop solutions. In addition, our students are capable of identifying problems yet to be investigated and in need of advanced study. The student's ability to integrate and apply their knowledge is demonstrated through our internship programs, animal related job
experiences, club activities, and problems sets that students solve in exams and laboratory settings.
4. (Critical thinking) Find their sources of information using peer reviewed research articles. They learn not only to question popular press, but understand that even in the scientific literature there are contradictory findings. They have the capacity to synthesize scientific literature such that they can communicate a position backed with strong scientific support. These skills are demonstrated through the reading, writing and discussion of science-based papers in key courses during their educational process and through an oral presentation in their capstone course.
5. (Effective communication) Communicate, both in writing and orally, the science behind the biology and management of domestically farmed animals. Their communications provide new insights into animal production, and are explained in a manner fitting with the audience. Our students' ability to communicate is measured by their effectiveness in presenting research posters and presentations, their analysis of the literature in papers and presentations in class and during their senior capstone course.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE POULTRY SCIENCE FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| AN SCI/ <br> DY SCI 101 | 4 CHEM 104 <br> (unless took 109) | 5 |
| CHEM 103 or $109^{1}$ | 4 MATH 113 <br> (unless took 114) | 3 |
| MATH 114 or $112^{1}$ | 5 Humanities | 3 |
| First Year Seminar | 1 Emphasis Course ${ }^{2}$ | 3-4 |

Seminar

|  | 17 | 14-15 |  |
| :---: | :---: | :---: | :---: |
| Sophomore |  |  |  |
| Fall | Credits Spring | Credits Summer | Credits |
| ZOOLOGY/ | 5 ZOOLOGY/ | $5 \mathrm{AN} \mathrm{SCI} 503{ }^{3}$ | 3 |
| BIOLOGY/ | BIOLOGY/ |  |  |
| BOTANY 151 | BOTANY 152 |  |  |
| Emphasis | 3 Emphasis | 5 AN SCI $511^{3}$ | 3 |
| Course | Course |  |  |
| Ethnic or Int'l | 3 Social Science | $3 \mathrm{AN} \mathrm{SCI} 508{ }^{3}$ | 3 |
| Studies |  |  |  |
| Elective | 3 Int'I or Ethnic | 3 |  |
|  | Studies |  |  |
|  | 14 | 16 | 9 |

Junior

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| GENETICS 466 | 3 STAT 371 | 3 AN SCI 512 ${ }^{3}$ | 3 |
| Emphasis | 6 Emphasis | 4 AN SCI 314 $4^{3}$ | 3 |
| Courses | Course |  |  |


| Poultry Sci Depth Course ${ }^{4}$ | 2 Poultry Sci Depth Course | 4-5 AN SCl $315^{3}$ | 3 |
| :---: | :---: | :---: | :---: |
| Elective | 3 Elective | 3 |  |
|  | 14 | 14-15 | 9 |
| Senior |  |  |  |
| Fall | Credits |  |  |
| AN SCI 435 | 2 |  |  |
| Emphasis Course | 4 |  |  |
| Poultry Sci Depth Courses | 6 |  |  |
| AN SCI <br> Independent <br> Study | 1-3 |  |  |
| Humanities | 3 |  |  |
|  | 16-18 |  |  |

Total Credits 123-127
If placement into MATH 112, defer CHEM 103 until spring semester.
2 Choose Science or Business Emphasis; see Requirements tab.
3 Summer school is required because courses are only offered in the summer.
4
12 credits required; see Requirements tab for options.

## ADVISING AND CAREERS

All students receive individualized advising from their academic advisors. Students are assigned a faculty advisor upon declaration of the major. Interested students should contact Kathy Monson (kamonson@wisc.edu, 608-263-5225) with questions.

Career opportunities for poultry science graduates exceed the number of graduates and may be found in production, marketing, sales, and technical services for the live bird industry or its food products (meat or eggs). Internships and research experience are encouraged.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Recommended Animal Sciences Electives |  |  |
| AN SCI 110 | Animal Handling |  |
| AN SCI 150 | Career Orientation Animal/Poultry Sciences |  |
| AN SCI 200 | The Biology and Appreciation of Companion Animals |  |
| AN SCI 221 | Advanced Meat Animal Evaluation Lab |  |
| AN SCI 250 | Horse Science and Management |  |
| AN SCI 299 | Independent Study |  |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { FOOD SCI } 321 \end{aligned}$ | Food Laws and Regulations |  |
| AN SCI 375 | Special Topics |  |
| AN SCI 400 | Study Abroad in Animal Sciences |  |
| AN SCI 444 | Laboratory Techniques in Mammalian Gamete and Embryo Biology |  |

## PEOPLE

## PROFESSORS

Albrecht, Claus, Crenshaw (chair), Khatib, Kirkpatrick, Parrish, Reed, Richards, Rosa, Schaefer

## ASSOCIATE PROFESSOR

Sindelar (Extension)

## ASSISTANT PROFESSOR

Shanmuganayagam

## INSTRUCTIONAL STAFF

Barry, Kean, Monson, O'Rourke, Russell, Sandberg

## WISCONSIN EXPERIENCE

Undergraduates majoring in poultry science at UW-Madison will find an inclusive, welcoming community where professors know their students and are able to provide guidance based on students' specific academic and career goals. There are numerous opportunities to conduct research with faculty and to take part in the Wisconsin Idea, whereby faculty and students extend the knowledge developed at the university to stakeholders in Wisconsin and beyond for the betterment of society.

Students majoring in poultry science are involved in a wide variety of opportunities across campus. Students are highly encouraged to complement their coursework with out-of-classroom experiences such as clubs, research, volunteering, internships, and study abroad.

By joining one of the several clubs listed below, majors get to know their fellow students outside the classroom. The following opportunities can help students connect with other students interested in poultry science and other biological science majors, build relationships with faculty and staff, and contribute to out-of-classroom learning.

- Pre Vet Club (https://prevetassociation.weebly.com)
- Poultry Club (https://win.wisc.edu/organization/poultryclub)
- Badger Meat Science Club (https://win.wisc.edu/organization/ badgermeatscienceclub)
- Saddle and Sirloin Club (https://win.wisc.edu/organization/ saddleandsirloin)
- Hoofer Riding Club (https://win.wisc.edu/organization/ hooferridingclub)
- Badger Dairy Club (https://win.wisc.edu/organization/ badgerdairyclub)
- Collegiate FFA (http://collegiateffamadison.weebly.com)
- Association of Women in Agriculture (http://awamadison.org)
- Meat Lab/Bucky's Butchery: Interested in meat science? The meatprocessing facilities within the poultry science department apply many food science principles and provide a unique opportunity for students to get hands-on experience with all aspects of meat production.
- Study Abroad: Poultry science majors have the opportunity to go on experiential study abroad programs, where they can immerse themselves in research or global, animal field experiences. Students can review the International Academic Programs website (https:// www.studyabroad.wisc.edu) and the CALS study abroad advising
page (https://cals.wisc.edu/academics/undergraduate-students/ international-programs/study-abroad-advising) for information on these and other programs, as well as requirements that can typically be fulfilled abroad and things to consider when fitting study abroad into an academic plan.
- Research/Lab Experience: Students are encouraged to get involved in research, whether in the poultry science department or through other biology -elated departments. Research can be performed for either course credit or pay, depending on the opportunity. Research opportunities can be found primarily by contacting faculty members.

Students are also involved in prehealth organizations, volunteer and shadowing opportunities, publishing in an undergraduate science journal, biotechnology and agricultural internships, and other related experiences on and off campus.

## BACTERIOLOGY

Contact Katy France, student services coordinator, 262-2975, kfrance@bact.wisc.edu, for information about the undergraduate program, declaring the microbiology major, career opportunities, and advisor assignments.

Microorganisms are the oldest life forms on earth and impact our lives and the well being of the planet in innumerable ways. The field of microbiology has become even more prominent in recent years because of increased concerns about bioterrorism, infectious disease, and environmental manipulation. The microbiology major offered by the Department of Bacteriology provides training in broad aspects of microbiology with emphasis on 21 st-century laboratory skills.

Core courses focus on the diversity, genetics, biochemistry, and physiology of microorganisms. A variety of elective courses provide the opportunity to study environmental microbiology, microbial ecology, food microbiology, host-parasitic interactions, microbial pathogenesis, immunology, virology, fermentation, and microbial biotechnology. Instructional laboratory courses provide hands-on experience with modern techniques and equipment. Students have many opportunities for independent research projects in faculty laboratories.

The bachelor's degree provides a strong background in the biological sciences for students planning to enter medical, dental, veterinary or other professional schools, as well as those planning graduate studies in any branch of microbiology or other biological sciences such as molecular or cell biology.

Students who end their training with a bachelor's degree are well prepared for a wide variety of career opportunities, including laboratory positions in pharmaceutical and biotechnology firms and in university and government laboratories. They also work as specialists in industrial quality testing and control, and as regulatory workers in government agencies and public health laboratories. Exposure to the scientific process and training in microbiology itself allow microbiology graduates to enter fields as diverse as business, technical service, sales, or technical writing.

The department also serves as the administrative home for the biology major in the College of Agricultural and Life Sciences.

## DEGREES/MAJORS/CERTIFICATES

- Biology, B.S. (CALS) (p. 82)
- Microbiology, B.S. (CALS) (p. 104)


## PEOPLE

## PROFESSORS

Ané, Currie, Donohue, Filutowicz, Forest, Gourse, Johnson, Kaspar (chair), McMahon (Civil and Environmental Engineering), Thomas, Wang, Wassarman, Yu

## ASSOCIATE PROFESSOR

Suen

## ASSISTANT PROFESSORS

Amador-Noguez, Anantharaman, Burton, Rey, Vetsigian

## BIOLOGY, B.S. (CALS)

The biology major is designed for students with broad interests in the biological sciences. It is intended primarily to:

1. prepare undergraduates for graduate studies in diverse areas of biology;
2. prepare certain pre-professional students (e.g., medicine, veterinary medicine, dentistry) for advanced study in the health professions;
3. provide a broad exposure to biology for students who want a general science education as biologists, and
4. serve as initial preparation for students who later choose a more specialized major.

The major is offered by the College of Agricultural and Life Sciences and the College of Letters \& Science.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core
of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |

CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p.33)

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

Students may complete the biology major requirements or select a Named Option (below).

## CORE REQUIREMENTS

## Mathematics and Statistics

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry |  |
| Select one of the following: ${ }^{1}$ |  | 3-4 |
| MATH 222 | Calculus and Analytic Geometr |  |
| STAT 301 | Introduction to Statistical Method |  |
| STAT 371 | Introductory Applied Statistics the Life Sciences |  |
| 1 Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences. |  |  |
| Chemistry |  |  |
| Code | Title | Credits |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| Chemical Principles II also satisfies the General Chemistry Requirement. |  |  |

## Physics

Code Title Credits

| 1st semester Physics; select one of the following: | $4-5$ |
| :---: | :--- |
| PHYSICS 103 | General Physics |
| PHYSICS 201 | General Physics |
| PHYSICS 207 | General Physics |


| 2nd semester Physi | , select one of the following: | 4-5 |
| :---: | :---: | :---: |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| Introductory Biology |  |  |
| Code | Title | Credits |
| Select one of the fol | wing options: ${ }^{1}$ | 10-16 |
| Option A: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| Biology/ BOTANY/ ZOOLOGY 152 | Introductory Biology |  |
| Option B: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |
| Option C: |  |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany |  |
| Foundational Course ${ }^{2}$ |  |  |
| Select one of the following: |  |  |
| BIOCORE 381 <br> \& BIOCORE 383 | Evolution, Ecology, and Genetics and Cellular Biology ${ }^{3}$ |  |
| AGRONOMY/ <br> HORT 338 | Plant Breeding and Biotechnology |  |
| GENETICS 466 | Principles of Genetics |  |
| GENETICS 468 | General Genetics 2 |  |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |  |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BIOCHEM 508 | General Biochemistry II |  |
| For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy). |  |  |
| Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement. |  |  |
| 3 Students may us BIOCORE 383 C and satisfy foun | BIOCORE 381 Evolution, Ecology, lular Biology to contribute to introdu ation. | tics and ology |

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.
Select one course from categories A or B below.
Select one course from categories C or D below.
Select one course from category E or from an unused category above.

## A. Cellular and Subcellular Biology

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology | 3 |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques ${ }^{1}$ | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | 4 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| BIOCHEM 507 | General Biochemistry I | 3 |
| BIOCHEM 508 | General Biochemistry II | 3-4 |
| BIOCHEM/ NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition | 3 |
| BIOCHEM 551 | Biochemical Methods ${ }^{1}$ | 4 |
| BIOCHEM/ <br> M M \& I 575 | Biology of Viruses | 2 |
| BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 |
| BIOCHEM/ <br> GENETICS/ <br> MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| BIOCHEM/ <br> GENETICS/ <br> MD GENET 620 | Eukaryotic Molecular Biology | 3 |
| BIOCHEM/ | ry | 3 |


| BIOCHEM/ | Plant Biochemistry | 3 |
| :--- | :--- | :---: |
| BOTANY 621 |  | 2 |
| BIOCHEM 625 | Mechanisms of Action of Vitamins | 2 |

BIOCHEM/PHMCOL- Cellular Signal Transduction 3

| M/ZOOLOGY 630 | Mechanisms | 3 |
| :--- | :--- | :--- |
| BMOLCHEM 314 | Introduction to Human |  |


|  | Biochemistry |
| :--- | :--- |


| BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{1}$ | 3 |
| :--- | :--- | :--- |
| BMOLCHEM/ | Microbiology at Atomic Resolution | 3 |

MICROBIO 668

BOTANY/ENTOM/ Plant-Microbe Interactions: 3
$\begin{array}{lll}\text { PL PATH } 505 & \text { Molecular and Ecological Aspects } & \\ \text { BOTANY/GENETICS/ } & \text { Introductory Cytogenetics } & 2-3\end{array}$
HORT 561
GENETICS 466 Principles of Genetics 3
GENETICS 467 General Genetics 13
GENETICS 520 Neurogenetics 2
GENETICS/ Human Cytogenetics 2

MD GENET/
ZOOLOGY 562
GENETICS/
Advanced Microbial Genetics
3

| MICROBIO 470 | Microbial Genetics \& Molecular Machines | 3 | ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MICROBIO/ SOIL SCI 523 | Soil Microbiology and Biochemistry | 3 | ANTHRO/ NTP/PSYCH/ | Biology of Mind | 3 |
| MICROBIO/M M \& I/ | Immunology | 3 | ZOOLOGY 619 |  |  |
| PATH-BIO 528 |  |  | BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 | BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
|  |  |  | BOTANY 330 | Algae ${ }^{1}$ | 3 |
| MICROBIO/ ONCOLOGY/ PLPATH 640 | General Virology-Multiplication of Viruses | 3 | BOTANY/ | Fungi ${ }^{1}$ | 4 |
|  |  |  | BOTANY/ | Dendrology ${ }^{1}$ | 2 |
| M M \& I 341 | Immunology | 3 | F\&W ECOL 402 |  |  |
| NEURODPT/ <br> NTP/PHYSIOL/ <br> ZOOLOGY 616 | Lab Course in Neurobiology and Behavior ${ }^{1}$ | 4 | BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
|  |  |  | CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language | 3 |
| NTP/ | Cellular and Molecular | 4 | DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 |
| NEURODPT 610 NTP/PHYSIOL 629 | Neuroscience |  | ENTOM/ | Introduction to Entomology ${ }^{1}$ | 4 |
|  | Molecular and Cellular Mechanisms of Memory | 3 | ZOOLOGY 302 |  |  |
| NTP 655 |  | 3 | ENTOM 321 | Physiology of Insects | 3 |
| NTP 655 | Disease | 3 | ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| NTP 675 | Special Topics (Stem Cell in Neurobiology) | 1-3 | F\&W ECOL 401 | Physiological Animal Ecology | 3 |
|  |  |  | GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |
| NTP 675 | Special Topics (Reproductive Neuroendocrinology) | 1-3 | GENETICS/ <br> MD GENET 565 | Human Genetics | 3 |
| NTP 675 | Special Topics (Molecular Mechanisms of Brain Damage) | 1-3 | $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology ${ }^{1}$ | 2 | KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 |
|  |  |  | KINES 721 | Neural Basis for Movement | 3 |
| NEURODPT 533 | Molecular Physiology | 2 | MICROBIO 303 | Biology of Microorganisms | 3 |
| PSYCH 601 | Current Topics in Psychology (Epigenetics \& the Brain) ${ }^{2}$ | 3 | MICROBIO 304 | Biology of Microorganisms Laboratory ${ }^{1}$ | 2 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 | MICROBIO 330 | Host-Parasite Interactions | 3 |
| ZOOLOGY/ <br> PSYCH 523 | Neurobiology | 3 | MICROBIO/ <br> BIOLOGY 525 | Advanced Biological Laboratory Practices: A Research Experience ${ }^{1}$ | 2 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 | MICROBIO 526 | Physiology of Microorganisms | 3 |
|  |  |  | M M \& I 301 | Pathogenic Bacteriology | 2 |
| ZOOLOGY 570 | Cell Biology | 3 | M M \& I/ENTOM/ | Parasitology | 3 |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab ${ }^{1}$ | 2 | PATH-BIO/ <br> ZOOLOGY 350 |  |  |
| ZOOLOGY 625 | Development of the Nervous System | 2 | M M \& 1410 | Medical Mycology | 2 |
|  |  |  | NTP/NEURODPT/ | Systems Neuroscience | 4 |
| Courses also approved for lab credit |  |  | PSYCH 611 |  |  |
|  |  |  | NTP/ZOOLOGY 620 | Neuroethology Seminar | 2 |
| B. Organismal Biology |  | Credits | NTP/ | Neuronal Mechanisms for | 3 |
| Code | Title |  | NEURODPT 630 | Sensation and Memory in Cerebral |  |
| AN SCI/DY SCI 373 | Animal Physiology | 3 | NTP 675 |  |  |
| AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |  | Special Topics (Basic Sleep <br> Mechanisms \& Sleep Disorders) | 1-3 |
| AN SCI/F\&W ECOL/ <br> ZOOLOGY 520 | Ornithology | 3 | NTP 675 | Special Topics (Functional Brain Imaging of Cognitive Disorders) | 1-3 |
| AN SCI/F\&W ECOL/ <br> ZOOLOGY 521 | Birds of Southern Wisconsin ${ }^{1}$ | 3 | NUTR SCI 431 | Nutrition in the Life Span | 3 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 | NUTR SCI 631 | Clinical Nutrition I | 3 |
| ANAT\&PHY 337 | Human Anatomy | 3 | NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |
| ANAT\&PHY 338 | Human Anatomy Laboratory ${ }^{1}$ | 2 |  |  |  |


| ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| :---: | :---: | :---: |
| PATH 404 | Pathophysiologic Principles of Human Diseases | 3 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| PSYCH 406 | Psychology of Perception | 3-4 |
| PSYCH 601 | Current Topics in Psychology (Neural Basis of Cognitive Control) ${ }^{2}$ | 3 |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| PSYCH 513 | Hormones, Brain, and Behavior | 4 |
| PSYCH 606 | Hormones and Behavior | 3 |
| ZOOLOGY 303 | Aquatic Invertebrate Biology | 3 |
| ZOOLOGY 400 | Topics in Biology (Mammalogy) | 1-3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates ${ }^{1}$ | 5 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory 1 | 2 |

1 Courses also approved for lab credit

## C. Ecology

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| AGRONOMY/ ENTOM/F\&W ECOL/ M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 633 | Ecotoxicology: Impacts on Individuals | 1 |
| AGRONOMY/ ENTOM/F\&W ECOL/ M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems | 1 |
| BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach | 2 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 |
| BOTANY/ENTOM/ <br> ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| BOTANY/ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { ZOOLOGY } 315 \end{aligned}$ | Limnology-Conservation of Aquatic Resources | 2 |


| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| :---: | :---: | :---: |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources 1 | 2-3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab ${ }^{1}$ | 2 |

## D. Evolution and Systematics

Code Title Credits

| ANTHRO 302 | Hominoid Evolution | 3 |
| :--- | :--- | :--- |
| ANTHRO 304 | Heredity, Environment and Human | 3 |


|  | Populations |
| :--- | :--- |
| ANTHRO/BOTANY/ Evolutionary Biology |  |


| ZOOLOGY 410 |  |
| :--- | :--- |
| ANTHRO 411 | The Evolution of the Genus, Homo |

ANTHRO 458 Primate Behavioral Ecology 3
ANTHRO 603 Seminar in Evolutionary Theory 3
ANTHRO 658 Ecological Models of Behavior 3
BOTANY $305 \quad$ Plant Morphology and Evolution ${ }^{1} \quad 4$
BOTANY $400 \quad$ Plant Systematics ${ }^{1} \quad 4$
BOTANY $401 \quad$ Vascular Flora of Wisconsin ${ }^{1} \quad 4$
BOTANY $422 \quad$ Plant Geography 3
BOTANY 563 Phylogenetic Analysis of Molecular 3
Data
ENTOM 432 Taxonomy and Bionomics of 4
Immature Insects ${ }^{1}$
$\begin{array}{llr}\text { ENTOM/GENETICS/ } & \text { Molecular Ecology } & 3 \\ \text { ZOOLOGY } 624 & \text { Extinction of Species } & 3\end{array}$
F\&W ECOL/
ZOOLOGY 360
$\begin{array}{lll}\text { GENETICS 468 } & \text { General Genetics 2 } & 3 \\ \text { GEOSCI/ } & \text { Paleobiology } & 3\end{array}$
$\begin{array}{lll}\text { ZOOLOGY } 541 & & \\ \text { MICROBIO } 450 & \text { Diversity, Ecology and Evolution of } & 3\end{array}$

| MICROBIO 450 | Diversity, Ecology and Evolution of <br> Microrrganisms | 3 |
| :--- | :--- | :--- |
| PSYCH 449 | Animal Behavior | 3 |
| PSYCH 450 | Primates and Us: Insights into <br> Human Biology and Behavior | 3 |



| F\&W ECOL 410 | Principles of Silviculture | 3 |
| :---: | :---: | :---: |
| F\&W ECOL 415 | Tree Physiology | 3 |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 |
| F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 |
| FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory ${ }^{1}$ | 2 |
| FOOD SCI/ <br> MICROBIO 325 | Food Microbiology | 3 |
| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 |
| GENETICS/ HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants I ${ }^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| MEDICINE/ <br> M\&ENVTOX/ <br> ONCOLOGY/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| NTP/MED PHYS 651 | Methods for Neuroimaging Research ${ }^{1,3}$ | 3 |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar | 1 |
| 1 Courses also appr | roved for lab credit |  |

Code<br>Title<br>Credits

Two credits minimum required. With advisor approval, directed study or research-based senior thesis in a biological science discipline can also count. The experience must be completed after the first year of an introductory biology sequence above. The capstone experience will normally be completed during the student's final two or three semesters. Also, a subset of laboratory courses has been approved for capstone. The following courses, along with 682s and 692s in biological science departments (taken senior year), can be accepted as fulfilling the capstone experience.

| ANAT\&PHY 435 | Fundamentals of Human Physiology | 5 |
| :---: | :---: | :---: |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BMOLCHEM 504 | Human Biochemistry Laboratory | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology (taken fall 2016 summer 2020) | 4 |
| BOTANY/ <br> LAND ARC 670 | Adaptive Restoration Lab | 2 |
| ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab (taken fall 2016 - summer 2020) | 2 |
| F\&W ECOL 599 | Wildlife Research Capstone (limited access) | 3 |
| MICROBIO 551 | Capstone Research Project in Microbiology | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |

1 To count BIOCORE 486 Organismal Biology Laboratory for capstone, students must also complete BIOCORE 382 Evolution, Ecology, and Genetics Laboratory and BIOCORE 384 Cellular Biology Laboratory.

## BIOLOGY NAMED OPTIONS

Instead of completing the requirements above, students may choose to select one of the options below.

- Biology: Evolutionary Biology (p. 91)
- Biology: Neurobiology (p. 96)
- Biology: Plant Biology (p. 101)


## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take BIOLOGY 681 Senior Honors Thesis and BIOLOGY 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http:// www.cals.wisc.edu/academics/undergraduate-programs/get-involved/ honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Know and understand core concepts that unify the breadth of biological sciences including: evolution; structure and function; information flow, exchange, and storage; pathways for transformations of energy and matter; and systems.
2. Demonstrate practical skills of a professional biologist including: problem\#solving by engaging the process of science; written and verbal proficiency; laboratory skills; quantitative analysis skills; and teamwork skills.
3. Graduates will be able to engage and make broader connections to other scientific disciplines and society.

## FOUR-YEAR PLAN

Four-year road maps for the biology major are designed to support biological science major exploration. The road map is a tool to assist you and your advisor in planning your academic career. Use it along with your DARS report and the Course Guide/Schedule of Classes. Your specific program of study could, and probably will, look different. You should customize the road map to fit your unique path at UW-Madison. Consult with your advisor about the best path for you.

## FOUR-YEAR PLAN

SAMPLE BIOLOGY MAJOR-NO OPTION FOUR-YEAR PLAN

Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 103 or 109 | $4-5$ CHEM 104 | 5 |
| Math Course | $3-5$ Math Course | $3-5$ |
| COMM A or Breadth | 6 COMM A or Breadth | $5-7$ |
| Courses | Courses |  |
| First Year Seminar $^{2}$ | 1 | $13-17$ |

Total Credits 27-34

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 343 | 3 CHEM 344 | 2 |
| Math Course (if needed) | $3-5$ CHEM 345 | 3 |
| Intro Biology Courses ${ }^{3}$ | $3-5$ Intro Biology Courses ${ }^{3}$ | $3-5$ |
| Breadth Course | 3 Breadth Courses | $4-6$ |
|  | $12-16$ | $12-16$ |

Total Credits 24-32

| Junior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| Physics Course | $4-5$ Physics Course | $4-5$ |
| Foundational or Biocore | Advanced Biology <br> Courses $^{4}$ | $3-5$ |
| Elective Courses | $5-8$ Elective Courses $^{12-16}$ | $5-8$ |
|  | $12-18$ |  |

Total Credits 24-34

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| Intermediate/Advanced | $3-5$ Intermediate/Advanced | Biology Course |$\quad 3-5$

## Total Credits 24-36

1 Math determined by placement scores. Biology majors must complete MATH 171/MATH 217 or MATH 221 plus one additional math/stats course.
2 Suggested that CALS freshmen investigate INTER-AG 155: Issues in Agriculture, Environment and Life Sciences; BIOLOGY 375 Special Topics: Exploring Biology; or a FIG.
3
Students may complete BIOLOGY/BOTANY/ZOOLOGY 151-BIOLOGY/ BOTANY/ZOOLOGY 152 \& a foundational course or BIOLOGY/ ZOOLOGY 101-BIOLOGY/ZOOLOGY 102, BIOLOGY/BOTANY 130 \& a foundational course or BIOCORE (three lectures and two labs required).
4 See Requirements tab for intermediate/advanced biology course lists.

## SAMPLE BIOLOGY FOUR-YEAR PLAN-EVOLUTIONARY BIOLOGY OPTION

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| CHEM 103 or 109 | $4-5$ CHEM 104 | 5 |
| Math Courses ${ }^{1}$ | $3-5$ Math Courses | $3-5$ |
| COMM A or Breadth | 6 COMM A or Breadth | $5-7$ |
| Courses | Courses |  |
| First Year Seminar ${ }^{2}$ | 1 | $13-17$ |
|  | $14-17$ |  |

Total Credits 27-34

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 343 | 3 CHEM 345 | 3 |
| Math Course (if needed) | $3-5$ CHEM 344 | 2 |
| Intro Biology Course 3 | $3-5$ Intro Biology Course | $3-5$ |
| Breadth Course | 3 Breadth Courses | $4-6$ |
|  | $12-16$ | $12-16$ |

[^2]Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| Physics Course | $4-5$ Physics Course | $4-5$ |
| Foundational or Biocore | $3-5$ Biocore or Intermediate/ | $3-5$ |
| Electives | Advanced Biology 4 |  |
|  | 5 ANTHRO/BOTANY/ |  |
|  | ZOOLOGY 410 | 3 |
|  | Evolution Seminar | 1 |
| Electives |  |  |

Total Credits 27-33

## Senior

Fall Credits Spring Credits

| Intermediate/Advanced | Intermediate/Advanced <br> Biology Course | 5 |
| :--- | :---: | ---: |
| Capstone or Research 2-3 Capstone or Research | $2-3$ |  |
| Course | $5-8$ Elective Courses | $5-8$ |
| Elective Courses | $12-16$ | $12-16$ |

Total Credits 24-32
1 Math determined by placement scores. Biology majors must complete MATH 171/MATH 217 or MATH 221 plus one additional math/stats course.
2 Suggested that CALS freshmen investigate INTER-AG 155: Issues in Agriculture, Environment and Life Sciences; BIOLOGY 375 Special Topics: Exploring Biology; or a FIG.
3 Students may complete BIOLOGY/BOTANY/ZOOLOGY 151-BIOLOGY/ BOTANY/ZOOLOGY 152 \& a foundational course or BIOLOGY/ ZOOLOGY 101-BIOLOGY/ZOOLOGY 102, BIOLOGY/BOTANY 130 \& a foundational course or BIOCORE (three lectures and two labs required).
4 See Requirements tab for intermediate/advanced biology course lists.

## SAMPLE BIOLOGY FOUR-YEAR PLAN-PLANT BIOLOGY OPTION

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| CHEM 103 or 109 | 4-5 CHEM 104 | 5 |
| Math ${ }^{1}$ | 3-5 Stats/ Math | 3-5 |
| COMM A or Breadth | 6 COMM A or Breadth | 5-7 |
| First Year Seminar ${ }^{2}$ | 1 |  |
|  | 14-17 | 13-17 |
| Total Credits 27-34 |  |  |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| CHEM 343 | 3 CHEM 345 | 3 |
| Stats / Math (if needed) | 3-5 CHEM 344 | 2 |
| Intro Biology Course ${ }^{3}$ | 3-5 Intro Biology Course ${ }^{3}$ | 3-5 |


| Breadth Course | 3 Breadth Course |  |
| :--- | :---: | ---: |
|  | $12-16$ | $4-6$ |
| Total Credits 24-32 |  |  |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| Physics | $4-5$ Physics | $4-5$ |
| Foundational or Biocore | $3-5$ Biocore or Intermediate/ | $3-5$ |
|  | $\quad$ Advanced Plant Biology ${ }^{4}$ |  |
| Electives | $5-8$ Plant Science Seminar | 1 |
|  | Electives |  |
|  | $12-18$ | $5-7$ |

Total Credits 25-36

## Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| Intermediate/Advanced Plant Biology ${ }^{4}$ | 5 Intermediate/Advanced Plant Biology ${ }^{4}$ | 5 |
| Capstone or Research | 2-3 Capstone or Research | 2-3 |
| Plant Science Seminar (if needed) | 1 Plant Science Seminar (if needed) | 1 |
| Electives | 5-8 Electives | 5-8 |
|  | 13-17 | 13-17 |

## Total Credits 26-34

Math determined by placement scores. Biology majors must complete MATH 171/MATH 217 or MATH 221 plus one additional math/stats course. Stats recommended.
Suggested that CALS freshmen investigate INTER-AG 155: Issues in Agriculture, Environment and Life Sciences; BIOLOGY 375 Special Topics: Exploring Biology; or a FIG.
3
Students may complete BIOLOGY/BOTANY/ZOOLOGY 151-BIOLOGY/ BOTANY/ZOOLOGY 152 \& a foundational course or (recommended) BIOLOGY/ZOOLOGY 101-BIOLOGY/ZOOLOGY 102, BIOLOGY/ BOTANY 130 \& a foundational course or BIOCORE (three lectures and two labs required).
4 See Requirements tab for intermediate/advanced biology course lists.

## ADVISING AND CAREERS

## ADVISING

Your advisor is here to guide you through the biology major. We can address your questions and concerns, provide advice, help you create a four-year degree plan that meets your major and professional goals, and connect you to resources. It is important to remember that advising is about the process, and some questions do not have a quick and easy answer. Your advisor will challenge you to self-reflect, to critically think about your goals and strategies, and to develop decision-making skills. For more information about what to expect during your advising appointment, visit UW Undergraduate Advising (http://advising.wisc.edu/ content/expectations-about-advising).

In the biology major, students are assigned to an advisor according to last name. Please schedule an advising appointment here (http:// biologymajor.wisc.edu/advising).

## CAREERS

The biology major encourages students to begin working on their career exploration and preparation soon after arriving on campus. We partner with the CALS Career Services office to help you leverage the academic skills learned in your major and liberal arts degree, explore and try out different career paths, participate in internships, prepare for the job search and/or graduate school applications, and network with professionals in the field (alumni and employers).

College of Agricultural and Life Sciences graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## Career Resources:

- Schedule a Career Advising appointment (https://cals.wisc.edu/ academics/undergraduate-students/career-services/students)
- Explore CALS Career Services for Students (https://cals.wisc.edu/ academics/undergraduate-students/career-services/resources)


## PEOPLE

## ADVISING LEADERSHIP AND STAFF

Harris, Kelley, Program Manager

Asen, Brian
Courtenay, Todd
Haas-Gallo, Erica

## BIOLOGY MAJOR ADMINISTRATION

Fernandez, Donna, L\&S Co-Chair
Wassarman, Karen, CALS Co-Chair
Pringle, Ann, Evolutionary Biology Option Representative
Auger, Catherine, Neurobiology Option Representative
Goldman, Irwin and Patricia McManus Plant Biology Option
Representative
Blair, Seth
Gilroy, Simon
Boekhoff-Falk, Grace
Harris, Michelle
Senes, Alessandro
Kurtz, Robin, ex officio
Thoma, Sharon, ex officio
Harris, Kelley, ex officio

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in biology, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- Beta Beta Beta Biological Honor Society (https://win.wisc.edu/ organization/tribeta) is an honor and professional organization for undergraduate students in the biological sciences. Its activities are designed to stimulate interest, scholarly attainment, and investigation in the biological sciences, and to promote the dissemination of information and new interpretations among students in life sciences. The society offers its members the unique opportunity to publish their undergraduate work in the pages of its journal, BIOS.
- Biology majors have the opportunity to go on experiential study abroad programs, where students can immerse themselves in research or global health field experiences. Students can review the Biology Major Advising Page (https://www.studyabroad.wisc.edu/ map_biology.asp) on the International Academic Programs website for information on these and other programs, as well as requirements that can typically be fulfilled abroad and things to consider when incorporating study abroad into an academic plan.
- Students are encouraged to get involved in research in any life science department. Research can be performed for either course credit or pay, depending on the opportunity. Research opportunities can be identified by inquiring directly with faculty members, reading the Biology Major Newsletter, or announcement on the Student Job Center (https://jobcenter.wisc.edu).


## BIOLOGY: EVOLUTIONARY BIOLOGY

The Evolutionary Biology Option allows biology majors to concentrate their studies in evolution and to have this reflected on their transcript. Since there is no evolutionary biology major available at UW-Madison, this is the only mechanism to indicate specialization in this rapidly growing and popular field. In taking this option students will be able to fulfill their intermediate/advanced biology requirement with courses that emphasize evolutionary biology, ranging from required courses in fundamental evolutionary biology to more advanced optional courses that cover a wide range of evolutionary biology topics. They will also get to take a one-credit seminar course in evolutionary biology.

Who should enroll in this option? Students with broad interest in the biological sciences who want to:

- Prepare for graduate study in evolutionary biology or related fields
- Prepare for professional studies (e.g. medical school, veterinary school, dentistry)
- Concentrate their biological studies in evolutionary biology


## REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

## CORE REQUIREMENTS

| Mathematics and Statistics |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calcu |  |
| Select one of the following: |  | 3-4 |
| MATH 222 | Calcu |  |
| STAT 301 | Introd |  |

STAT 371 Introductory Applied Statistics for the Life Sciences

1 Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences.

## Chemistry

| Code | Title | Credits |
| :---: | :---: | :---: |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement.

## Physics

| Code | Title | Credits |
| :---: | :---: | :---: |
| 1st semester Physics; select one of the following: |  | 4-5 |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| 2nd semester Physics | , select one of the following: | 4-5 |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| Introductory Biology |  |  |
| Code | Title | Credits |
| Select one of the follo | wing options: ${ }^{1}$ | 10-16 |
| Option A: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology |  |
| Option B: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |
| Option C: |  |  |
| ZOOLOGY/ <br> BIOLOGY 101 | Animal Biology |  |
| ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology Laboratory |  |


| BOTANY/ <br> BIOLOGY 130 | General Botany | BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Foundational Course ${ }^{2}$ |  | BIOCHEM/ | Prokaryotic Molecular Biology | 3 |
| Select one of the following: |  | GENETICS/ |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics and Cellular Biology ${ }^{3}$ | MICROBIO 612 |  |  |
| \& BIOCORE 383 |  | BIOCHEM/ <br> GENETICS/ <br> MD GENET 620 | Eukaryotic Molecular Biology | 3 |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology |  |  |  |
| GENETICS 466 | Principles of Genetics | BIOCHEM/ BOTANY 621 | Plant Biochemistry | 3 |
| GENETICS 468 | General Genetics 2 |  |  |  |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines | BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals | 2 |
| BIOCHEM 501 | Introduction to Biochemistry | BIOCHEM/PHMCOL- <br> M/ZOOLOGY 630 | Cellular Signal Transduction Mechanisms | 3 |
| BIOCHEM 508 | General Biochemistry II | BMOLCHEM 314 | Introduction to Human Biochemistry | 3 |
| For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy). |  | BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{1}$ | 3 |
|  |  | BMOLCHEM/ | Microbiology at Atomic Resolution | 3 |
| Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General |  | MICROBIO 668 |  |  |
|  |  | BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: Molecular and Ecological Aspects | 3 |
| Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement. |  | BOTANY/GENETICS/ <br> HORT 561 | Introductory Cytogenetics | 2-3 |
|  |  | GENETICS 466 | Principles of Genetics | 3 |
|  |  | GENETICS 467 | General Genetics 1 | 3 |
| Students may use BIOCORE 381 Evolution, Ecology, and Genetics and BIOCORE 383 Cellular Biology to contribute to introductory biology and satisfy foundation. |  | GENETICS 520 | Neurogenetics | 2 |
|  |  | GENETICS/ <br> MD GENET/ | Human Cytogenetics | 2 |
| INTERMEDIATE/ADVANCED COURSES |  | ZOOLOGY 562 |  |  |
| Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote. |  | GENETICS/ <br> MICROBIO 607 | Advanced Microbial Genetics | 3 |
|  |  | MICROBIO 470 | Microbial Genetics \& Molecular | 3 |
| Students must take ANTHRO/BOTANY/ZOOLOGY 410 Evolutionary |  |  | Machines |  |
| Biology. In addition, select one course from categories A or B below. Select one course from category C. Select one course from category D. Additional courses can be taken from A-E to satisfy the lab and/or 31credit requirement. |  | MICROBIO/ <br> SOIL SCI 523 | Soil Microbiology and Biochemistry | 3 |
|  |  | MICROBIO/M M \& I/ <br> PATH-BIO 528 | Immunology | 3 |
| A. Cellular and Subcellular Biology |  | MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 |
| AGRONOMY/ <br> HORT 338 | $\begin{array}{lr}\text { Plant Breeding and Biotechnology } & 3\end{array}$ | MICROBIO/ <br> ONCOLOGY/ <br> PLPATH 640 | General Virology-Multiplication of Viruses | 3 |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques ${ }^{1}$ | M M \& I 341 | Immunology | 3 |
|  |  | NEURODPT/ | Lab Course in Neurobiology and | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | ZOOLOGY 616 |  |  |
| AN SCI/DY SCI 362 | Veterinary Genetics 2 | NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| BIOCHEM 501 | Introduction to Biochemistry 3 | NTP/PHYSIOL 629 |  | 3 |
| BIOCHEM 507 | General Biochemistry I |  | of Memory |  |
| BIOCHEM 508 | General Biochemistry II 3-4 | NTP 655 | Modeling Neurodevelopmental | 3 |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition |  | Disease |  |
|  |  | NTP 675 | Special Topics (Stem Cell in | 1-3 |
| BIOCHEM 551 | Biochemical Methods ${ }^{1}$ ( 4 |  | Neurobiology) |  |
| BIOCHEM/ <br> M M \& I 575 | Biology of Viruses 2 | NTP 675 | Special Topics (Reproductive Neuroendocrinology) | 1-3 |


| NTP 675 | Special Topics (Molecular <br> Mechanisms of Brain Damage) | $1-3$ |
| :--- | :--- | ---: |
| PHM SCI 558 | Laboratory Techniques in <br> Pharmacology and Toxicology ${ }^{1}$ | 2 |
| NEURODPT 533 | Molecular Physiology <br> PSYCH 601 | Current Topics in Psychology <br> (Epigenetics \& the Brain) |
| ZOOLOGY 470 | Introduction to Animal Development | 2 |
| ZOOLOGY/ | Neurobiology | 3 |
| PSYCH 523 | Laboratory in Developmental <br> ZOOLOGY 555 | Biology |
| ZOOLOGY 570 | Cell Biology |  |
| ZOOLOGY 604 | Computer-based Gene and Disease/ <br> Disorder Research Lab ${ }^{1}$ | 3 |
| ZOOLOGY 625 | Development of the Nervous <br> System | 3 |

1 Courses also approved for lab credit

## B. Organismal Biology

Code Title

| AN SCI/DY SCI 373 | Animal Physiology | 3 |
| :---: | :---: | :---: |
| AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |
| AN SCI/F\&W ECOL/ <br> ZOOLOGY 520 | Ornithology | 3 |
| AN SCI/F\&W ECOL/ ZOOLOGY 521 | Birds of Southern Wisconsin ${ }^{1}$ | 3 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 |
| ANAT\&PHY 337 | Human Anatomy | 3 |
| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 |
| ANTHRO/ <br> NTP/PSYCH/ <br> ZOOLOGY 619 | Biology of Mind | 3 |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language | 3 |
| DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 |
| ENTOM/ ZOOLOGY 302 | Introduction to Entomology ${ }^{1}$ | 4 |
| ENTOM 321 | Physiology of Insects | 3 |
| ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| F\&W ECOL 401 | Physiological Animal Ecology | 3 |
| GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |
| GENETICS/ <br> MD GENET 565 | Human Genetics | 3 |
| GEOSCI/ <br> ZOOLOGY 542 | Invertebrate Paleontology | 3 |


| KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 |
| :---: | :---: | :---: |
| ANAT\&PHY 338 | Human Anatomy Laboratory | 2 |
| KINES 721 | Neural Basis for Movement | 3 |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory ${ }^{1}$ | 2 |
| MICROBIO 330 | Host-Parasite Interactions | 3 |
| MICROBIO/ BIOLOGY 525 | Advanced Biological Laboratory <br> Practices: A Research Experience ${ }^{1}$ | 2 |
| MICROBIO 526 | Physiology of Microorganisms | 3 |
| M M \& I 301 | Pathogenic Bacteriology | 2 |
| M M \& I/ENTOM/ PATH-BIO/ ZOOLOGY 350 | Parasitology | 3 |
| M M \& 1410 | Medical Mycology | 2 |
| NTP/NEURODPT/ PSYCH 611 | Systems Neuroscience | 4 |
| NTP/ZOOLOGY 620 | Neuroethology Seminar | 2 |
| NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 |
| NTP 675 | Special Topics (Basic Sleep Mechanisms \& Sleep Disorders) | 1-3 |
| NTP 675 | Special Topics (Functional Brain Imaging of Cognitive Disorders) | 1-3 |
| NUTR SCI 431 | Nutrition in the Life Span | 3 |
| NUTR SCI 631 | Clinical Nutrition I | 3 |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |
| ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| PATH 404 | Pathophysiologic Principles of Human Diseases | 3 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| PSYCH 406 | Psychology of Perception | 3-4 |
| PSYCH 601 | Current Topics in Psychology (Neural Basis of Cognitive Control) | 3 |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| PSYCH 513 | Hormones, Brain, and Behavior | 4 |
| PSYCH 606 | Hormones and Behavior | 3 |
| ZOOLOGY 303 | Aquatic Invertebrate Biology | 3 |
| ZOOLOGY 400 | Topics in Biology (Mammalogy) | 1-3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates ${ }^{1}$ | 5 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory | 2 |

[^3]| C. Ecology |  |  | D. Evolution and Sy | ematics |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Title | Credits | Code | Title | Credits |
| AGRONOMY/ | Grassland Ecology | 3 | ANTHRO 302 | Hominoid Evolution | 3 |
| BOTANY/ <br> SOIL SCI 370 |  |  | ANTHRO 304 | Heredity, Environment and Human Populations | 3 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ | Ecotoxicology: The Chemical Players | 1 | ANTHRO/BOTANY/ ZOOLOGY 410 | Evolutionary Biology | 3 |
| M\&ENVTOX 632 |  |  | ANTHRO 411 | The Evolution of the Genus, Homo | 3 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ | Ecotoxicology: Impacts on Individuals | 1 | ANTHRO 458 | Primate Behavioral Ecology | 3 |
| M\&ENVTOX 633 |  |  | ANTHRO 603 | Seminar in Evolutionary Theory | 3 |
| AGRONOMY/ | Ecotoxicology. Impacts on | 1 | ANTHRO 658 | Ecological Models of Behavior | 3 |
| ENTOM/F\&W ECOL/ | Populations, Communities and |  | BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| M\&ENVTOX 634 | Ecosystems |  | BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 |
| BOTANY/ | Midwestern Ecological Issues: A | 2 | BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 |
| ZOOLOGY 450 | Case Study Approach |  | BOTANY 422 | Plant Geography | 3 |
| botany/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 | BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 | ENTOM 432 | Taxonomy and Bionomics of Immature Insects ${ }^{1}$ | 4 |
| BOTANY/F\&W ECOL/ ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 | ENTOM/GENETICS/ ZOOLOGY 624 | Molecular Ecology | 3 |
| BOTANY/ENTOM/ ZOOLOGY 473 | Plant-Insect Interactions | 3 | ENVIR ST/ <br> F\&W ECOL/ | Extinction of Species | 3 |
| BOTANY/ENVIR ST/ | Conservation Biology | 3 | ZOOLOGY 360 |  |  |
| F\&W ECOL/ |  |  | GENETICS 468 | General Genetics 2 | 3 |
| ZOOLOGY 651 |  |  | GEOSCI/ | Paleobiology | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 | ZOOLOGY 541 |  |  |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 | MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| ENVIR ST/ | Limnology-Conservation of Aquatic | 2 | PSYCH 449 | Animal Behavior | 3 |
| ZOOLOGY 315 | Resources |  | PSYCH 450 | Primates and Us: Insights into | 3 |
| ENVIR ST/ | Wetlands Ecology | 3 |  | Human Biology and Behavior |  |
| LAND ARC 361 |  |  | PSYCH/ | Animal Communication and the | 3 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 | ZOOLOGY 550 | Origins of Language |  |
| F\&W ECOL 550 | Forest Ecology | 3 | ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| F\&W ECOL/ <br> LAND ARC/ | Principles of Landscape Ecology | 2 | ZOOLOGY 301 | Invertebrate Biology and Evolution Lab ${ }^{1}$ | 2 |
| ZOOLOGY 565 |  |  | ZOOLOGY 425 | Behavioral Ecology | 3 |
| $\begin{aligned} & \text { F\&W ECOL/ } \\ & \text { ZOOLOGY } 660 \end{aligned}$ | Climate Change Ecology | 3 | 1 Courses also app | roved for lab credit |  |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 | E. Applied Biology, | Agriculture and Natural Resources |  |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 | Code | Title |  |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources 1 | 2-3 | A A E/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 | AGRONOMY 300 | Cropping Systems | 3 |
| ZOOLOGY/ | Ecology of Fishes | 3 | AGRONOMY 302 | Forage Management and Utilization | 3 |
| ENVIR ST 510 |  |  | AGRONOMY/ HORT 360 | Genetically Modified Crops: Science, | 2 |
| ZOOLOGY/ | Ecology of Fishes Lab ${ }^{1}$ | 2 | HORT 360 | Regulation \& Controversy |  |
| ENVIR ST 511 |  |  | AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| 1 Courses also appr | roved for lab credit |  | AGRONOMY/ HORT 501 | Principles of Plant Breeding | 3 |
|  |  |  | AMER IND/ANTHRO/ BOTANY 474 | Ethnobotany | 3-4 |


| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 | MEDICINE/ M\&ENVTOX/ | Toxicology I | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 | ONCOLOGY/PATH/ |  |  |
| AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 | PHM SCI/PHMCOLM/POP HLTH 625 |  |  |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 | M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 | MICROBIO/ | Environmental Microbiology | 3 |
| AN SCI 503 | Avian Physiology ${ }^{1}$ | 3 |  |  |  |
| AN SCI 512 | Management for Avian Health ${ }^{1}$ | 3 | NTP/MED PHYS 651 | Methods for Neuroimaging Research ${ }^{1,3}$ | 3 |
| BIOCORE 587 | Biological Interactions | 3 | NUTR SCI 332 | Human Nutritional Needs | 3 |
| BIOLOGY/ GENETICS 522 | Evolution Seminar SeriesUndergraduate | 1 | PL PATH/ <br> SOIL SCI 323 | Soil Biology | 3 |
| BOTANY 403 | Field Collections and Identification | 1-4 | PL PATH 517 | Plant Disease Resistance | 2-3 |
| DY SCI/INTERAG 471 | Food Production Systems and Sustainability | 3 | SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| ENTOM 351 | Principles of Economic Entomology | 3 | ZOOLOGY 500 | Undergraduate Neurobiology | 1 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 371 \end{aligned}$ | Medical Entomology ${ }^{1}$ | 3 | 1 Courses also approved for lab credit |  |  |
| ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 | SEMINAR |  |  |
| ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 | Code | Title | Credits |
| ENVIR ST/ | Air Pollution and Human Health | 3 | Undergradute Evolution Seminar (1 cr minimum) |  |  |
| POP HLTH 502 |  |  | Biology/ <br> GENETICS 522 | Evolution Seminar SeriesUndergraduate | 1 |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology ${ }^{1}$ | 4 |  |  |  |
| F\&W ECOL/ HORT/LAND ARC/ | Diseases of Trees and Shrubs | 3 | Code | Title | Credits |
| PLPATH 309 |  |  | Two credits minimum required. With advisor approval, directed study or research-based senior thesis in |  |  |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |  |  |  |
| F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: Biological and Philosophical Issues | 3 | a biological science discipline can also count. The |  |  |
| F\&W ECOL 410 | Principles of Silviculture | 3 | introductory biology sequence above. The capstone experience will normally be completed during the |  |  |
| F\&W ECOL 415 | Tree Physiology | 3 | student's final two or three semesters. Also, a subset of |  |  |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 | laboratory courses has been approved for capstone. The following courses, along with 682 s and 692 s in biological |  |  |
| F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 | science departments (taken senior year), can be accepted |  |  |
| FOOD SCI/ | Food Microbiology Laboratory ${ }^{1}$ | 2 |  |  |  |
| MICROBIO 324 |  |  | ANAT\&PHY 435 | Fundamentals of Human | 5 |
| FOOD SCI/ | Food Microbiology | 3 |  | Physiology |  |
| MICROBIO 325 |  |  | BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 | BMOLCHEM 504 | Human Biochemistry Laboratory | 3 |
| GENETICS/ <br> HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 | F\&W ECOL 455 |  |  |
| HORT/ <br> LAND ARC 263 | Landscape Plants I ${ }^{1}$ | 3 | $\begin{array}{ll}\text { BOTANY/F\&W ECOL/ } & \text { General Ecology (taken fall 2016- } \\ \text { ZOOLOGY } 460 & \text { summer 2020) }\end{array}$ |  | 4 |
| HORT 370 | World Vegetable Crops | 3 | BOTANY/ <br> LAND ARC 670 | Adaptive Restoration Lab | 2 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |  |  |  |
| HORT 376 | Tropical Horticultural Systems | 1 | ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab (taken fall 2016 - summer 2020) | 2 |
| HORT 378 | Tropical Horticultural Systems | 2 |  |  |  |
| HORT/PATH-BIO 500 | International Field Study ${ }^{\text {Molecular Biology Techniques }{ }^{1}}$ | 3 | F\&W ECOL 599 | Wildlife Research Capstone (limited access) | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 | MICROBIO 551 | Capstone Research Project in Microbiology | 2 |


| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| :---: | :---: | :---: |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| To count B students m Genetics L | E 486 Organismal Biology Laboratory so complete BIOCORE 382 Evolution, ory and BIOCORE 384 Cellular Biology |  |

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take BIOLOGY 681 Senior Honors Thesis and BIOLOGY 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http:// www.cals.wisc.edu/academics/undergraduate-programs/get-involved/ honors-program/honors-in-the-major) for more information.

## FOUR-YEAR PLAN

## SAMPLE BIOLOGY FOUR-YEAR PLAN-EVOLUTIONARY BIOLOGY OPTION

Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 103 or 109 | $4-5$ CHEM 104 | 5 |
| Math Courses $^{1}$ | $3-5$ Math Courses | $3-5$ |
| COMM A or Breadth | 6 COMM A or Breadth |  |
| Courses | Courses | $5-7$ |
| First Year Seminar $^{2}$ | 1 |  |
|  | $14-17$ | $13-17$ |

Total Credits 27-34

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 343 | 3 CHEM 345 | 3 |
| Math Course (if needed) | $3-5$ CHEM 344 | 2 |
| Intro Biology Course ${ }^{3}$ | $3-5$ Intro Biology Course ${ }^{3}$ | $3-5$ |
| Breadth Course | 3 Breadth Courses | $4-6$ |
|  | $12-16$ | $12-16$ |

Total Credits 24-32

| Junior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| Physics Course | 4-5 Physics Course | $4-5$ |
| Foundational or Biocore | $3-5$ Biocore or Intermediate/ | $3-5$ |
|  | Advanced Biology |  |

[^4]Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| Intermediate/Advanced Biology Course ${ }^{4}$ | 5 Intermediate/Advanced Biology Course ${ }^{4}$ | 5 |
| Capstone or Research Course | 2-3 Capstone or Research | 2-3 |
| Elective Courses | 5-8 Elective Courses | 5-8 |
|  | 12-16 | 12-16 |

## Total Credits 24-32

1 Math determined by placement scores. Biology majors must complete MATH 171/MATH 217 or MATH 221 plus one additional math/stats course.
2 Suggested that CALS freshmen investigate INTER-AG 155: Issues in Agriculture, Environment and Life Sciences; BIOLOGY 375 Special Topics: Exploring Biology; or a FIG.
3 Students may complete BIOLOGY/BOTANY/ZOOLOGY 151-BIOLOGY/ BOTANY/ZOOLOGY 152 \& a foundational course or BIOLOGY/ ZOOLOGY 101-BIOLOGY/ZOOLOGY 102, BIOLOGY/BOTANY 130 \& a foundational course or BIOCORE (three lectures and two labs required).
4 See Requirements tab for intermediate/advanced biology course lists.

## BIOLOGY: NEUROBIOLOGY

Admissions to the Biology: Neurobiology B.S. have been suspended as of fall 2016; and will be discontinued as of fall 2019. If you have any questions, please contact the department (info@biologymajor.wisc.edu).

The College of Letters \& Science now offers a neurobiology major. Students already declared for the biology major with a Neurobiology option are allowed to continue in the program; they must complete the program no later than August 2019.

Students who have declared the Bology Major-Neurobiology option may cancel the major and declare the new neurobiology major, provided it does not extend their time to degree. Students should consult with an advisor in the new neurobiology major to determine which program is best for them.

Students may not double-major in any biology major option and the neurobiology major.

The Neurobiology option allows biology majors to concentrate their studies in neurobiology and to have this reflected on their transcript. Students in this option are able to fulfill their intermediate/advanced biology requirement with courses that emphasize neuroscience, ranging from two required courses in fundamental neuroscience to more advanced optional courses that cover a wide range of neuroscience topics. They also get to take a 1-credit seminar course in which different neuroscience faculty members from the campus present their work in an informal setting.

Who should enroll in this option? Students with broad interest in the biological sciences who want to:

[^5]- Prepare for professional studies (e.g. medical school, veterinary school, dentistry)
- Concentrate their biological studies in neurobiology


## REQUIREMENTS

The College of Letters \& Science now offers a neurobiology major. Students already declared for the biology major with a Neurobiology option are allowed to continue in the program; they must complete the program no later than August 2019.

Students who have declared the Bology Major-Neurobiology option may cancel the major and declare the new neurobiology major, provided it does not extend their time to degree. Students should consult with an advisor in the new neurobiology major to determine which program is best for them.

Students may not double-major in any biology major option and the neurobiology major.

## CORE REQUIREMENTS

## Mathematics and Statistics

Code

Select one of the following: \begin{tabular}{rl}
Title <br>
MATH 171 <br>
\& MATH 217

$\quad$

Calculus with Algebra and <br>
Trigonometry I <br>
and Calculus with Algebra and <br>
Trigonometry II
\end{tabular}

## Chemistry

Code Title Credits

## General Chemistry

Select one of the following: ${ }^{1} \quad$ 5-9

| CHEM 103 | General Chemistry I |  |
| :--- | :--- | ---: |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  | 3 |
| CHEM 343 | Introductory Organic Chemistry | 2 |
| CHEM 344 | Introductory Organic Chemistry <br> Laboratory |  |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement.

## Physics

| Code | Title | Credits |
| :---: | :---: | :---: |
| 1st semester Physics; select one of the following: |  | 4-5 |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| 2nd semester Physics, select one of the following: |  | 4-5 |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| Introductory Biology |  |  |
| Code | Title | Credits |
| Select one of the following options: ${ }^{1}$ |  | 10-16 |
| Option A: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology |  |
| Option B: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |
| Option C: |  |  |
| ZOOLOGY/ <br> BIOLOGY 101 | Animal Biology |  |
| ZOOLOGY/ BIOLOGY 102 | Animal Biology Laboratory |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany |  |
| Foundational Course ${ }^{2}$ |  |  |
| Select one of the following: |  | 3 |
| BIOCORE 381 <br> \& BIOCORE 383 | Evolution, Ecology, and Genetics and Cellular Biology ${ }^{3}$ |  |
| AGRONOMY/ <br> HORT 338 | Plant Breeding and Biotechnology |  |
| GENETICS 466 | Principles of Genetics |  |
| GENETICS 468 | General Genetics 2 |  |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |  |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BIOCHEM 508 | General Biochemistry II |  |
| For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy). |  |  |
| 2 Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take |  |  |

MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement.
3
Students may use BIOCORE 381 Evolution, Ecology, and Genetics and

BIOCORE 383 Cellular Biology to contribute to introductory biology and satisfy foundation.

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.
Students must complete ZOOLOGY/PSYCH 523 Neurobiology and PSYCH 454 Behavioral Neuroscience.
In addition, select one course from category A. Select one course from category $B$. Select one course from categories $C$ or $D$ below. Additional courses can be taken from A-F to satisfy the lab and/or 31-credit requirement.

| A. Cellular and Molecular Neurobiology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| GENETICS 520 | Neurogenetics | 2 |
| NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| NTP/NEURODPT/ PHYSIOL/ ZOOLOGY 616 | Lab Course in Neurobiology and Behavior ${ }^{1}$ | 4 |
| NTP/PHYSIOL 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| NTP 655 | Modeling Neurodevelopmental Disease | 3 |
| NTP 675 | Special Topics (Molecular Mechanisms of Brain Damage) | 1-3 |
| NTP 675 | Special Topics (Reproductive Neuroencrinology) | 1-3 |
| PSYCH 601 | Current Topics in Psychology (Epigenetics \& the Brain) | 3 |
| PSYCH 601 | Current Topics in Psychology (Neuropharmacology) | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology ${ }^{1}$ | 3 |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab ${ }^{1}$ | 2 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |

1 Courses also approved for lab credit

| B. Systems Neurobiology <br> Code | Title | Credits |
| :--- | :--- | ---: |
| CS\&D 210 | Neural Basis of Communication | 3 |
| CS\&D 503 | Neural Mechanisms of Speech, <br> Hearing and Language | 3 |
| ED PSYCH 326 | Mind, Brain and Education | 3 |
| KINES 531 | Neural Control of Movement | 3 |
| NTP/NEURODPT/ | Systems Neuroscience | 4 |
| PSYCH 611 |  | 2 |
| NTP/ZOOLOGY 620 | Neuroethology Seminar | 3 |
| NTP/ | Neuronal Mechanisms for | 3 |

    Cortex
    | NTP/MED PHYS 651 | Methods for Neuroimaging <br> Research |  |
| :--- | :--- | ---: |
| NTP 675 | Special Topics (Functional Brain <br> Imaging of Cognitive Disorders) | $1-3$ |
| NTP 675 | Special Topics (Basic Sleep <br> Mechanisms \& Sleep Disorders) | $1-3$ |
| PSYCH 406 | Psychology of Perception | $3-4$ |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH 504 | Affective Neuroscience | 4 |
| PSYCH 601 | Current Topics in Psychology <br> (Cognition \& Emotion: Cognitive <br> Affective Neuroscience) | 3 |
| PSYCH 601 | Current Topics in Psychology <br> (Neural Basis of Cognitive Control) | 3 |
| PSYCH 601 | Current Topics in Psychology <br> (Neuroeconomics) | 3 |

1 Courses also approved for lab credit
C. Ecology

| Code | Title | Credits |
| :--- | :--- | ---: |
| AGRONOMY/ | Grassland Ecology | 3 |

BOTANY/
SOIL SCI 370
AGRONOMY/ Ecotoxicology: The Chemical 1

ENTOM/F\&W ECOL/ Players
M\&ENVTOX 632
AGRONOMY/ Ecotoxicology: Impacts on 1

ENTOM/F\&W ECOL/ Individuals
M\&ENVTOX 633
AGRONOMY/ Ecotoxicology: Impacts on 1

ENTOM/F\&W ECOL/ Populations, Communities and M\&ENVTOX 634 Ecosystems
BOTANY/ Midwestern Ecological Issues: A 2

ZOOLOGY 450 Case Study Approach
BOTANY/ The Vegetation of Wisconsin ${ }^{1}$ 4
F\&W ECOL 455
BOTANY/ Ecological Techniques for Field 1-2
ZOOLOGY $459 \quad$ Monitoring
BOTANY/F\&W ECOL/ General Ecology ${ }^{1}$
ZOOLOGY 460
BOTANY/ENTOM/ Plant-Insect Interactions 3
ZOOLOGY 473
BOTANY/ENVIR ST/ Conservation Biology 3
F\&W ECOL/
ZOOLOGY 651

| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| :--- | :--- | :--- |
| ENTOM 451 | Basic and Applied Insect Ecology <br> Laboratory | 1 |
| ENVIR ST/ | Limnology-Conservation of Aquatic | 2 |

ZOOLOGY 315 Resources

LAND ARC 361
F\&W ECOL 379 Principles of Wildlife Management 3
F\&W ECOL 550 Forest Ecology 3

| F\&W ECOL/ | Principles of Landscape Ecology | 2 | E. Applied Biology, Agriculture and Natural Resources |  | Credits |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LAND ARC/ |  |  | Code | Title |  |
| ZOOLOGY 565 |  |  | A A E/AGRONOMY/ | World Hunger and Malnutrition | 3 |
| F\&W ECOL/ <br> ZOOLOGY 660 | Climate Change Ecology | 3 | INTER-AG/ <br> NUTR SCI 350 |  |  |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 | AGRONOMY 300 | Cropping Systems | 3 |
|  |  |  | AGRONOMY 302 | Forage Management and Utilization | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 | AGRONOMY/ | Genetically Modified Crops: Science, | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources 1 | 2-3 | HORT 360 | Regulation \& Controversy |  |
|  |  |  | AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
|  |  |  | AGRONOMY/ | Principles of Plant Breeding | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 | HORT 501 |  |  |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 | AMER IND/ANTHRO/ BOTANY 474 | Ethnobotany | 3-4 |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab ${ }^{1}$ | 2 | AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| Courses also approved for lab credit |  |  | AN SCI/DY SCl 313 | Animal Feeds and Diet Formulation | 1 |
|  |  |  | AN SCI/DY SCI 320 | Animal Health and Disease | 3 |
| D. Evolution and Systematics |  |  |  | Management |  |
| Code | Title | Credits | AN SCI/DY SCI 361 | Introduction to Animal and | 2 |
| ANTHRO 302 | Hominoid Evolution | 3 |  | Veterinary Genetics |  |
| ANTHRO 304 | Heredity, Environment and Human Populations | 3 | AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 |
|  |  |  | AN SCI 503 | Avian Physiology ${ }^{1}$ | 3 |
| ANTHRO/BOTANY/ zOOLOGY 410 | Evolutionary Biology | 3 | AN SCI 512 | Management for Avian Health ${ }^{1}$ | 3 |
|  |  |  | BIOCORE 587 | Biological Interactions | 3 |
| ANTHRO 411 | The Evolution of the Genus, Homo | 3 | BIology/ | Evolution Seminar Series- | 1 |
| ANTHRO 458 | Primate Behavioral Ecology | 3 | GENETICS 522 | Undergraduate |  |
| ANTHRO 603 | Seminar in Evolutionary Theory | 3 | BOTANY 403 | Field Collections and Identification | 1-4 |
| ANTHRO 658 | Ecological Models of Behavior | 3 | DY SCI/INTER- | Food Production Systems and | 3 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 | AG 471 | Sustainability |  |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 | ENTOM 351 | Principles of Economic Entomology | 3 |
| BOTANY 422 | Plant Geography | 3 | ENTOM/ | Medical Entomology ${ }^{1}$ | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular | 3 | ZOOLOGY 371 |  |  |
|  | Data |  | ENTOM/ | Insects in Forest Ecosystem | 2 |
| ENTOM/GENETICS/ | Molecular Ecology | 3 | F\&W ECOL 500 | Function and Management |  |
| ZOOLOGY 624 |  |  | ENVIR ST/ | Introduction to Environmental | 3 |
| ENVIR ST/ | Extinction of Species | 3 | POP HLTH 471 | Health |  |
| F\&W ECOL/ |  |  | ENVIR ST/ | Air Pollution and Human Health | 3 |
| ZOOLOGY 360 |  |  | POP HLTH 502 |  |  |
| GENETICS 468 | General Genetics 2 | 3 | F\&W ECOL 306 | Terrestrial Vertebrates: Life History | 4 |
| GEOSCI/ | Paleobiology | 3 |  | and Ecology |  |
| ZOOLOGY 541 |  |  | F\&W ECOL/ | Diseases of Trees and Shrubs | 3 |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 | HORT/LAND ARC/ <br> PLPATH 309 |  |  |
| PSYCH 449 | Animal Behavior | 3 | F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior | 3 | F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: Biological and Philosophical Issues | 3 |
| $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language | 3 | F\&W ECOL 410 | Principles of Silviculture | 3 |
|  |  |  | F\&W ECOL 415 | Tree Physiology | 3 |
| ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 | F\&W ECOL/ | Diseases of Wildlife | 3 |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab ${ }^{1}$ | 2 | SURG SCI 548 |  |  |
|  |  |  | F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 |
| ZOOLOGY 425 | Behavioral Ecology | 3 | FOOD SCI/ | Food Microbiology Laboratory ${ }^{1}$ | 2 |
|  |  |  | MICROBIO 324 |  |  |
| Courses also appr | roved for lab credit |  | FOOD SCI/ MICROBIO 325 | Food Microbiology | 3 |


| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 |
| :---: | :---: | :---: |
| GENETICS/ <br> HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants I ${ }^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| MEDICINE/ <br> M\&ENVTOX/ <br> ONCOLOGY/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |

1 Courses also approved for lab credit

## F. Other Lab Courses

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ <br> BOTANY/HORT 339 | Plant Biotechnology: Principles and Techniques ${ }^{1}$ | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | 4 |
| ANATOMY 329 | Human Anatomy-Kinesiology ${ }^{1}$ | 2 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| AN SCI/F\&W ECOL/ ZOOLOGY 521 | Birds of Southern Wisconsin ${ }^{1}$ | 3 |
| AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 |
| ANAT\&PHY 338 | Human Anatomy Laboratory | 2 |
| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BIOCHEM 551 | Biochemical Methods ${ }^{1}$ | 4 |
| BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{1}$ | 3 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| BOTANY/GENETICS/ | Introductory Cytogenetics ${ }^{1}$ | 2-3 |


| DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| ENTOM/ | Introduction to Entomology ${ }^{1}$ | 4 |
| ZOOLOGY 302 |  |  |
| ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 |
| GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory ${ }^{1}$ | 2 |
| MICROBIO/ BIOLOGY 525 | Advanced Biological Laboratory Practices: A Research Experience ${ }^{1}$ | 2 |
| MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology ${ }^{1}$ | 2 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates ${ }^{1}$ | 5 |
| ZOOLOGY 612 | Comparative Physiology Laboratory 1 | 2 |
| 1 Courses also approved for lab credit |  |  |
| SEMINAR |  |  |


| Code | Title | Credits |
| :--- | :--- | ---: |
| Undergradute Neurobiology Seminar |  |  |
| ZOOLOGY 500 | Undergraduate Neurobiology <br> Seminar | 1 |

## CAPSTONE REQUIREMENT

Code

Title

Credits

Two credits minimum required. With advisor approval, directed study or research-based senior thesis in a biological science discipline can also count. The experience must be completed after the first year of an introductory biology sequence above. The capstone experience will normally be completed during the student's final two or three semesters. Also, a subset of laboratory courses has been approved for capstone. The following courses, along with 682s and 692s in biological science departments (taken senior year), can be accepted as fulfilling the capstone experience.

| ANAT\&PHY 435 | Fundamentals of Human Physiology | 5 |
| :---: | :---: | :---: |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BMOLCHEM 504 | Human Biochemistry Laboratory | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology (taken fall 2016summer 2020) | 4 |
| BOTANY/ <br> LAND ARC 670 | Adaptive Restoration Lab | 2 |
| ENVIR ST/ <br> ZOOLOGY 511 | Ecology of Fishes Lab (taken fall 2016 - summer 2020) | 2 |


| F\&W ECOL 599 | Wildlife Research Capstone (limited <br> access) | 3 |
| :--- | :--- | ---: |
| MICROBIO 551 | Capstone Research Project in <br> Microbiology | 2 |
| ZOOLOGY 316 | Laboratory for Limnology- <br> Conservation of Aquatic Resources | $2-3$ |
| ZOOLOGY 555 | Laboratory in Developmental <br> Biology | 3 |

1 To count BIOCORE 486 Organismal Biology Laboratory for capstone, students must also complete BIOCORE 382 Evolution, Ecology, and Genetics Laboratory and BIOCORE 384 Cellular Biology Laboratory.

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take BIOLOGY 681 Senior Honors Thesis and BIOLOGY 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http:// www.cals.wisc.edu/academics/undergraduate-programs/get-involved/ honors-program/honors-in-the-major) for more information.

## BIOLOGY: PLANT BIOLOGY

The Plant Biology Option allows biology majors to focus their studies on plant science and to have this reflected on their transcript. There are a number of departments at UW-Madison who host plant sciencebased majors, including agronomy, botany, horticulture, plant pathology, and forest and wildlife ecology. While those specialized majors offer in-depth programs in their disciplines, the Plant Biology option allows students to pursue a course of study within the biology major and explore plant biology at the same time. Students in this option can fulfill their requirements with courses that emphasize various aspects of plant science, including anatomy, physiology, genetics, crop production, disease resistance, and molecular techniques in plant improvement. Students also participate in a one credit seminar called Frontiers in Plant Science taught by two faculty from plant science departments.

Who should enroll in this option? Students with broad interest in biological sciences who also want to:

- Prepare for graduate work in a plant science field
- Prepare for advanced study or graduate work in a natural or environmental science field
- Concentrate their studies on the biology of plants


## REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

## CORE REQUIREMENTS

| Mathematics and Statistics |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calcu <br> Trigo <br> and <br> Trigo |  |
| MATH 221 | Calcu |  |
| Select one of the following: |  | 3-4 |
| MATH 222 | Calcu |  |
| STAT 301 | Introd |  |
| STAT 371 | Introd the Lif |  |
| Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences. |  |  |

## Chemistry

| Code | Title | Credits |
| :---: | :---: | :---: |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement.

## Physics



| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology |
| :---: | :---: |
| Option B: |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |
| BIOCORE 383 | Cellular Biology |
| BIOCORE 384 | Cellular Biology Laboratory |
| BIOCORE 485 | Organismal Biology |
| Option C: |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |
| BOTANY/ <br> BIOLOGY 130 | General Botany |
| Foundational Course ${ }^{2}$ |  |
| Select one of the following: 3 |  |
| BIOCORE 381 <br> \& BIOCORE 383 | Evolution, Ecology, and Genetics and Cellular Biology ${ }^{3}$ |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology |
| GENETICS 466 | Principles of Genetics |
| GENETICS 468 | General Genetics 2 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |
| BIOCHEM 501 | Introduction to Biochemistry |
| BIOCHEM 508 | General Biochemistry II |
| 1 For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy). |  |
| Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement. |  |
| 3 Students may BIOCORE 383 Ce and satisfy foun | BIOCORE 381 Evolution, Ecology, and Genetics and ular Biology to contribute to introductory biology ation. |

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.
Select one course from categories A or B below. Select one course from categories $C$ or $D$ below. Select one course from category E or from an unused category above.

| A. Cellular and Subcellular Biology  <br> Code Title | Credits |  |
| :--- | :--- | ---: |
| AGRONOMY/ | Plant Breeding and Biotechnology | 3 |
| HORT 338 |  |  |
| AGRONOMY/ | Plant Biotechnology: Principles and | 4 |
| BOTANY/HORT |  |  |

3

| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | 4 |
| :---: | :---: | :---: |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| BIOCHEM 507 | General Biochemistry I | 3 |
| BIOCHEM 508 | General Biochemistry II | 3-4 |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry | 3 |
| BOTANY/ENTOM/ PLPATH 505 | Plant-Microbe Interactions: Molecular and Ecological Aspects | 3 |
| BOTANY/GENETICS/ HORT 561 | Introductory Cytogenetics | 2-3 |
| GENETICS 466 | Principles of Genetics | 3 |
| GENETICS 467 | General Genetics 1 | 3 |
| 1 Courses also app | roved for lab credit |  |

## B. Organismal Biology

| Code | Title | Credits |
| :---: | :---: | :---: |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { PL PATH } 332 \end{aligned}$ | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology ${ }^{1}$ | 4 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |

1 Courses also approved for lab credit

## C. Ecology

Code Title Credits
AGRONOMY/ Grassland Ecology 3
BOTANY/
SOIL SCI 370
BOTANY/ Midwestern Ecological Issues: A 2
ZOOLOGY 450 Case Study Approach
F\&W ECOL 455
BOTANY/F\&W ECOL/ General Ecology ${ }^{1} 4$
ZOOLOGY 460
BOTANY/ENTOM/ Plant-Insect Interactions 3
ZOOLOGY 473
BOTANY/ENVIR ST/ Conservation Biology 3
F\&W ECOL/
ZOOLOGY 651
F\&W ECOL 550 Forest Ecology 3
F\&W ECOL/ Principles of Landscape Ecology 2
LAND ARC/
ZOOLOGY 565
MICROBIO/AN SCV
BOTANY 335 and Humans
PL PATH 300 Introduction to Plant Pathology ${ }^{1} 4$

| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| :---: | :---: | :---: |
| Courses also approved for lab credit |  |  |
| D. Evolution and Systematics |  |  |
| Code | Title | Credits |
| ANTHRO/BOTANY/ ZOOLOGY 410 | Evolutionary Biology | 3 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 |
| BOTANY 422 | Plant Geography | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| GENETICS 468 | General Genetics 2 | 3 |

1 Courses also approved for lab credit

| E. Applied Biology, Agriculture and Natural Resources |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| A A E/AGRONOMY/ | World Hunger and Malnutrition | 3 |
| INTER-AG/ |  |  |
| NUTR SCI 350 |  | 3 |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY 302 | Forage Management and Utilization | 2 |
| AGRONOMY/ | Genetically Modified Crops: Science, |  |
| HORT 360 | Regulation \& Controversy |  |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| AGRONOMY/ | Principles of Plant Breeding | 3 |
| HORT 501 |  |  |
| AMER IND/ANTHRO/ Ethnobotany | $3-4$ |  |

## BOTANY 474

| BIOLOGY/ | Evolution Seminar Series- | 1 |
| :--- | :--- | :---: |
| GENETICS 522 | Undergraduate |  |
| BOTANY 403 | Field Collections and Identification | $1-4$ |
| BOTANY/ | Ecological Techniques for Field | $1-2$ |
| ZOOLOGY 459 | Monitoring |  |
| DY SCI/INTER- | Food Production Systems and | 3 |
| AG 471 | Sustainability |  |
| F\&W ECOL/ | Diseases of Trees and Shrubs | 3 |

HORT/LAND ARC/
PLPATH 309

| F\&W ECOL 410 | Principles of Silviculture | 3 |
| :--- | :--- | :--- |
| F\&W ECOL 415 | Tree Physiology | 3 |

GENETICS/ Molecular Approaches for Potential 3

| HORT 550 | Crop Improvement |
| :--- | :--- |
| HORT/ | ${\text { Landscape Plants }{ }^{1}}^{1}$ |


| LAND ARC 263 |  |
| :--- | :--- |
| HORT 370 | World Vegetable Crops |

HORT 372 Colloquium in Organic Agriculture 1
HORT $376 \quad$ Tropical Horticultural Systems 1
HORT $378 \quad$ Tropical Horticultural Systems 2

HORT/PATH-BIO 500 Molecular Biology Techniques ${ }^{1} 3$
$\begin{array}{lll}\text { LACIS } 440 & \begin{array}{l}\text { Topics in Latin American, } \\ \text { Caribbean, and Iberian Studies }\end{array} & 1-4\end{array}$
Caribbean, and Iberian Studies

| MED PHYS/NTP 651 | Methods for Neuroimaging Research | 3 |
| :---: | :---: | :---: |
| PL PATH/ <br> SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar | 1 |
| BIOCORE 587 | Biological Interactions | 3 |
| 1 Courses also approved for lab credit |  |  |
| SEMINAR |  |  |
| Code | Title | Credits |
| Undergradute Plant Science Seminar (1 cr minimum) |  |  |
| PL PATH 375 | Special Topics (Frontiers in Plant Biology) | 1-4 |

## CAPSTONE REQUIREMENT

Code Title<br>Credits

Two credits minimum required. With advisor approval, directed study or research-based senior thesis in a biological science discipline can also count. The experience must be completed after the first year of an introductory biology sequence above. The capstone experience will normally be completed during the student's final two or three semesters. Also, a subset of laboratory courses has been approved for capstone. The following courses, along with 682s and 692s in biological science departments (taken senior year), can be accepted as fulfilling the capstone experience.

| ANAT\&PHY 435 | Fundamentals of Human Physiology | 5 |
| :---: | :---: | :---: |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BMOLCHEM 504 | Human Biochemistry Laboratory | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology (taken fall 2016 summer 2020) | 4 |
| BOTANY/ <br> LAND ARC 670 | Adaptive Restoration Lab | 2 |
| ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab (taken fall 2016 - summer 2020) | 2 |
| F\&W ECOL 599 | Wildlife Research Capstone (limited access) | 3 |
| MICROBIO 551 | Capstone Research Project in Microbiology | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |

1 To count BIOCORE 486 Organismal Biology Laboratory for capstone, students must also complete BIOCORE 382 Evolution, Ecology, and Genetics Laboratory and BIOCORE 384 Cellular Biology Laboratory.

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take BIOLOGY 681 Senior Honors Thesis and BIOLOGY 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http:// www.cals.wisc.edu/academics/undergraduate-programs/get-involved/ honors-program/honors-in-the-major) for more information.

## FOUR-YEAR PLAN

## SAMPLE BIOLOGY FOUR-YEAR PLAN-PLANT BIOLOGY OPTION

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| CHEM 103 or 109 | $4-5$ CHEM 104 | 5 |
| Math $^{1}$ | $3-5$ Stats/ Math | $3-5$ |
| COMM A or Breadth $^{\text {First Year Seminar }}{ }^{2}$ | 6 COMM A or Breadth | $5-7$ |
|  | 1 |  |

Total Credits 27-34

| Sophomore |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| CHEM 343 | 3 CHEM 345 | 3 |
| Stats / Math (if needed) | $3-5$ CHEM 344 | 2 |
| Intro Biology Course 3 | $3-5$ Intro Biology Course | $3-5$ |
| Breadth Course | 3 Breadth Course | $4-6$ |
|  | $12-16$ | $12-16$ |

Total Credits 24-32

## Junior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| Physics | 4-5 Physics | 4-5 |
| Foundational or Biocore | 3-5 Biocore or Intermediate/ Advanced Plant Biology ${ }^{4}$ | 3-5 |
| Electives | 5-8 Plant Science Seminar | 1 |
|  | Electives | 5-7 |
|  | 12-18 | 13-18 |

## Total Credits 25-36

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| Intermediate/Advanced | $5^{\text {Intermediate/Advanced }}$Plant Biology |  |
| Plant Biology | 5 |  |
| Capstone or Research | $2-3$ Capstone or Research | $2-3$ |
| Plant Science Seminar (if 1 Plant Science Seminar (if <br> needed) needed) | 1 |  |
| Electives | $5-8$ Electives | $5-8$ |
|  | $13-17$ | $13-17$ |

## Total Credits 26-34

1 Math determined by placement scores. Biology majors must complete MATH 171/MATH 217 or MATH 221 plus one additional math/stats course. Stats recommended.


MICROBIOLOGY, B.S. (CALS)
Microbiology, the study of microorganisms, helps us understand our world and solve major problems. Microorganisms, or microbes, were the first life forms on earth and influence our lives and our planet in innumerable ways. The field of microbiology is constantly expanding as we learn more about the role of microbes in infectious disease, environmental remediation, bioenergy, food safety, antibiotic resistance, biotechnology and much more. Communities of microbes (or "microbiomes") are critically important in human health, global warming, agricultural yield, criminal justice, economic development and other issues of national concern.

The microbiology major, offered by the Department of Bacteriology, is a rigorous path of study, providing a curriculum packed with deep knowledge on broad aspects of microbiology and emphasizing modern laboratory skills. The core courses focus on the diversity, genetics, biochemistry, and physiology of microorganisms. A variety of elective courses provide the opportunity to study environmental microbiology, food microbiology, microbial pathogenesis, immunology, virology, microbiomes and microbial biotechnology, as well as advanced topics in microbial genetics and physiology. In the instructional laboratory courses, students learn beginning through advanced laboratory techniques-gaining the type of hands-on experiences with modern equipment that employers and graduate schools seek. Additionally, students can conduct mentored and independent research projects in faculty laboratories.

The bachelor's degree provides a strong background in the biological sciences for students planning to enter medical, dental, veterinary or other professional schools, as well as those planning graduate studies in any branch of microbiology or other biological sciences such as biochemistry, pathology, and molecular or cell biology.

Students who end their training with a bachelor's degree are wellprepared for a variety of career opportunities, including laboratory positions in pharmaceutical and biotechnology firms and in university and government laboratories. They also work as specialists in industrial quality testing and control, and as regulatory workers in government agencies and public health laboratories. Exposure to the scientific process as well as training in microbiology allows microbiology graduates to enter fields as diverse as business, technical service, sales, and technical writing.

## HOW TO GET IN

Incoming or current students in good academic standing may declare the microbiology major at any time.

Schedule an appointment (https://calendar.wisc.edu/ scheduling-assistant/schedule/RAUHTzYt/
view.html;jsessionid=89D5FEA38114F159C48E4959F05B91E1. primary) with Katy France to discuss the microbiology major, appropriate coursework, how to declare, and so on.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code Title Credits

Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.

Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33) 1
International Studies (p. 33) 3
Physical Science Fundamentals 4-5

| CHEM 103 | General Chemistry I |
| :---: | :--- |
| or CHEM 108 | Chemistry in Our World |
| or CHEM 109 | Advanced General Chemistry |

Biological Science ..... 5
Additional Science (Biological, Physical, or Natural) ..... 3
Science Breadth (Biological, Physical, Natural, or Social) ..... 3

CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33)

## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics |  |  |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| Statistics |  |  |
| Select one of the following: |  | 3 |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| STAT/B M I 541 | Introduction to Biostatistics |  |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| Select ALL of the following: |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| Biology Foundation |  |  |
| Select one of the fo | owing: | 10-13 |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 151 <br> \& BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology and Introductory Biology ${ }^{2}$ |  |


| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| :---: | :---: | :---: |
| \& BIOCORE 382 | and Evolution, Ecology, and |  |
| \& BIOCORE 383 | Genetics Laboratory |  |
| \& BIOCORE 384 | and Cellular Biology |  |
| \& BIOCORE 485 | and Cellular Biology Laboratory and Organismal Biology ${ }^{2}$ |  |
| ZOOLOGY/ | Animal Biology and Animal Biology Laboratory and General Botany |  |
| BIOLOGY 101 |  |  |
| \& ZOOLOGY/ |  |  |
| BIOLOGY 102 |  |  |
| \& BOTANY/ |  |  |
| BIOLOGY 130 |  |  |
| Physics |  |  |
| Select one of the following: |  | 8-10 |
| PHYSICS 103 <br> \& PHYSICS 104 | General Physics and General Physics ${ }^{3}$ |  |
| PHYSICS 207 <br> \& PHYSICS 208 | General Physics and General Physics ${ }^{3}$ |  |
| PHYSICS 201 <br> \& PHYSICS 202 | General Physics and General Physics |  |
| Biochemistry |  |  |
| Select one of the following: |  | 3-6 |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BIOCHEM 507 \& BIOCHEM 508 | General Biochemistry I and General Biochemistry II |  |
| Microbiology Courses |  |  |
| Microbiology Core (all required): |  |  |
| Except where noted, all Microbiology Core courses are offered every fall and spring semester. |  |  |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory | 2 |
| MICROBIO 305 | Critical Analyses in Microbiology | 1 |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines | 3 |
| MICROBIO 526 | Physiology of Microorganisms | 3 |
| MICROBIO 527 | Advanced Laboratory Techniques in Microbiology (FALL ONLY) | 2 |
| Microbiology Capstone (required): |  |  |
| MICROBIO 551 | Capstone Research Project in Microbiology (SPRING ONLY) | 2 |
| Microbiology Electives |  |  |
| Select at least 6 credits; at least 3 credits must come from Set A. Note that not all elective courses are offered every semester. |  |  |
| Set A: |  | 3-6 |
| MICROBIO/ FOOD SCI 324 | Food Microbiology Laboratory |  |
| MICROBIO/ <br> FOOD SCI 325 | Food Microbiology |  |
| MICROBIO 330 | Host-Parasite Interactions |  |
| MICROBIO 375 | Special Topics |  |
| MICROBIO/SOIL SCI 425 | Environmental Microbiology |  |

Microbiology Core (all required):

Microbiology Capstone (required):

Set A:

2 (BIOLOGY/BOTANY/ZOOLOGY 151 and BIOLOGY/BOTANY/ ZOOLOGY 152) or (BIOCORE 381 / BIOCORE 382 / BIOCORE 383 / BIOCORE 384 / BIOCORE 485) are recommended.
3 (PHYSICS 103 / PHYSICS 104) or (PHYSICS 207 / PHYSICS 208) are recommended.

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take MICROBIO 681 Senior Honors Thesis and MICROBIO 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http://www.cals.wisc.edu/academics/undergraduate-programs/get-involved/honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |
| Quality of | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Develop a fundamental understanding of the principles of microbiology and the necessary skills for a professional career in microbiology
2. Apply the scientific method to questions. Formulate a hypothesis, gather data, and analyze that data to assess the degree to which their work supports the hypothesis.
3. Demonstrate proficiency in the techniques used in microbiology and an ability to critically analyze data and integrate ideas for problem solving
4. Access the primary and secondary literature and, in combination with their own findings, effectively communicate their ideas both orally and in written form.
5. Learn about and demonstrate personal and professional ethics.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN SAMPLE MICROBIOLOGY FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| General Chemistry ${ }^{1}$ | 4-5 Gen Chem or Electives ${ }^{1}$ | 5 |
| Math ${ }^{2}$ | $3 \mathrm{Math}^{2}$ | 3-5 |
| COMM-A | 3 Electives ${ }^{3}$ | 6 |
| First-Year Seminar | 1 |  |
| Elective ${ }^{3}$ | 3 |  |
|  | 14-15 | 14-16 |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| CHEM 343 | 3 CHEM 344 | 2 |
| Math ${ }^{2}$ | 3-5 CHEM 345 | 3 |
| Intro Biology, Semester $1^{4}$ | 5 Intro Biology, Semester $2^{4}$ | 5 |
| Elective ${ }^{3}$ | 3 Electives ${ }^{3}$ | 6 |
|  | 14-16 | 16 |

## Junior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| General Physics, Semester $1^{5}$ | 4-5 General Physics, Semester $2^{5}$ | 4-5 |
| MICROBIO 303 | 3 MICROBIO 470 | 3 |
| MICROBIO 304 | 2 BIOCHEM 501 or BMOLCHEM 503 ${ }^{7}$ | 3 |
| MICROBIO 305 | 1 Research ${ }^{6}$ | 1-4 |
| Research ${ }^{6}$ | 1-4 Electives (for major or other) ${ }^{3}$ | 0-4 |
| Electives (to reach 15 crs) ${ }^{3}$ | 0-4 |  |
|  | 11-19 | 11-19 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| MICROBIO 526 | 3 MICROBIO 450 | 3 |
| MICROBIO 527 | 2 MICROBIO 551 | 2 |
| Research ${ }^{6}$ | 1-4 Research ${ }^{6}$ | 1-4 |
| Electives (for major or other) ${ }^{3}$ | 6-9 Electives (for major or other) ${ }^{3}$ | 7-10 |
|  | 12-18 | 13-19 |

Total Credits 105-138

* Students planning to pursue graduate studies in a biological science are encouraged to take MATH 221 Calculus and Analytic Geometry 1, MATH 222 Calculus and Analytic Geometry 2, PHYSICS 201 General Physics and PHYSICS 202 General Physics or PHYSICS 207 General Physics and PHYSICS 208 General Physics, and BIOCHEM 507 General Biochemistry I and BIOCHEM 508 General Biochemistry II (see Note 7). Also recommended: CHEM 565 Biophysical Chemistry and MICROBIO/BIOCHEM/GENETICS 612 Prokaryotic Molecular Biology.

1

Choose 1 of 2 sequences: CHEM 103 General Chemistry I and CHEM 104 General Chemistry II or CHEM 109 Advanced General Chemistry. Students who take CHEM 109 and plan to attend medical or other professional schools are advised to take one additional inorganic course (CHEM 311 Chemistry Across the Periodic Table or CHEM 327 Fundamentals of Analytical Science).
Math course determined by placement scores. Microbio majors must complete math through calculus (choose from MATH 171 Calculus with Algebra and Trigonometry I \& MATH 217 Calculus with Algebra and Trigonometry II or MATH 221 Calculus and Analytic Geometry 1), and statistics (choose from STAT 301 Introduction to Statistical Methods, STAT 371 Introductory Applied Statistics for the Life Sciences, or STAT/B M I 541 Introduction to Biostatistics).
Electives can be scheduled according to the student's preference. Consult your advisor and the Requirements tab.
The three choices are 1) ZOOLOGY/BIOLOGY/BOTANY 151 Introductory Biology and ZOOLOGY/BIOLOGY/BOTANY 152 Introductory Biology; 2) ZOOLOGY/BIOLOGY 101 Animal Biology, ZOOLOGY/BIOLOGY 102 Animal Biology Laboratory and BOTANY/ BIOLOGY 130 General Botany; or 3) Biocore. Biocore is a 3 to 4 semester sequence. Students must complete the first three lectures and the first two labs. The Biocore courses are BIOCORE 381 Evolution, Ecology, and Genetics, BIOCORE 382 Evolution, Ecology, and Genetics Laboratory, BIOCORE 383 Cellular Biology, BIOCORE 384 Cellular Biology Laboratory, BIOCORE 485 Organismal Biology, BIOCORE 587 Biological Interactions.
Physics may be taken in year $1,2,3$, or 4 depending on the student's schedule.
Undergraduate research courses include 299, 699, 681\#682 (Honors Thesis), 691\#692 (Thesis). Both semesters are required for thesis credit. Students are encouraged to take several semesters of research (internship opportunities, 399, are also encouraged). If BIOCHEM 507 General Biochemistry I and BIOCHEM 508 General Biochemistry II are taken, both semesters must be completed (take BIOCHEM 507 in fall semester of year 3 and BIOCHEM 508 in spring semester of year 3).

## ADVISING AND CAREERS

Current UW-Madison students can schedule initial advising (https:// calendar.wisc.edu/scheduling-assistant/schedule/RAUHTzYt/view.htmI) in the microbiology major with Katy France.

Prospective/future UW-Madison students should send an email to Katy France, katy.france@wisc.edu, to set up an appointment, which can be conducted in person or via phone call.

Read about and explore possible microbiology careers at the American Society for Microbiology website (https://www.asm.org/index.php/learn-about-careers).

Learn more about health-related careers through the ExploreHealthCareers.org website (https://explorehealthcareers.org).

## PEOPLE

## PROFESSORS

Ané, Currie, Donohue, Filutowicz, Forest, Gourse, Johnson, Kaspar (chair), McMahon (Civil and Environmental Engineering), Thomas, Wang, Wassarman, Yu

## ASSOCIATE PROFESSOR

Suen

## ASSISTANT PROFESSORS

Amador-Noguez, Anantharaman, Burton, Rey, Vetsigian

## BIOCHEMISTRY

Biochemistry is a very broad science that studies the molecules and chemistry of life. Biochemistry focuses on the structure, properties, and interactions of molecules such as proteins, nucleic acids, sugars and lipids. Biochemistry's aim is to understand how these molecules participate in the processes that support the various functions of the living cell. These studies are therefore essential for understanding disease and finding cures, for improving agriculture and the production of food and biofuels, and to produce innovation in biotechnology.

Whereas other biological science majors may focus on cellular, organismal or population level biology, biochemistry focuses on processes that occur at the molecular to cellular levels. Therefore, this major has a greater focus on basic and quantitative sciences, such as math and, particularly, on chemistry.

Biochemistry graduates go on to a variety of careers in science and science-related fields. The major is designed to fit the needs of the student who wishes to achieve bachelor's level training as well as those planning to pursue graduate or professional study. The degree serves as an excellent background for medical school or veterinary school admission, as well as for graduate study in biochemistry or other allied fields (biology, bacteriology, genetics, molecular biology, or oncology).

## DEGREES/MAJORS/CERTIFICATES

- Biochemistry, B.S. (CALS) (p. 109)


## PEOPLE

## PROFESSORS

Amasino, Rick
Ansari, Aseem
Attie, Alan
Bednarek, Sebastian
Butcher, Sam
Clagett-Dame, Margaret
Cox, Mike
Craig, Elizabeth
Fox, Brian (Chair)
Friesen, Paul
Hayes, Colleen
Holden, Hazel

Kimble, Judith
Landick, Bob
Markley, John
Martin, Tom
Mitchell, Julie
Ntambi, James
Palmenberg, Ann
Pike, Wes
Ralph, John
Rayment, Ivan
Record, Tom
Sussman, Mike
Weibel, Doug
Wickens, Marv

## ASSOCIATE PROFESSORS

Henzler-Wildman, Katie
Pagliarini, Dave
Senes, Alessandro

## ASSISTANT PROFESSORS

Hoskins, Aaron
Raman, Vatsan
Romero, Phil
Venturelli, Ophelia
Wildonger, Jill

## ASSOCIATE FACULTY ASSOCIATES

Prost, Lynne
Pennella, Mario

## BIOCHEMISTRY, B.S. (CALS)

Biochemistry is a very broad science that studies the molecules and chemistry of life. Biochemistry focuses on the structure, properties, and interactions of molecules such as proteins, nucleic acids, sugars and lipids. Biochemistry's aim is to understand how these molecules participate in the processes that support the various functions of the living cell. These studies are therefore essential for understanding disease and finding cures, for improving agriculture and the production of food and biofuels, and to produce innovation in biotechnology.

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## HOW TO GET IN

Students may declare the major via an appointment with the undergraduate advisor at any time. Students who attend Student

Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences (CALS) have the option to declare biochemistry at SOAR. Students may otherwise declare after they have begun their undergraduate studies. The biochemistry major is offered through either CALS or the College of Letters \& Science (L\&S). Students interested in the differences or transferring between CALS and L\&S should meet with the advisor to discuss this in more detail. Students in other schools/colleges (Business, Education, Engineering, etc.) may add biochemistry as an additional major with permission of their home school/college.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

REQUIREMENTS FOR THE MAJOR
MATHEMATICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following options: |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 <br> and Calculus and Analytic Geometry <br> \& MATH 222 | 9 |
| MATH 171 | Calculus with Algebra and <br> \& MATH 217 <br> \& MATH 222 | Trigonometry I <br> and Calculus with Algebra and <br> Trigonometry II <br> and Calculus and Analytic Geometry <br> 2 |
| MATH 275 | Topics in Calculus I <br> \& MATH 276 | 14 |
|  | and Topics in Calculus II |  |

## CHEMISTRY <br> General Chemistry

Code
Title
Credits
Select one of the following options:

| CHEM 103 | General Chemistry I | 9 |
| :--- | :--- | ---: |
| \& CHEM 104 | and General Chemistry II | 5 |
| CHEM 109 | Advanced General Chemistry | 10 |
| CHEM 115 | Chemical Principles I <br> and Chemical Principles II (satisfies <br> both general and analytical <br> chemistry requirements) |  |

## Organic Chemistry

| Code | Title | Credits |
| :--- | ---: | ---: |
| Select ALL of the following courses: |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |


| CHEM 345 | Intermediate Organic Chemistry | 3 |
| :--- | :--- | :--- |
| CHEM 344 | Introductory Organic Chemistry | 2 |

## Analytical Chemistry

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following options: |  |  |
| CHEM 327 | Fundamentals of Analytical Science | 4 |
| CHEM 329 | Fundamentals of Analytical Science | 4 |
| CHEM 115 | Chemical Principles I <br> \& CHEM 116 | and Chemical Principles II (satisfies <br> both general and analytical <br> chemistry requirements) |

## Physical Chemistry

Code Title Credits

Must complete 4 credits of physical chemistry. Select one of the following options:

| CHEM 565 | Biophysical Chemistry <br> (recommended) | 4 |
| :--- | :--- | :---: |
| CHEM 561 | Physical Chemistry | $4-5$ |
| $\&$ CHEM 563 | and Physical Chemistry Laboratory |  |

## BIOLOGY

Students must complete either Option A (introductory + upper-level biology), or Option B (Biocore), for 16 total credits of biological science coursework.

## Option A (Introductory + Upper-Level Biology) Option A Introductory Biology

Code Title Credits

Select one of the following introductory biology options:
BIOLOGY/BOTANY/ Introductory Biology 10
ZOOLOGY 151 and Introductory Biology
\& BIOLOGY/BOTANY/ (recommended)
ZOOLOGY 152
BIOLOGY/ Animal Biology 10
ZOOLOGY 101 and Animal Biology Laboratory
\& BIOLOGY/
ZOOLOGY 102
\& BOTANY/
BIOLOGY 130

## AND Option A Upper-Level Biology

At least 6 credits of upper-level biological science coursework are required (to achieve 16 total credits-more than 6 credits may be required if introductory biology totals less than 10 credits due to transfer credits). Select from the course list below. To see courses offered in specific upcoming semesters, please see the Biochemistry website (https:// biochem.wisc.edu/undergraduate_program/advanced-biology-courses-undergraduate-program).

Important: Biochemistry courses on this list can count only for "upper-level biology" if they are above-and-beyond what is needed to fulfill the "biochemistry" portion of the major. For example, if students have taken BIOCHEM 501, they will need one upper-level biochemistry elective to fulfill the biochemistry

| requirement, and then any additional biochemistry courses taken can count for upper-level biology. A course may not double count in both the "upper-level biology" and the "biochemistry" requirements for the major. |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ANAT\&PHY 335 | Physiology | 5 |
| ANAT\&PHY 337 | Human Anatomy | 3 |
| ANAT\&PHY 435 | Fundamentals of Human Physiology | 5 |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY 302 | Forage Management and Utilization | 3 |
| AGRONOMY/HORT/ SOIL SCI 326 | Plant Nutrition Management | 3 |
| AGRONOMY/ HORT 328 | Integrated Weed Management | 4 |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology | 3 |
| AGRONOMY/ <br> BOTANY/HORT 339 | Plant Biotechnology: Principles and Techniques I | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering | 4 |
| AGRONOMY/ <br> A A E/INTER-AG/ <br> NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| AGRONOMY/ HORT 501 | Principles of Plant Breeding | 3 |
| AGRONOMY/ <br> ATM OCN/ SOIL SCI 532 | Environmental Biophysics | 3 |
| AN SCI/ <br> FOOD SCI 305 | Introduction to Meat Science and Technology | 4 |
| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| AN SCI 314 | Poultry Nutrition | 3 |
| AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 |
| AN SCI/DY SCI 370 | Livestock Production and Health in Agricultural Development | 3 |
| AN SCI/DY SCI 414 | Ruminant Nutrition | 2 |
| AN SCI 415 | Application of Monogastric Nutrition Principles | 2 |
| AN SCI 430 | Sheep Production | 3 |
| AN SCI 431 | Beef Cattle Production | 3 |
| AN SCI 432 | Swine Production | 3 |
| AN SCI/DY SCI 434 | Reproductive Physiology | 3 |
| AN SCI 503 | Avian Physiology | 3 |


| AN SCI 508 | Poultry Products Technology | 3 |
| :---: | :---: | :---: |
| AN SCI 511 | Breeder Flock and Hatchery Management | 3 |
| AN SCI 512 | Management for Avian Health | 3 |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { FOOD SCI } 515 \end{aligned}$ | Commercial Meat Processing | 2 |
| AN SCI/F\&W ECOL/ <br> ZOOLOGY 520 | Ornithology | 3 |
| AN SCI/F\&W ECOL/ <br> ZOOLOGY 521 | Birds of Southern Wisconsin | 3 |
| AN SCI/ NUTR SCI 626 | Experimental Diet Design | 1 |
| B M E/ANATOMY/ MED PHYS/ PHMCOL-M/ PHYSICS/ RADIOL 619 | Microscopy of Life | 3 |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition | 3 |
| BIOCHEM 550 | Topics in Medical Biochemistry | 2 |
| BIOCHEM/ <br> M M \& 575 | Biology of Viruses | 2 |
| BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 |
| BIOCHEM/B M I/ <br> BMOLCHEM/ <br> MATH 606 | Mathematical Methods for Structural Biology | 3 |
| BIOCHEM/B M I/ BMOLCHEM/ MATH 609 | Mathematical Methods for Systems Biology | 3 |
| BIOCHEM/ GENETICS/ MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| BIOCHEM/ <br> NUTR SCI 619 | Advanced Nutrition: Intermediary Metabolism of Macronutrients | 3 |
| BIOCHEM/ GENETICS/ MD GENET 620 | Eukaryotic Molecular Biology | 3 |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry | 3 |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals | 2 |
| BIOCHEM/PHMCOL <br> M/ZOOLOGY 630 | Cellular Signal Transduction Mechanisms | 3 |
| BIOCHEM/ <br> NUTR SCI 645 | Molecular Control of Metabolism and Metabolic Disease | 3 |
| BSE 349 | Quantitative Techniques for Biological Systems | 3 |
| BSE 364 | Engineering Properties of Food and Biological Materials | 3 |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| BSE 461 | Food and Bioprocessing Operations | 3 |


| BSE 472 | Sediment and Bio-Nutrient |
| :--- | :--- | ---: |
| Engineering and Management |  |$\quad 3$


| DY SCI 305 | Lactation Physiology | 3 |
| :---: | :---: | :---: |
| DY SCI 535 | Dairy Farm Management Practicum | 3 |
| ENTOM/ ZOOLOGY 302 | Introduction to Entomology | 4 |
| ENTOM 321 | Physiology of Insects | 3 |
| ENTOM 331 | Taxonomy of Mature Insects | 4 |
| ENTOM 342 | Insect Ecology | 3 |
| ENTOM 351 | Principles of Economic Entomology | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 371 \end{aligned}$ | Medical Entomology | 3 |
| ENTOM 432 | Taxonomy and Bionomics of Immature Insects | 4 |
| ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 |
| ENTOM/ <br> ZOOLOGY 530 | Insect Behavior | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 540 \end{aligned}$ | Theoretical Ecology | 3 |
| $\begin{aligned} & \text { ENTOM/GENETICS/ } \\ & \text { ZOOLOGY } 624 \end{aligned}$ | Molecular Ecology | 3 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| ENVIR ST/ POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST/ <br> ATM OCN 520 | Bioclimatology | 3 |
| ENVIR ST/A A E/ F\&W ECOL 652 | Decision Methods for Natural Resource Managers | 3-4 |
| FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory | 2 |
| FOOD SCI/ <br> MICROBIO 325 | Food Microbiology | 3 |
| FOOD SCI 410 | Food Chemistry | 3 |
| FOOD SCI 440 | Principles of Food Engineering | 3 |
| FOOD SCI 511 | Chemistry and Technology of Dairy Products | 3 |
| FOOD SCI 512 | Principles of Food Chemistry-Lab | 2 |
| FOOD SCI 514 | Integrated Food Functionality | 4 |
| FOOD SCI 550 | Fermented Foods and Beverages | 2 |
| FOOD SCI 610 | Food Proteins | 2 |
| FOOD SCI 611 | Chemistry and Technology of Dairy Products | 3 |
| FOOD SCI/ <br> MICROBIO 650 | Advanced Microbiology of Foodborne Pathogens | 3 |
| F\&W ECOL 300 | Forest Biometry | 4 |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology | 4 |
| F\&W ECOL/ <br> HORT/LAND ARC/ <br> PL PATH 309 | Diseases of Trees and Shrubs | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |


| $\begin{aligned} & \text { F\&W ECOL/ } \\ & \text { ZOOLOGY } 335 \end{aligned}$ | Human/Animal Relationships: Biological and Philosophical Issues | 3 | M M \& I/ENTOM/ PATH-BIO/ | Parasitology | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F\&W ECOL/ | Extinction of Species | 3 | ZOOLOGY 350 |  |  |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { ZOOLOGY } 360 \end{aligned}$ |  |  | M M \& I/PATH-BIO/ ZOOLOGY 351 | Parasitology Laboratory | 2 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 | M M \& 1410 | Medical Mycology | 2 |
| F\&W ECOL 401 | Physiological Animal Ecology | 3 | M M \& 1412 | Medical Mycology Laboratory | 1 |
| F\&W ECOL 404 | Wildlife Damage Management | 3 | M M \& I 460 | Techniques in DNA Science for | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |  | Microbiologists |  |
| F\&W ECOL 415 | Tree Physiology | 3 | M M \& I/MICROBIO/ | Immunology | 3 |
| F\&W ECOL/ | Diseases of Wildlife | 3 | PATH-BIO 528 |  |  |
| SURG SCI 548 |  |  | M M \& I/PATH- | Immunology Laboratory | 2 |
| F\&W ECOL 550 | Forest Ecology | 3 | BIO 529 |  |  |
| F\&W ECOL 561 | Wildlife Management Techniques | 3 | M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 | M M \& I 555 | Bioterrorism <br> Vaccines: Practical Issues for a Global Society | 3 |
| F\&W ECOL 590 | Integrated Resource Management | 3 | M M \& I/ | Clinical and Public Health | 5 |
| F\&W ECOL/ AGRONOMY/ ENTOM/ | Ecotoxicology: The Chemical Players | 1 | MED PHYS/ <br> H ONCOL 410 | Microbiology | 2-3 |
| M\&ENVTOX 632 |  |  | MED PHYS/ | Radiological Physics and Dosimetry | 3 |
| F\&W ECOL/ AGRONOMY/ | Ecotoxicology: Impacts on Individuals | 1 | B M E/H ONCOL/ PHYSICS 501 |  |  |
| ENTOM/ |  |  | MICROBIO 303 | Biology of Microorganisms | 3 |
| M\&ENVTOX 633 |  |  | MICROBIO 304 | Biology of Microorganisms | 2 |
| F\&W ECOL/ | Ecotoxicology: Impacts on | 1 |  | Laboratory |  |
| AGRONOMY/ | Populations, Communities and |  | MICROBIO 330 | Host-Parasite Interactions | 3 |
| ENTOM/ M\&ENVTOX 634 | Ecosystems |  | MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| F\&W ECOL 635 | Forest Stand Dynamics | 1-2 | MICROBIO 450 | Diversity, Ecology and Evolution of | 3 |
| F\&W ECOL 655 | Animal Population Dynamics | 3 |  | Microrrganisms |  |
| GENETICS 466 | Principles of Genetics | 3 | MICROBIO 470 | Microbial Genetics \& Molecular | 3 |
| GENETICS 467 | General Genetics 1 | 3 |  | Machines |  |
| GENETICS 468 | General Genetics 2 | 3 | MICROBIO/ | Soil Microbiology and Biochemistry | 3 |
| GENETICS 545 | Genetics Laboratory | 2 | SOIL SCI 523 |  |  |
| GENETICS/ | Molecular Approaches for Potential | 3 | MICROBIO 526 | Physiology of Microorganisms | 3 |
| HORT 550 | Crop Improvement |  | MICROBIO 527 | Advanced Laboratory Techniques in | 2 |
| GENETICS/ | Human Cytogenetics | 2 |  | Microbiology |  |
| MD GENET/ ZOOLOGY 562 |  |  | MICROBIO 551 | Capstone Research Project in Microbiology | 2 |
| GENETICS/ <br> MD GENET 565 | Human Genetics | 3 | MICROBIO/ PLPATH 622 | Plant-Bacterial Interactions | 2-3 |
| GENETICS 566 | Advanced Genetics | 3 | MICROBIO 625 | Advanced Microbial Physiology | 3 |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics | 3 | MICROBIO 632 | Industrial Microbiology/ Biotechnology | 2 |
| GENETICS/ <br> AN SCI 610 | Quantitative Genetics | 3 | MICROBIO/ ONCOLOGY/ | General Virology-Multiplication of Viruses | 3 |
| HORT 320 | Environment of Horticultural Plants | 3 | PL PATH 640 |  |  |
| HORT/ | Principles of Plant Breeding | 3 | NEURODPT 533 | Molecular Physiology | 2 |
| AGRONOMY 501 |  |  | NTP/ | Cellular and Molecular | 4 |
| M M \& I 301 | Pathogenic Bacteriology | 2 | NEURODPT 610 | Neuroscience |  |
| M M \& I 302 | Medical Microbiology Laboratory | 3 | NTP/NEURODPT/ | Systems Neuroscience | 4 |
| M M \& I 341 | Immunology | 3 | PSYCH 611 |  |  |


| NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 |
| :---: | :---: | :---: |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| NUTR SCI 431 | Nutrition in the Life Span | 3 |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |
| ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| ONCOLOGY/ M\&ENVTOX/ MEDICINE/PATH/ PHM SCI/PHMCOLM/POP HLTH 625 | Toxicology I | 3 |
| PEDIAT 646 | Cancer Genetics Risk Assessment and Counseling | 2 |
| PHM SCI 310 | Drugs and Their Actions | 2 |
| PHM SCI 401 | Survey of Pharmacology | 3 |
| PHM SCI/B M E 430 | Biological Interactions with Materials | 3 |
| PHYSICS/ <br> ANATOMY/B M E/ MED PHYS/ <br> PHMCOL-M/ <br> RADIOL 619 | Microscopy of Life | 3 |
| PHYSIOL/NTP 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| PL PATH 300 | Introduction to Plant Pathology | 4 |
| PL PATH/ <br> SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| PL PATH 558 | Biology of Plant Pathogens | 3 |
| PL PATH 559 | Diseases of Economic Plants | 3 |
| PL PATH 602 | Ecology, Epidemiology and Control of Plant Diseases | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry | 3 |
| SOIL SCI/ <br> CIV ENGR 623 | Microbiology of Waterborne Pathogens and Indicator Organisms | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: <br> Sources, Distribution, Fate, \& Effects | 3 |
| ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab | 2 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY 425 | Behavioral Ecology | 3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates | 5 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |


| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab | 2 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 523 \end{aligned}$ | Neurobiology | 3 |
| ZOOLOGY 535 | Ecosystem Analysis | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 541 \end{aligned}$ | Paleobiology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| ZOOLOGY/ <br> PSYCH 550 | Animal Communication and the Origins of Language | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory | 2 |
| ZOOLOGY/ANTHRO/ <br> NTP/PSYCH 619 | Biology of Mind | 3 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |

## Option B (Biocore)

Biocore is an honors-level, integrated sequence of lecture and lab courses that covers introductory and intermediate biology topics. Students must apply and be accepted to the program to take BIOCORE classes.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select ALL of the following lecture courses: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics | 3 |
| BIOCORE 383 | Cellular Biology | 3 |
| BIOCORE 485 | Organismal Biology | 3 |
| BIOCORE 587 | Biological Interactions | 3 |
| AND, select two of the following lab classes: |  |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics | 2 |
| BIOCORE 384 | Laboratory | 2 |
| BIOCORE 486 | Cellular Biology Laboratory | 2 |

## PHYSICS (CALCULUS-BASED) ${ }^{1}$

Code Title Credits
Select one of the following options:
PHYSICS 207 General Physics 10
\& PHYSICS 208 and General Physics
PHYSICS 201 General Physics 10
\& PHYSICS 202 and General Physics
1 Honors students may use PHYSICS 247 A Modern Introduction to Physics \& PHYSICS 248 A Modern Introduction to Physics to satisfy this requirement. Students should consult with their advisor if they have credit for PHYSICS 103 General Physics and/or PHYSICS 104 General Physics to discuss options.

## BIOCHEMISTRY

One set of introductory coursework and the capstone course are required, for a total of three BIOCHEM courses.

| Introductory Courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select one of the following options: |  |  |
| BIOCHEM 507 <br> \& BIOCHEM 508 | General Biochemistry I and General Biochemistry II (recommended) | 6 |
| OR |  |  |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| AND one of the following upper-level biochemistry electives: |  |  |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition |  |
| BIOCHEM 550 | Topics in Medical Biochemistry |  |
| BIOCHEM/ <br> M M \& I 575 | Biology of Viruses |  |
| BIOCHEM 601 | Protein and Enzyme Structure and Function |  |
| BIOCHEM/B M I/ <br> BMOLCHEM/ <br> MATH 606 | Mathematical Methods for Structural Biology |  |
| BIOCHEM/B M I/ <br> BMOLCHEM/ <br> MATH 609 | Mathematical Methods for Systems Biology |  |
| BIOCHEM/ <br> GENETICS/ <br> MICROBIO 612 | Prokaryotic Molecular Biology |  |
| BIOCHEM/ <br> GENETICS/ <br> MD GENET 620 | Eukaryotic Molecular Biology |  |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry |  |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals |  |
| BIOCHEM/ <br> PHMCOL-M/ <br> ZOOLOGY 630 | Cellular Signal Transduction Mechanisms |  |
| BIOCHEM/ <br> NUTR SCI 645 | Molecular Control of Metabolism and Metabolic Disease |  |


| Capstone Course (required) |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |

## HONORS IN THE MAJOR

Students may declare Honors in the Biochemistry Major in consultation with the Biochemistry undergraduate advisor. To be admitted to Honors in the Major in Biochemistry, students must have declared a major in biochemistry and have a 3.300 overall university GPA.

## HONORS IN THE MAJOR IN BIOCHEMISTRY: REQUIREMENTS

To earn Honors in the Major in Biochemistry, students must satisfy the requirements for the major (above) as well as the following requirements.

All courses used for Honors in the Major requirements must receive " B " or better grades to fulfill requirements.

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all BIOCHEM courses, and all courses accepted in the major
- Complete BIOCHEM 507 General Biochemistry I and BIOCHEM 508 General Biochemistry II for Honors
- Complete a two-semester Senior Honors Thesis for 6 credits total in either BIOCHEM (BIOCHEM 681 Senior Honors Thesis and BIOCHEM 682 Senior Honors Thesis) CHEM (CHEM 681 Senior Honors Thesis and CHEM 682 Senior Honors Thesis) or related biological science department (other departments must receive approval from the advisor) and present research in a public forum
- Complete at least 14 credits for Honors or equivalent. Any combination of the following coursework may count towards these 14 credits:
- Honors courses that would fulfill the biological science requirement in the major (listed in the major requirements section), including coursework in introductory biology, upper-level biology, and/or BIOCORE
- Statistics coursework, does not need to be taken for Honors (STAT 301 Introduction to Statistical Methods, STAT 371 Introductory Applied Statistics for the Life Sciences, or STAT/ B M I 541 Introduction to Biostatistics)
- Biochemistry elective coursework, does not need to be taken for Honors (NUTR SCI/BIOCHEM 510 Biochemical Principles of Human and Animal Nutrition, BIOCHEM 550 Topics in Medical Biochemistry, M M \& I/BIOCHEM 575 Biology of Viruses, BIOCHEM 601 Protein and Enzyme Structure and Function, MATH/B M I/BIOCHEM/BMOLCHEM 606 Mathematical Methods for Structural Biology, MATH/B M I/BIOCHEM/ BMOLCHEM 609 Mathematical Methods for Systems Biology, MICROBIO/BIOCHEM/GENETICS 612 Prokaryotic Molecular Biology, MD GENET/BIOCHEM/GENETICS 620 Eukaryotic Molecular Biology, BOTANY/BIOCHEM 621 Plant Biochemistry, BIOCHEM 625 Mechanisms of Action of Vitamins and Minerals, BIOCHEM/PHMCOL-M/ZOOLOGY 630 Cellular Signal Transduction Mechanisms, BIOCHEM/NUTR SCI 645 Molecular Control of Metabolism and Metabolic Disease)
- Honors coursework in math, chemistry, and/or physics from the list below:


## Math

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 275 | Topics in Calculus I | 5 |
| MATH 276 | Topics in Calculus II | 5 |
| MATH 341 | Linear Algebra | 3 |
| MATH 375 | Topics in Multi-Variable Calculus |  |
|  | and Linear Algebra | 5 |
| MATH 376 | Topics in Multi-Variable Calculus | 5 |
| MATH 521 | and Differential Equations | 3 |
| MATH 522 | Analysis I | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |


| Chemistry |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 5 |
| CHEM 109 | Advanced General Chemistry | 5 |
| CHEM 115 | Chemical Principles I | 5 |
| CHEM 116 | Chemical Principles II | 3 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 2 |
| CHEM 344 | Introductory Organic Chemistry | 4 |
| CHEM 329 | Faboratory | 4 |
| CHEM 547 | Advanced Organic Chemistry | 3 |
| CHEM 561 | Physical Chemistry | 4 |
| CHEM 565 | Biophysical Chemistry | $1-2$ |
| CHEM 563 | Physical Chemistry Laboratory | 3 |
| CHEM 562 | Physical Chemistry | 1 |
| CHEM 564 | Physical Chemistry Laboratory | 5 |
| Physics |  | 5 |
| Code | Title | 5 |
| PHYSICS 201 | General Physics | 5 |
| PHYSICS 202 | General Physics | 5 |
| PHYSICS 207 | General Physics | 5 |
| PHYSICS 208 | General Physics | 5 |
| PHYSICS 241 | Introduction to Modern Physics | 5 |
| PHYSICS 247 | A Modern Introduction to Physics | 5 |
| PHYSICS 248 | A Modern Introduction to Physics | 5 |
| PHYSICS 249 | A Modern Introduction to Physics | 5 |

## HOW TO APPLY

Apply to the Honors Program by filling out the application (https://cals.wisc.edu/wp-content/uploads/2017/05/
honorsapplication_form.pdf). Be sure to check the "Honors in the Major" box on your application. The undergraduate advisor must sign your application.

CALS students must deposit their thesis with the Honors Dean and submit an Honors checklist at the time of graduation in order to graduate with Honors in the Major. See the website (https:// cals.wisc.edu/academics/undergraduate-students/outside-the-classroom/honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Identify the fundamental biochemical principles that underlie all biological processes.
2. Communicate biochemical knowledge in both written reports and oral presentations to scientists and non-scientists.
3. Evaluate how biochemistry relates to other scientific disciplines and to contemporary issues in our society.
4. Demonstrate professional and ethical responsibility in scientific research.
5. Design and conduct quantitative experiments and/or interpret data to address a scientific question.

FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE BIOCHEMISTRY FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 103 or 109 | $4-5$ CHEM 104 (if needed) | 5 |
| MATH 221 | 5 MATH 222 | 4 |
| COMM A or Elective | 3 Humanities Course | 3 |
| INTER-AG 155 or | 1 Elective | 3 |
| BIOCHEM 100 | $13-14$ | 15 |

Total Credits 28-29

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 343 | 3 CHEM 344 | 2 |
| BIOCORE 381 | 5 CHEM 345 | 3 |
| \& BIOCORE 382 (or |  |  |
| ZOOLOGY 151) | 3 BIOCORE 383 |  |
| Humanities Course | \& BIOCORE 384 (or |  |
|  | ZOOLOGY 152) | 5 |
| Social Science Course | 3 Ethnic Studies Course | 3 |
|  | 14 | 13 |

## Total Credits 27

## Junior

Fall
Credits Spring
Credits
5 PHYSICS 208 or 202
PHYSICS 207 or 201
BIOCORE 485 (or Upper-
3 BIOCORE 587 (or Upper-
level Biology) level Biology)
BIOCHEM $507^{2} \quad 3$ BIOCHEM 508

| International Studies <br> Course | 3 CHEM 327 | 4 |
| :--- | ---: | ---: |
| Electives | $2-3$ | 15 |
|  | $16-17$ |  |


| Total Credits 31-32 |  |  |
| :---: | :---: | :---: |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| CHEM 565 or BIOCHEM 551 | $\begin{aligned} & 4 \text { BIOCHEM } 551 \text { or CHEM } \\ & 565 \end{aligned}$ | 4 |
| BIOCHEM 691 or $681{ }^{3}$ | 2-3 BIOCHEM 692 or 682 | 2-3 |
| Electives or Remaining Requirements | 6-10 Electives or Remaining Requirements | 6-10 |
|  | 12-17 | 12-17 |

## Total Credits 24-34

1 BIOCORE sequence requires four lecture courses plus two lab courses. Student may also take ZOOLOGY/BIOLOGY/BOTANY 151 and ZOOLOGY/BIOLOGY/BOTANY 152 plus 6 credits of upper-level Biology instead of BIOCORE.
2 Students must take either. (1) both BIOCHEM 507 and BIOCHEM 508 or (2) 501 and 2 additional credits of Biochemistry from the 500/600level electives.
3
Senior Thesis, independent study or work experience in laboratory are strongly recommended, but are not required. However, certain groups of honors students are required to do a senior honors thesis.

## ADVISING AND CAREERS

## HOW TO SEEK ADVISING

- To schedule an appointment with the advisor, use the Scheduling Assistant (https://calendar.wisc.edu/scheduling-assistant).
- Send an email with brief questions to undergradadvisor@biochem.wisc.edu.
- Drop-in advising hours for quick (10-15 minute) questions, on a first-come, first-serve basis, are posted on the Biochemistry website (https://biochem.wisc.edu/undergraduate_program/advising-information-undergraduate-program) each semester.


## CAREER EXAMPLES

- Take your skills to a rewarding career in product development, quality control, hospitals, biotechnology, university labs, pharmaceuticals, forensics, and more. Possibilities at top organizations and leading companies include positions such as protein purification scientist, lab manager, medical scribe, clinical research coordinator, and food safety and quality chemist.
- Pursue a professional degree in medical, dental, or veterinary school, using your background in biochemistry to aid your admission and success.
- Build on your research experience and continue graduate studies in biochemistry or a related field to shape a career in academia as a professor or in industry.
- Use your science background to inform patent law, science policy and ethics, sales and marketing for science and technology companies, scientific article publishing, and related fields.


## PEOPLE

## PROFESSORS

Amasino, Rick
Ansari, Aseem
Attie, Alan
Bednarek, Sebastian
Butcher, Sam
Clagett-Dame, Margaret
Cox, Mike
Craig, Elizabeth
Fox, Brian (Chair)
Friesen, Paul
Hayes, Colleen
Holden, Hazel
Kimble, Judith
Landick, Bob
Markley, John
Martin, Tom
Mitchell, Julie
Ntambi, James
Palmenberg, Ann
Pike, Wes
Ralph, John
Rayment, Ivan
Record, Tom
Sussman, Mike
Weibel, Doug
Wickens, Marv

## ASSOCIATE PROFESSORS

Henzler-Wildman, Katie
Pagliarini, Dave
Senes, Alessandro

## ASSISTANT PROFESSORS

Hoskins, Aaron
Raman, Vatsan
Romero, Phil
Venturelli, Ophelia
Wildonger, Jill

## ASSOCIATE FACULTY ASSOCIATES

Prost, Lynne
Pennella, Mario

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in biochemistry, build relationships with faculty and staff, and contribute to out-of-classroom learning:

[^6]- Several biochemistry faculty members offer experiential study abroad programs, where students can immerse themselves in research or global health field experiences. Students can review the Biochemistry Major Advising Page (https://www.studyabroad.wisc.edu/ map_biochem.asp) on the International Academic Programs website for information on these and other programs, as well as requirements that can typically be fulfilled abroad and things to consider when fitting study abroad into an academic plan.
- Students are encouraged to get involved in research, whether in the biochemistry department or through other life science or chemistryrelated departments. Research can be performed for either course credit or pay, depending on the opportunity. The Biochemistry website (https://biochem.wisc.edu/undergraduate_program/research-opportunities-undergraduate-program) and the advisor can provide more information on finding research opportunities. Summer funding awards for research are available through the department.


## BIOLOGICAL SYSTEMS ENGINEERING

The biological systems engineering program is a professional program leading to the degree of Bachelor of Science-Biological Systems Engineering jointly granted by the College of Engineering and the College of Agricultural and Life Sciences. A student may study in the General program, or specialize in food and bioprocess engineering, natural resources and environmental engineering, or machinery systems engineering. It is intended for students interested in engineering as applied to all aspects of food and fiber production and biologically related engineering applications. All engineering curricula are designed to meet all criteria for accreditation by the Engineering Accreditation Commission of ABET (http://www.abet.org) (Accreditation Board for Engineering and Technology).

## DEGREES/MAJORS/CERTIFICATES

- Biological Systems Engineering, B.S. (p. 118)


## PEOPLE

## PROFESSORS

Robert Anex, Dave Bohnhoff, Christopher Choi, Sundaram Gunasekaran, Awad Hanna, David Kammel, Krishnapuram Karthikeyan, John Ralph, Douglas Reinemann, John Shutske, Kevin Shinners, Richard Straub, Anita Thompson

ASSOCIATE PROFESSORS<br>Xuejun Pan, Troy Runge (chair)

## ASSISTANT PROFESSORS

Rebecca Larson, Brian Luck

## STAFF

Department Administrator: Susan Reinen
Student Services: Betsy Wood
Payroll: Pam Spahn
Financial: Terry Meyer

## BIOLOGICAL SYSTEMS ENGINEERING, B.S.

Biological systems engineering (BSE) is the application of engineering principles to biological and agricultural systems which greatly impact our food, fiber and renewable energy resources. Since biological systems engineering programs focus heavily on the protection and conservation of natural resources, it is not uncommon for them to be described as sustainable engineering programs.

Within the BSE program a student must enroll in either the General Program area or in one of the following three specialization areas: Machinery Systems Engineering, Natural Resources and Environmental Engineering, or Food and Bioprocess Engineering. The specialization in Food and Bioprocess Engineering is split into a Food Engineering track and a Bioprocess Engineering track.

Students who complete all degree requirements are awarded a Bachelor of Science-Biological Systems Engineering degree. A student who completes one of the three program specializations will have the area of specialization identified on the official transcript. The BSE program, like all undergraduate engineering programs on the UW-Madison campus, is accredited by ABET (http://www.abet.org). Accreditation by ABET is an indication of program quality and has major benefits for individuals seeking registration as a licensed professional engineer. A UW-Madison BSE graduate may apply for licensure as a registered professional engineer once they have passed the Fundamentals of Engineering (FE) exam, obtained four years of qualifying engineering work experience, and have passed the Professional Engineering (PE) exam. To obtain a BSE degree from UW-Madison, a student must have taken (but is not required to have passed) the FE exam as part of their Senior Design sequence. Information about the FE exam can be found at Fundamentals of Engineering Exam (http://ncees.org/exams/fe-exam).

Graduates work in career fields associated with the growth, harvest, transportation, processing and storage of food, feedstuffs, biomass for energy production and forestry products. This includes, but is not limited to, jobs involving the design, construction and management of: bio-energy production facilities, greenhouses, food processing plants, soil management systems and erosion control structures, irrigation and drainage systems, wastewater and solid waste treatment/recycling operations, animal housing facilities, aquaculture enterprises, systems for improved air quality, and equipment for agricultural production, material handling, processing, and packaging. Job opportunities for BSE graduates remain plentiful and show no signs of decreasing given (1) the increase in world population and corresponding increasing need for food, fiber and renewable energy, (2) the measurable shortage of highly trained technical personnel in the United States, and (3) the constantly expanding emphasis on protection and conservation of natural resources.

The UW-Madison BSE program is traditionally known for its emphasis on undergraduate education which is reflected in outstanding one-on one advising and smaller class sizes.

The BSE program requires completion of a minimum of 125 credits to be eligible for graduation. Note that this is higher than the minimum for other CALS programs.

## BIOLOGICAL SYSTEMS ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

The Biological Systems Engineering Department recognizes that our graduates will choose to use the knowledge and skills they have acquired during their undergraduate years to pursue a wide variety of career and life goals, and we encourage this diversity of paths. Whatever path graduates choose, be it a job, graduate school, or volunteer service, be it in engineering or another field, we have for our graduates the following objectives; that they will:

1. Exhibit strong skills in problem solving, leadership, teamwork, and communication;
2. Use these skills to contribute to their communities;
3. Make thoughtful, well-informed career choices; and
4. Demonstrate a continuing commitment to and interest in their own and others' education.

## HOW TO GET IN

Entry to this professional program requires students to meet the five admission requirements detailed below. Students are admitted to the department as pre-Biological Systems Engineering until they meet the admission criteria. Admission eligibility must be confirmed by the department.

1. Must complete a minimum of 24 degree credits.
2. Must have completed a minimum of 17 graded credits of calculus, statistics, chemistry, computer science, statics, biology, and physics courses required for a BSE degree.
3. Must have a math and science grade point average (M\&SGPA) of at least 2.80 with a minimum grade of $C$ in every course used to calculate the M\&SGPA. The M\&SGPA is based on: math courses numbered 217 and above; statistics courses numbered 224 and above; all chemistry courses; all biology courses (courses with biological science breadth); computer sciences courses numbered 302 and above; EM A 201 Statics; and physics courses numbered 201 and above. For any course that a student repeats, only the most recent grade will be used in the calculation. Any transfer course from another university that is included in the previous list must be included in the GPA calculation. To calculate the M\&SGPA, see Applications and Forms (https://bse.wisc.edu/undergraduate-studies/student-resources) on the BSE website.
4. Must be in good academic standing-i.e., not on academic probation or dropped status.
5. Must successfully complete introductory chemistry (CHEM 103 \& CHEM 104, or CHEM 109, or equivalent) and math through MATH 222.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to
the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## NAMED OPTIONS WITHIN THE MAJOR

Students may complete the Biological Systems Engineering General Program or select a Named Option. The course requirements on this page represent the general program. Students are encouraged to consider one of the Named Options (Food and Bioprocess Engineering; Machinery Systems Engineering; or Natural Resources and Environmental Engineering). Links to learn more about these options, including the course requirements, are included below.

- Biological Systems Engineering: Food and Bioprocess Engineering (p. 126)
- Biological Systems Engineering: Machinery Systems Engineering (p. 129)
- Biological Systems Engineering: Natural Resources and Environmental Engineering (p. 131)


## MAJOR REQUIREMENTS

| Code Title | Credits |
| :--- | ---: |
| Major Requirements |  |
| Common Requirements | 53 |
| General Program Classes and Technical Electives | 43 |
| Capstone | 5 |
| Total Credits | 101 |

## COMMON REQUIREMENTS

Code

Title
Credits

| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| :---: | :---: | :---: |
| MATH 222 | Calculus and Analytic Geometry 2 | 4 |
| MATH 234 | Calculus--Functions of Several Variables | 4 |
| MATH 319 | Techniques in Ordinary Differential Equations | 3 |
| or MATH 320 | Linear Algebra and Differential Equations |  |
| STAT 324 | Introductory Applied Statistics for Engineers | 3 |

## Chemistry

Select one of the following: 5-9

| CHEM 109 | Advanced General Chemistry <br> (Recommended) |
| :--- | :--- |
| CHEM 103 | General Chemistry I <br> and General Chemistry II ${ }^{1}$ |
| \& CHEM 104 |  |
| Biology | Quantitative Techniques for <br> Biological Systems |

One additional Biological Science breadth Course; the
following courses are preferred choices: ${ }^{2}$

| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |
| :---: | :---: |
| ZOOLOGY 153 | Introductory Biology |
| BIOLOGY/BOTANY 130 | General Botany |
| BIOLOGY/ <br> ZOOLOGY 101 | Animal Biology |


| MICROBIO 101 | General Microbiology ${ }^{3}$ |  |
| :---: | :---: | :---: |
| MICROBIO 303 | Biology of Microorganisms ${ }^{3}$ |  |
| Physics |  |  |
| E M A 201 | Statics ${ }^{4}$ | 3 |
| PHYSICS 202 | General Physics | 5 |
| Foundation |  |  |
| BSE 270 | Introduction to Computer Aided Design | 3 |
| Select one of the following: |  | 3 |
| COMP SCI 310 | Problem Solving Using Computers (Preferred) |  |
| CBE 255 | Introduction to Chemical Process Modeling |  |
| CIV ENGR/G LE 291 | Problem Solving Using Computer Tools |  |
| Select one of the following: |  | 3 |
| I SY E 313 | Engineering Economic Analysis (Preferred) |  |
| M E 314 | Manufacturing Fundamentals |  |
| ACCT I S 300 | Accounting Principles |  |
| $\begin{aligned} & \text { ECON/FINANCE } \\ & 300 \end{aligned}$ | Introduction to Finance |  |
| GEN BUS 310 | Fundamentals of Accounting and Finance for Non-Business Majors |  |
| Core |  |  |
| BSE 249 | Engineering Principles for Biological Systems ${ }^{5}$ | 3 |
| or CBE 250 | Process Synthesis |  |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE 308 | Career Management for Engineers | 1 |
| Total Credits |  | 53-60 |
| Taking the combination of CHEM 103 and CHEM 104 instead of CHEM 109 may increase the total minimum number of credits required for graduation. |  |  |
| Any biological science course of 2 or more credits is accepted. Additional courses taken may be counted as Technical Electives. |  |  |
| MICROBIO 101 or MICROBIO 303 required for Food \& Bioprocess Engineering specialization. |  |  |
| 4 E M A 201 Statics is an acceptable prerequisite for PHYSICS 202 General Physics. |  |  |
| 5 Students selecting the Food \& Bioprocess Engineering option who plan to enroll in CBE 310 Chemical Process Thermodynamics and CBE/B M E 320 Introductory Transport Phenomena must take CBE 250 here as a prerequisite. Students selecting the Food \& Bioprocess Engineering option who plan to enroll in M E 361 Thermodynamics and M E 363 Fluid Dynamics are recommended to take BSE 249 here. |  |  |
| GENERAL PROGRAM REQUIREMENTS |  |  |
| Code | Title | Credits |
| M E 361 | Thermodynamics ${ }^{1}$ | 侕 |
| or CBE 310 | Chemical Process Thermodynamics |  |
| Select one of the fol | wing: ${ }^{1}$ | 3-4 |


| M E 363 | Fluid Dynamics |  |
| :---: | :---: | :---: |
| CIV ENGR 310 | Fluid Mechanics |  |
| B M E/CBE 320 | Introductory Transport Phenomena |  |
| BSE 464 | Heat and Mass Transfer in Biological Systems | 3 |
| $\begin{aligned} & \text { E M A } 303 \\ & \text { or M E } 306 \end{aligned}$ | Mechanics of Materials <br> Mechanics of Materials | 3 |
| Select a minimum of three of the following: |  | 6-9 |
| BSE 201 | Land Surveying Fundamentals |  |
| BSE/ <br> ENVIR ST 367 | Renewable Energy Systems |  |
| BSE/CIV ENGR/ SOIL SCI 372 | On-Site Waste Water Treatment and Dispersal |  |
| BSE/FOOD SCI/ <br> M E 441 | Rheology of Foods and Biomaterials |  |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources |  |
| BSE 461 | Food and Bioprocessing Operations |  |
| BSE 472 | Sediment and Bio-Nutrient Engineering and Management |  |
| BSE 473 | Irrigation and Drainage Systems Design |  |
| BSE/M E 475 | Engineering Principles of Agricultural Machinery |  |
| BSE/M E 476 | Engineering Principles of Off-Road Vehicles |  |
| BSE 571 | Small Watershed Engineering |  |
| $\begin{aligned} & \text { BSE/ } \\ & \text { FOOD SCI } 642 \end{aligned}$ | Food and Pharmaceutical Separations |  |

Select a minimum of 9 credits of 300 level or above non- 9
BSE engineering courses
Total Credits
27-31
1 Take BSE 249 and M E 361 and M E 364, or take CBE 250 and CBE 310 and CBE/B M E 320.

## TECHNICAL ELECTIVES

Select courses from one or more of the following four technical elective categories to bring the total number of credits in the General Program Area or in the selected specialization area to 43. See the BSE Undergraduate Student Handbook for a list of recommended technical electives for various areas of specialization.

| A. INTRODUCTION TO ENGINEERING COURSES <br> (FRESHMEN ONLY) |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| INTEREGR 101 | Contemporary Issues in the | 2 |
|  | Engineering Profession |  |
| INTEREGR 102 | Introduction to Society's | 2 |
|  | Engineering Grand Challenges |  |
| INTEREGR 110 | Introduction to Engineering | 1 |
| INTEREGR 111 | Introduction to the Engineering | 2 |
| INTEREGR 160 | Design Process and Profession | Introduction to Engineering Design |

## B. INDEPENDENT STUDY/INSTRUCTION COURSES

CALS or CoE courses with a $001,299,399$, or 699 course number. No more than 3 credits of coursework in this category can be used to meet technical elective requirements.

## C. UPPER-LEVEL COURSES

## Part 1. Upper-Level Engineering Courses

This includes BSE courses not taken to meet other curricular requirements. This does not include independent study/ instruction courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Any Engineering course numbered 300 or above |  |  |
| E M A 202 | Dynamics | 3 |
| or M E 240 | Dynamics |  |

## Part 2. Upper-Level Science Courses

This includes BSE courses not taken to meet other curricular requirements. This does not include independent study/ instruction courses.

| Code | Title | Credits |
| :--- | :--- | :---: |
| Advanced biological, natural, and physical science |  |  |
| courses (i.e., courses with a B, N, or P designation) |  |  |
| CHEM 341 | Elementary Organic Chemistry |  |
| CHEM 342 | Elementary Organic Chemistry <br> Laboratory | 3 |
| CHEM 343 | Introductory Organic Chemistry | 1 |
| CHEM 344 | Introductory Organic Chemistry <br> Laboratory | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 2 |
| CHEM/M S \& E 421 | Polymeric Materials | 3 |
| AGRONOMY/ATM | Environmental Biophysics | 3 |
| OCN/SOIL SCI 532 |  | 3 |

## D. LOWER-LEVEL SCIENCE AND ENGINEERING COURSES, BREADTH COURSES

Elementary and intermediate biological, natural and physical science courses except elementary and intermediate math courses; College of Engineering courses with a 100 or 200 level designation; College of Agricultural and Life Sciences courses, Institute of Environmental Studies courses, and/or School of Business courses. Independent study/instruction courses cannot be counted in this category. No more than 12 credits of coursework in this category can be used to meet technical elective requirements.

## CAPSTONE

| Code | Title | Credits |
| :--- | :--- | ---: |
| BSE 508 | Biological Systems Engineering <br> Design Practicum I |  |
| BSE 509 | Biological Systems Engineering <br> Design Practicum II |  |
| Fundamentals of Engineering Exam 1 |  |  |
| 1 | Grades for BSE 509 will not be posted until proof of examination is <br> presented. |  |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
|  | Abroad/Study Away programs. |
| Quality of | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. The ability to analyze systems, components and processes. This includes: the ability to apply knowledge of mathematics, science, and engineering fundamentals; the ability to use the techniques and tools of modern engineering practice; the ability to identify, formulate, and solve engineering problems.
2. The ability to create a system, component, or process to meet desired needs within realistic constrain ts such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
3. The ability to formulate and conduct basic investigations such as laboratory experiments, prototype tests, field trials, computer simulations and market analyses.
4. The ability to identify important resources, and to retrieve, interpret, analyze and critique information for use in solving engineering problems and conducting basic investigations.
5. The ability to communicate effectively. This includes: the ability to effectively orally communicate; the ability to write in a clear, concise, grammatically correct and organized manner; the ability to document work activities and properly archive information; the ability to develop appropriate illustrations including hand sketches, computer generated drawings/graphs and pictures.
6. An understanding of professional and ethical responsibility.
7. The ability to function on multidisciplinary teams.
8. The broad education necessary to understand and assess the impact of engineering solutions in a global, economic, environmental, and societal context.
9. Recognition of the need, and the ability to engage in lifelong learning.
10. Knowledge of contemporary issues.

FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOURYEAR PLAN-GENERAL PROGRAM

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 MATH 222 | 4 |
| Biological Science Course | 3 I SYE 313 | 3 |
| CHEM 109 ${ }^{1}$ | 5 COMP SCI 310 | 3 |
| General Education Course | 3 INTEREGR 170 or 110 | 2 |
|  | EP D 155 | 2 |
|  | 16 | 14 |
| Total Credits 30 |  |  |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| E M A 201 | 3 BSE 349 | 3 |
| MATH 234 | 4 MATH 320 | 3 |
| BSE 249 | 3 M E 306 | 3 |
| BSE 270 | 3 PHYSICS 202 | 5 |
| General Education Course | 3 BSE 308 | 1 |


|  | 16 | 15 |
| :---: | :---: | :---: |
| Total Credits 31 |  |  |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| M E 361 | 3 E P D 397 (or other COMM B) | 3 |
| BSE Course | 3 M E 363 | 3 |
| STAT 324 | 3 BSE 508 | 2 |
| 300 level or higher nonBSE engineering course | 3 BSE Course | 3 |
| Technical Elective Course | 3 General Education Course | 6 |
| General Education Course | 3 BSE 365 | 3 |
|  | 18 | 20 |

Total Credits 38

## Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| BSE 509 | 3 BSE 464 | 3 |
| BSE Course | 3 General Education Course | 3 |
| Technical Electives | 4300 level or higher nonBSE engineering course | 3 |
| General Education Course | 3 Free Elective Course | 3 |


| 300 level or higher nonBSE engineering course | 3 Technical Electives |
| :---: | :---: |
|  | 16 |
| Total Credits 32 |  |
| 1 If CHEM 103 \& CHEM suggested to take CH in the spring semest semester of year 2 . <br> - Need 125 credits to | aken in place of CHEM 109, it is in the fall semester and CHEM 104 1, and move I SY E 313 to the fall degree. |

## SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOURYEAR PLAN-FOOD AND BIOPROCESS ENGINEERING SPECIALIZATION-BIOPROCESS ENGINEERING TRACK

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 COMP SCI 310 | 3 |
| CHEM 109 | 5 INTEREGR 170 or 110 | 2 |
| EPD 155 | 2 MATH 222 | 4 |
| General Education | 3 MICROBIO 101 | 5 |
| Course | \& MICROBIO 102 |  |
|  | 15 | 14 |


| Total Credits 29 |  |  |
| :--- | :---: | ---: |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| BSE 249 or CBE 250 | 3 BSE 349 | 3 |
| MATH 234 | 4 MATH 320 | 3 |
| CHEM 341 | 3 E P D 397 | 3 |
| E M A 201 | 3 PHYSICS 202 | 5 |
| BSE 270 | 3 BSE 308 | 1 |
|  | 16 | 15 |


| Total Credits 31 |  |  |
| :--- | :---: | ---: |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| M E 361 | 3 BSE 508 | 2 |
| BSE/ENVIR ST 367 | 3 BSE 364 | 3 |
| BIOCHEM 501 | 3 M E 363 or CBE 320 | $3-4$ |
| STAT 324 | 3 Technical Electives | 3 |
| General Education | 3 BSE 365 | 3 |
| Course | General Education | 3 |
|  | Courses |  |
|  | 15 | $17-18$ |


| Total Credits 32-33 |  |  |
| :---: | :---: | :---: |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| BSE 461 | 3 BSE 464 | 3 |
| BSE 509 | 3 General Education Courses | 6 |
| BSE 460 | 3 BSE Breadth Requirement | 3 |


| Technical Electives | $2-3$ Free Elective Course | 3 |
| :--- | ---: | ---: |
| General Education <br> Course | 3 |  |
| ISY E 313 | 3 | 15 |

## Total Credits 32-33

1 If CHEM 103 \& CHEM 104 is taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of year 1 and move MICROBIO 101/MICROBIO 102 to the first semester of year 2.

- Need 125 credits to complete degree.

SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOURYEAR PLAN-FOOD AND BIOPROCESS ENGINEERING SPECIALIZATION-FOOD ENGINEERING TRACK

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 MICROBIO 101 | 3 |
| CHEM 109 | 5 COMP SCI 310 | 3 |
| E P D 155 | 2 INTEREGR 170 or 110 | 2 |
| General Education <br> Course | 3 MATH 222 | 4 |
|  | I SY E 313 |  |
|  | 15 | 3 |

Total Credits 30
Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| BSE 249 or CBE 250 | 3 BSE 349 | 3 |
| MATH 234 | 4 General Education | 3 |
|  | Course |  |
| E M A 201 | 3 MATH 320 | 3 |
| BSE 270 | 3 PHYSICS 202 | 5 |
| CHEM 341 | 3 BSE 308 | 1 |
|  | 16 | 15 |

Total Credits 31

| Junior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| FOOD SCI 410 | 3 BSE 365 | 3 |
| MICROBIO/ | 3 FOOD SCI 432 | 3 |
| FOOD SCI 325 |  |  |
| M E 361 or CBE 310 | 3 BSE 508 | 2 |
| E P D 397 | 3 M E 363 or CBE 320 | $3-4$ |
| STAT 324 | 3 BSE 364 | 3 |
|  | 15 | $14-15$ |

Total Credits 29-30

## Senior

Fall Credits Spring Credits
FOOD SCI 532

4 General Education 6

| BSE 509 | 3 BSE Breadth <br> Requirement | 3 |
| :--- | :---: | ---: |
| General Education 3 BSE 464 <br> Course  | 3 Technical Elective | 3 |
| BSE 461 | $3-4$ Free Elective Course | 3 |
| Technical Electives | $16-17$ | 3 |
|  |  | 18 |

Total Credits 34-35
1 If CHEM 103 \& CHEM 104 is taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of year 1, and move I SY E 313 to year 2.

- Need 125 credits to complete degree.

SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOURYEAR PLAN-MACHINERY SYSTEMS ENGINEERING SPECIALIZATION

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 MATH 222 | 4 |
| CHEM 109 ${ }^{1}$ | 5 PHYSICS 202 | 5 |
| General Education Course | 3 INTEREGR 170 or 110 | 2 |
| EPD 155 | 2 M E 231 | 2 |
|  | COMP SCI 310 | 3 |
|  | 15 | 16 |
| Total Credits 31 |  |  |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| MATH 234 | 4 M E 361 | 3 |
| General Education Course | 3 M E 306 | 3 |
| E M A 201 | 3 ME /E M A 307 | 1 |
| Biological Science Course | 3 STAT 324 | 3 |
| BSE 249 | 3 BSE 349 | 3 |
|  | EM A 202 | 3 |
|  | BSE 308 | 1 |
|  | 16 | 17 |

Total Credits 33

| Junior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| BSE/M E 475 | 3 M E 340 | 3 |
| MATH 320 | 3 BSE/M E 476 | 3 |
| M E 363 | 3 EP P 397 | 3 |
| I SY E 313 | 3 M E 313 | 3 |
| BSE 270 | 3 BSE 508 | 2 |
|  | BSE 365 | 3 |
|  | 15 | 17 |

[^7]\(\left.\begin{array}{lcr}Senior \& Credits Spring <br>
Fall \& 3 General Education <br>

Courses\end{array}\right)\)| Credits |  |
| ---: | ---: |
| BSE 509 | 3 Technical Electives |$\quad 6$

## Total Credits 29

1 If CHEM 103 \& CHEM 104 is taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of year 1, and move M E 231M E 231 to Fall semester of year 2. M E 342 can be taken without M E 331 .

- Need 125 credits to complete degree.

SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOUR-YEAR PLAN-NATURAL RESOURCES AND ENVIRONMENT SPECIALIZATION

| Freshman | Credits Spring | Credits |
| :--- | :---: | ---: |
| Fall | 5 MATH 222 | 4 |
| MATH 221 | 2 SOIL SCI 301 or 230 | $3-4$ |
| E P D 155 | 5 COMP SCI 310 | 3 |
| CHEM 109 | 3 INTEREGR 170 or 110 | 2 |
| General Education | Biological Sciences |  |
| Course | Course |  |
|  | 15 | 3 |
| Total Credits 30-31 |  | $15-16$ |
| Sophomore | Credits Spring |  |
| Fall | 3 STAT 324 |  |
| E M A 201 | 4 BSE 349 |  |
| MATH 234 | 3 PHYSICS 202 | 3 |
| BSE 249 | 3 BSE 472 | 3 |
| BSE 270 | 1 BSE 308 | 5 |
| BSE 201 | 3 | 3 |
| General Education |  | 1 |
| Course |  |  |

$17 \quad 15$
Total Credits 32

| Junior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 320 | 3 E P D 397 | 3 |
| BSE 473 | 2 E M A 303 | 3 |
| CIV ENGR 310 | 3 BSE 508 | 2 |
| BSE/CIV ENGR/ | 2 BSE 571 | 3 |
| SOIL SCI 372 |  |  |
| I SY E 313 | 3 General Education | 3 |


| Technical Elective | 3 BSE 365 | 3 |
| :---: | :---: | :---: |
|  | 16 | 17 |
| Total Credits 33 |  |  |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| BSE 509 | 3 Technical Electives | 6 |
| M E 361 | 3 General Education Courses | 6 |
| Technical Elective | 3 Free Elective Course | 3 |
| BSE Breadth Requirement | 3 |  |
| General Education Course | 3 |  |
|  | 15 | 15 |
| Total Credits 30 |  |  |
| 1 If CHEM 103 \& CHEM 104 is taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of year 1, and move Biological Science to the fall semester of year 2. SOIL SCI 301 is offered Fall semesters and is a 4 credit alternative to SOIL SCI/ENVIR ST/GEOG 230. Plan BSE 473BSE 473 for Fall term of year 3 or 4 as available in odd years. <br> - Need 125 credits to complete degree. |  |  |

## ADVISING AND CAREERS

Students are assigned a faculty advisor when they declare the major or become pre-biological systems engineering. Prospective students should contact the department at bse@wisc.edu or 608-262-3310 for more information.

Graduates work in career fields associated with the growth, harvest, transportation, processing and storage of food, feedstuffs, biomass for energy production and forestry products. This includes, but is not limited to, jobs involving the design, construction and management of: bio-energy production facilities, greenhouses, food processing plants, soil management systems and erosion control structures, irrigation and drainage systems, wastewater and solid waste treatment/recycling operations, animal housing facilities, aquaculture enterprises, systems for improved air quality, and equipment for agricultural production, material handling, processing, and packaging. Job opportunities for BSE graduates remain plentiful and show no signs of decreasing given (1) the increase in world population and corresponding increasing need for food, fiber and renewable energy, (2) the measurable shortage of highly trained technical personnel in the United States, and (3) the constantly expanding emphasis on protection and conservation of natural resources.

## PEOPLE

## PROFESSORS

Robert Anex, Dave Bohnhoff, Christopher Choi, Sundaram Gunasekaran, Awad Hanna, David Kammel, Krishnapuram Karthikeyan, John Ralph, Douglas Reinemann, John Shutske, Kevin Shinners, Richard Straub, Anita Thompson

## ASSOCIATE PROFESSORS

Xuejun Pan, Troy Runge (chair)

## ASSISTANT PROFESSORS

Rebecca Larson, Brian Luck

## STAFF

Department Administrator: Susan Reinen
Student Services: Betsy Wood
Payroll: Pam Spahn
Financial: Terry Meyer

## WISCONSIN EXPERIENCE

Through our curriculum, BSE students have opportunities for many high-impact learning experiences including hands-on lab courses, involvement in student organizations, and BSE's capstone design classes. Introductory engineering courses and career management courses are built into the curriculum to make sure you have a community to succeed both at UW and after you graduate.

Beyond traditional classes, our students work or perform independent study with professors not only in BSE but throughout the campus. Many campus labs and shops need students who know how to design and build systems, skills at which you will excel through your experiences in BSE. Outside the university, BSE students can take advantage of internships and co-ops, but are also in high demand for programs such as Peace Corps and Engineers without Borders. BSE has an active student organization ASABE (http://asabe.bse.wisc.edu), where students network with professionals and provide service projects to the community.

As a BSE student, you will be proud that you are contributing to the social and economic well-being of Wisconsin and beyond by designing solutions to feed and fuel the world in a sustainable manner. Many of our students go on to work in the following areas:

- Machinery systems that support the agricultural production sector including precision agriculture, cultural and processing technology, and logistics for crop and animal production with a focus on dairy facilities and milking technology.
- Natural resource systems that support both agricultural producers and environmental agencies in the areas of air and water quality, and waste mitigation and utilization.
- Food production systems that support the food industry striving for improvements in food processing, safety, and security.
- Bioprocessing systems that support bioenergy and bioproducts industries including biomass production and logistics systems, biomass conversion technologies, and forest products.

Or, you may take the skills you learn through your experiences at BSE and apply them to a brand new challenge. We are excited to see what you will do.

## RESOURCES AND SCHOLARSHIPS

## THE BSE SHOP

The Biological Systems Engineering Shop is dedicated to providing BSE students a hands-on experience with machining equipment found throughout the production sector of industry. The shop, located at 540 Elm Drive, is open to all BSE students who have completed the shop
safety form (renewed annually) and have read and understood the Shop Rules and Regulations. In addition, a yearly refresher is required which consists of watching the shop safety presentation and completing a short, yearly safety quiz. Whether you have never worked in a shop before, or already feel at home working with this type of machinery, we welcome you to the BSE Shop and want to make you feel comfortable in this learning environment.

BSE students are welcome to learn various machining and metal fabrication techniques as well as woodworking skills. These skills are aimed at improving students' understanding of the design, fabrication, and assembly processes through one-on-one training and handson operation of the machines-before they enter the workforce. To operate any of the shop machines, students must first be authorized by completing the online Canvas course and provide a one-on-one, handson operation with the shop supervisor to demonstrate understanding of the machine's controls and capabilities. To maintain a safe work environment, the shop is under 24 -hour video surveillance. For additional details, please see Shop Info for Students (https://bse.wisc.edu/bse-shop-home/shop-info-for-students).

## CAE COMPUTER LAB

A dedicated student computer lab in room 217 of the Agricultural Engineering Building offers 10 computer workstations and space for group work. These machines have the same software packages as those found in Computer Aided Engineering labs on the Engineering campus. A CAE printer is also provided.

## THE B1 LOUNGE

In the basement of the Agricultural Engineering Building is a large room with multiple tables and chairs that can be used for group study or individual work. Department-wide social events are also held here. A microwave oven is available for student use.

## SCHOLARSHIPS

All BSE students are encouraged to apply for CALS scholarships annually through the common scholarship application. Each year the department makes specific funding decisions for more than two dozen outstanding students.

## ACCREDITATION

## Accreditation

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## BIOLOGICAL SYSTEMS <br> ENGINEERING: FOOD AND BIOPROCESS ENGINEERING

Food and bioprocess engineers develop and manage equipment and systems that process and distribute food and other biologically based materials. They are required by the food industry to help develop processes that add value to food products. These processing technologies are designed to improve the storage life and marketability of food products, reduce their transportation costs, handle processing wastes, and develop alternative uses for biological materials. (For
example, newspaper and soy flour are used to make the construction material, Environ ${ }^{\text {TM }}$, and corn stalks can be used to make chemical absorbent pads.)

The food industry makes up one of the largest segments of our nation's economy and continues to enjoy steady growth due to the ever-changing needs of consumers and increased awareness of nutritional and environmental issues. Food and bioprocess engineers play a vital role in meeting this need. From potato chips to microwavable entrees, food and bioprocess engineers continue to develop processes to convert raw materials from the farm to food products for the dining room table.

## REQUIREMENTS

| Code Title | Credits |
| :--- | ---: |
| Major Requirements |  |
| Common Requirements | 53 |
| Specialization \& Technical Electives | 43 |
| Capstone | 5 |
| Total Credits | 101 |

## COMMON REQUIREMENTS

See Major Requirements (p. 119).

## FOOD \& BIOPROCESS ENGINEERING SPECIALIZATION

This is a named option that will appear on the student's transcript upon completion.


| BSE 364 | Engineering Properties of Food and <br> Biological Materials |
| :--- | :--- | ---: |
| BSE 461 | Food and Bioprocessing Operations |
| Select one of the following BSE breadth courses: |  |
| BSE/ <br> ENVIR ST 367 | Renewable Energy Systems |
| BSE/CIV ENGR/ <br> SOIL SCI 372 | On-Site Waste Water Treatment and <br> Dispersal |
| BSE 460 | Biorefining: Energy and Products <br> from Renewable Resources |
| BSE 472 | Sediment and Bio-Nutrient <br> Engineering and Management |
| BSE 473 | Irrigation and Drainage Systems <br> Design |
| BSE/M E 475 | Engineering Principles of <br> Agricultural Machinery |
| BSE/M E 476 | Engineering Principles of Off-Road <br> Vehicles |
| BSE 571 | Small Watershed Engineering |
| Total Credits |  |

## BIOPROCESS ENGINEERING TRACK

| Code | Title | Credits |
| :---: | :---: | :---: |
| MICROBIO 102 or MICROBIO 304 | General Microbiology Laboratory Biology of Microorganisms Laboratory | 2 |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| BSE 364 | Engineering Properties of Food and Biological Materials | 3 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| BSE 461 | Food and Bioprocessing Operations | 3 |
| Select one of the following BSE breadth courses: |  |  |
| BSE/CIV ENGR/ SOIL SCI 372 | On-Site Waste Water Treatment and Dispersal |  |
| BSE/FOOD SCI/ M E 441 | Rheology of Foods and Biomaterials |  |
| BSE 472 | Sediment and Bio-Nutrient Engineering and Management |  |
| BSE 473 | Irrigation and Drainage Systems Design |  |
| BSE/M E 475 | Engineering Principles of Agricultural Machinery |  |
| BSE/M E 476 | Engineering Principles of Off-Road Vehicles |  |
| BSE 571 | Small Watershed Engineering |  |
| Total Credits |  | 17 |

## TECHNICAL ELECTIVES

Select courses from one or more of the following four technical elective categories to bring the total number of credits in the General Program Area or in the selected specialization area to 43. See the BSE Undergraduate Student Handbook for a list of recommended technical electives for various areas of specialization.


## B. INDEPENDENT STUDY/INSTRUCTION COURSES

CALS or CoE courses with a $001,299,399$, or 699 course number. No more than 3 credits of coursework in this category can be used to meet technical elective requirements.

## C. UPPER-LEVEL COURSES

## Part 1. Upper-Level Engineering Courses

This includes BSE courses not taken to meet other curricular requirements. This does not include independent study/ instruction courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Any Engineering course numbered 300 or above |  |  |
| E M A 202 | Dynamics | 3 |
| or M E 240 | Dynamics |  |

## Part 2. Upper-Level Science Courses

This includes BSE courses not taken to meet other curricular requirements. This does not include independent study/ instruction courses.
Code Title Credits

Advanced biological, natural, and physical science courses (i.e., courses with a B, N, or P designation)

| CHEM 341 | Elementary Organic Chemistry | 3 |
| :--- | :--- | :---: |
| CHEM 342 | Elementary Organic Chemistry <br> Laboratory | 1 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry <br>  <br> Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| CHEM/M S \& E 421 | Polymeric Materials | 3 |
| AGRONOMY/ATM | Environmental Biophysics | 3 |
| OCN/SOIL SCI 532 |  |  |

## D. LOWER-LEVEL SCIENCE AND ENGINEERING COURSES, BREADTH COURSES

Elementary and intermediate biological, natural and physical science courses except elementary and intermediate math courses; College of Engineering courses with a 100 or 200 level designation; College of Agricultural and Life Sciences courses, Institute of Environmental Studies courses, and/or School of Business courses. Independent study/instruction courses cannot be counted in this
category. No more than 12 credits of coursework in this category can be used to meet technical elective requirements.

## CAPSTONE

| Code | Title | Credits |
| :--- | :--- | ---: |
| BSE 508 | Biological Systems Engineering <br> Design Practicum I |  |
| BSE 509 | Biological Systems Engineering <br> Design Practicum II |  |
| Fundamentals of Engineering Exam ${ }^{1}$ |  |  |
| 1 | Grades for BSE 509 will not be posted until proof of examination is <br> presented. |  |

## FOUR-YEAR PLAN

SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOURYEAR PLAN-FOOD AND BIOPROCESS ENGINEERING SPECIALIZATION-BIOPROCESS ENGINEERING TRACK

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 COMP SCI 310 | 3 |
| CHEM 109 |  |  |
| EPD 155 | 5 INTEREGR 170 or 110 | 2 |
| General Education | 2 MATH 222 | 4 |
| Course | 3 MICROBIO 101 | 5 |
|  | \& MICROBIO 102 |  |
| 15 | 14 |  |


| Total Credits 29 |  |  |
| :--- | :---: | ---: |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| BSE 249 or CBE 250 | 3 BSE 349 | 3 |
| MATH 234 | 4 MATH 320 | 3 |
| CHEM 341 | 3 E P D 397 | 3 |
| E M A 201 | 3 PHYSICS 202 | 5 |
| BSE 270 | 3 BSE 308 | 1 |
|  | 16 | 15 |

Total Credits 31

| Junior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| M E 361 | 3 BSE 508 | 2 |
| BSE/ENVIR ST 367 | 3 BSE 364 | 3 |
| BIOCHEM 501 | 3 M E 363 or CBE 320 | $3-4$ |
| STAT 324 | 3 Technical Electives | 3 |
| $\begin{array}{l}\text { General Education } \\ \text { Course }\end{array}$ | 3 BSE 365 | 3 |
|  | General Education |  |
|  | Courses |  |$]$| 3 |
| :--- |

## Total Credits 32-33

## Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| BSE 461 | 3 BSE 464 | 3 |
| BSE 509 | 3 General Education Courses | 6 |
| BSE 460 | 3 BSE Breadth Requirement | 3 |
| Technical Electives | 2-3 Free Elective Course | 3 |
| General Education Course | 3 |  |
| I SYE 313 | 3 |  |

## Total Credits 32-33

1 If CHEM 103 \& CHEM 104 is taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of year 1 and move MICROBIO 101/MICROBIO 102 to the first semester of year 2.

- Need 125 credits to complete degree.

SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOURYEAR PLAN-FOOD AND BIOPROCESS ENGINEERING SPECIALIZATION-FOOD ENGINEERING TRACK

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 MICROBIO 101 | 3 |
| CHEM $109{ }^{1}$ | 5 COMP SCI 310 | 3 |
| EP D 155 | 2 INTEREGR 170 or 110 | 2 |
| General Education Course | 3 MATH 222 | 4 |
|  | I SYE313 | 3 |
|  | 15 | 15 |
| Total Credits 30 |  |  |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| BSE 249 or CBE 250 | 3 BSE 349 | 3 |
| MATH 234 | 4 General Education Course | 3 |
| E M A 201 | 3 MATH 320 | 3 |
| BSE 270 | 3 PHYSICS 202 | 5 |
| CHEM 341 | 3 BSE 308 | 1 |
|  | 16 | 15 |
| Total Credits 31 |  |  |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| FOOD SCI 410 | 3 BSE 365 | 3 |
| MICROBIO/ <br> FOOD SCI 325 | 3 FOOD SCI 432 | 3 |
| M E 361 or CBE 310 | 3 BSE 508 | 2 |
| EP D 397 | 3 M E 363 or CBE 320 | 3-4 |


| STAT 324 | 3 BSE 364 | 3 |
| :--- | :---: | ---: |
|  | 15 | $14-15$ |
| Total Credits 29-30 |  |  |
| Senior | Credits Spring |  |
| Fall | 4 General Education | Credits |
| FOOD SCI 532 | Courses | 6 |
|  | 3 BSE Breadth |  |
| BSE 509 | Requirement | 3 |
| General Education | 3 BSE 464 | 3 |
| Course | 3 Technical Elective | 3 |
| BSE 461 | $3-4$ Free Elective Course | 3 |
| Technical Electives | $16-17$ | 3 |

## Total Credits 34-35

1 If CHEM 103 \& CHEM 104 is taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of year 1, and move I SY E 313 to year 2.

- Need 125 credits to complete degree.


## BIOLOGICAL SYSTEMS ENGINEERING: MACHINERY SYSTEMS ENGINEERING

Machinery systems engineering is what many students initially perceive biological systems engineering to be. These engineers are trained to design machines for production agriculture and construction. Concepts covered in this field include power transmission, traction, hydraulic power, and crop handling, such as planting and harvesting.

Over the past 50 years, machines have improved production efficiency in all aspects of life. Machinery systems engineers have played a key role in moving society from the highly manual culture of the early 20th century to the highly technical culture of the late 20th century. Even with these advances, the job of the machinery systems engineer is not complete. Concern for our natural environment and worker safety, and the constant desire to reduce costs and energy consumption while improving production efficiency, will continue to challenge machinery systems engineers.

## REQUIREMENTS

| Code Title | Credits |
| :--- | ---: |
| Major Requirements |  |
| Common Requirements | 53 |
| Specialization \& Technical Electives | 43 |
| Capstone | 5 |
| Total Credits | 101 |

## COMMON REQUIREMENTS

See Major Requirements (p. 119).

## MACHINERY SYSTEMS ENGINEERING SPECIALIZATION

This is a named option that will appear on the student's transcript upon completion.

| Code | Title | Credits |
| :---: | :---: | :---: |
| BSE/M E 475 | Engineering Principles of Agricultural Machinery | 3 |
| BSE/M E 476 | Engineering Principles of Off-Road Vehicles | 3 |
| $\begin{aligned} & \text { E M A } 202 \\ & \quad \text { or M E } 240 \end{aligned}$ | Dynamics <br> Dynamics | 3 |
| $\begin{aligned} & \text { M E } 306 \\ & \text { or E M A } 303 \end{aligned}$ | Mechanics of Materials Mechanics of Materials | 3 |
| E M A/M E 307 | Mechanics of Materials Lab | 1 |
| M E 231 | Introductory Engineering Graphics | 2 |
| M E 313 | Manufacturing Processes | 3 |
| M E 340 | Introduction to Dynamic Systems | 3 |
| M E 342 | Design of Machine Elements | 3 |
| M E 361 | Thermodynamics | 3 |
| M E 363 | Fluid Dynamics | 3 |
| Select one of the foll | wing BSE breadth courses: | 2-3 |
| BSE/ <br> ENVIR ST 367 | Renewable Energy Systems |  |
| BSE/CIV ENGR/ SOIL SCI 372 | On-Site Waste Water Treatment and Dispersal |  |
| BSE/FOOD SCI/ <br> M E 441 | Rheology of Foods and Biomaterials |  |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources |  |
| BSE 461 | Food and Bioprocessing Operations |  |
| BSE 472 | Sediment and Bio-Nutrient Engineering and Management |  |
| BSE 473 | Irrigation and Drainage Systems Design |  |
| BSE 571 | Small Watershed Engineering |  |
| $\begin{aligned} & \text { BSE/ } \\ & \text { FOOD SCI } 642 \end{aligned}$ | Food and Pharmaceutical Separations |  |

Total Credits
32-33

## TECHNICAL ELECTIVES

Select courses from one or more of the following four technical elective categories to bring the total number of credits in the General Program Area or in the selected specialization area to 43. See the BSE Undergraduate Student Handbook for a list of recommended technical electives for various areas of specialization.

## A. INTRODUCTION TO ENGINEERING COURSES (FRESHMEN ONLY)

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTEREGR 101 | Contemporary Issues in the | 2 |
|  | Engineering Profession |  |
| INTEREGR 102 | Introduction to Society's <br> Engineering Grand Challenges |  |


| INTEREGR 110 | Introduction to Engineering | 1 |
| :--- | :--- | :--- |
| INTEREGR 111 | Introduction to the Engineering <br> Design Process and Profession | 2 |
| INTEREGR 160 | Introduction to Engineering Design | 3 |
| INTEREGR 170 | Design Practicum | 3 |

## B. INDEPENDENT STUDY/INSTRUCTION COURSES

CALS or CoE courses with a $001,299,399$, or 699 course number. No more than 3 credits of coursework in this category can be used to meet technical elective requirements.

## C. UPPER-LEVEL COURSES

## Part 1. Upper-Level Engineering Courses

This includes BSE courses not taken to meet other curricular requirements. This does not include independent study/ instruction courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Any Engineering course numbered 300 or above |  |  |
| E M A 202 | Dynamics | 3 |
| or M E 240 | Dynamics |  |

## Part 2. Upper-Level Science Courses

This includes BSE courses not taken to meet other curricular requirements. This does not include independent study/ instruction courses.

| Code | Title | Credits |
| :--- | :--- | :---: |
| Advanced biological, natural, and physical science |  |  |
| courses (i.e., courses with a B, N, or P designation) |  |  |
| CHEM 341 | Elementary Organic Chemistry |  |
| CHEM 342 | Elementary Organic Chemistry <br> Laboratory | 1 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry <br> Laboratory | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 2 |
| CHEM/M S \& E 421 | Polymeric Materials | 3 |
| AGRONOMY/ATM | Environmental Biophysics | 3 |
| OCN/SOIL SCI 532 |  | 3 |

## D. LOWER-LEVEL SCIENCE AND ENGINEERING COURSES, BREADTH COURSES

Elementary and intermediate biological, natural and physical science courses except elementary and intermediate math courses; College of Engineering courses with a 100 or 200 level designation; College of Agricultural and Life Sciences courses, Institute of Environmental Studies courses, and/or School of Business courses. Independent study/instruction courses cannot be counted in this category. No more than 12 credits of coursework in this category can be used to meet technical elective requirements.

## CAPSTONE

| Code | Title |
| :--- | :--- |
| BSE 508 | Biological Systems Engineering <br> Design Practicum I |
| BSE 509 | Biological Systems Engineering <br> Design Practicum II |

Fundamentals of Engineering Exam ${ }^{1}$

1 Grades for BSE 509 will not be posted until proof of examination is
presented.

## FOUR-YEAR PLAN

## SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOURYEAR PLAN-MACHINERY SYSTEMS ENGINEERING SPECIALIZATION

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 221 | 5 MATH 222 | 4 |
| CHEM 109 | 5 PHYSICS 202 | 5 |
| General Education | 3 INTEREGR 170 or 110 | 2 |
| Course |  |  |
| EPD 155 | 2 M E 231 | 2 |
|  | COMP SCI 310 | 3 |
|  | 15 | 16 |

Total Credits 31
Sophomore

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 234 | 4 M E 361 | 3 |
| General Education Course | 3 M E 306 | 3 |
| E M A 201 | $3 \mathrm{M} \mathrm{E/E} \mathrm{M} \mathrm{A} 307$ | 1 |
| Biological Science Course | 3 STAT 324 | 3 |
| BSE 249 | 3 BSE 349 | 3 |
|  | E M A 202 | 3 |
|  | BSE 308 | 1 |
|  | 16 | 17 |
| Total Credits 33 |  |  |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| BSE/M E 475 | 3 M E 340 | 3 |
| MATH 320 | 3 BSE/M E 476 | 3 |
| M E 363 | 3 EP D 397 | 3 |
| I SY E 313 | 3 M E 313 | 3 |
| BSE 270 | 3 BSE 508 | 2 |
|  | BSE 365 | 3 |
|  | 15 | 17 |

Total Credits 32

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| BSE 509 | 3 General Education | 6 |
| BSE Breadth | 3 Technical Electives | 9 |
| Requirement | 5 |  |
| Technical Elective |  |  |


| M E 342 | 3 |  |
| :---: | :---: | :---: |
|  | 14 | 15 |
| Total Credits 29 |  |  |
| 1 If CHEM 103 \& CHEM 104 is taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of year 1, and move M E 231 to fall semester of year 2. M E 342 can be taken without M E 331 . <br> - Need 125 credits to complete degree. |  |  |
| BIOLOEGALSMSEMS |  |  |
| ENGNEERME: NATURAL |  |  |
| RESOURCEG AND ENWEONMENTAL |  |  |
| ENGNEERNG |  |  |

Natural resources and environmental engineers work with all kinds of natural resources, like water, soil, plants, and air. For example, they could be responsible for the design of livestock or wildlife watering stations in a natural forest or the design of a recycling waste management system on a dairy farm. Graduates find challenging and rewarding work with engineering and environmental consultants, with government agencies like the Forest Service, and with companies such as Valmont Irrigation and Creative Habitat.

Conserving soil and water resources is critical to our future. Expanding populations and increasing needs for food, goods, and services are placing an ever growing demand upon our precious soil and water resources. Natural resources and environmental engineers are finding ways to manage and conserve our resources today so that we can meet the demands of the future.

| REQUIREMENTS |  |
| :--- | ---: |
| Title | Credits |
| Code |  |
| Major Requirements | 53 |
| Common Requirements | 43 |
| Specialization \& Technical Electives | 5 |
| Capstone | 101 |

## COMMON REQUIREMENTS

See Major Requirements (p. 119).

## NATURAL RESOURCES AND ENVIRONMENT SPECIALIZATION

This is a named option that will appear on the student's transcript upon completion.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BSE/CIV ENGR/SOIL | On-Site Waste Water Treatment and | 2 |
| SCI 372 | Dispersal |  |
| BSE 472 | Sediment and Bio-Nutrient |  |
|  | Engineering and Management | 3 |


| BSE 473 | Irrigation and Drainage Systems Design | 2 |
| :---: | :---: | :---: |
| BSE 571 | Small Watershed Engineering | 3 |
| M E 361 | Thermodynamics | 3 |
| $\begin{gathered} \text { CIV ENGR } 310 \\ \text { or M E } 363 \end{gathered}$ | Fluid Mechanics <br> Fluid Dynamics | 3 |
| BSE 201 | Land Surveying Fundamentals | 1 |
| $\begin{aligned} & \text { E M A } 303 \\ & \text { or M E } 306 \end{aligned}$ | Mechanics of Materials Mechanics of Materials | 3 |
| ENVIR ST/GEOG/ SOIL SCI 230 or SOIL SCI 301 | Soil: Ecosystem and Resource <br> General Soil Science | 3 |
| Select one of the fo | wing BSE breadth courses: | 2-3 |
| BSE/ <br> ENVIR ST 367 | Renewable Energy Systems |  |
| $\begin{aligned} & \text { BSE/FOOD SCI/ } \\ & \text { M E } 441 \end{aligned}$ | Rheology of Foods and Biomaterials |  |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources |  |
| BSE 461 | Food and Bioprocessing Operations |  |
| BSE/M E 475 | Engineering Principles of Agricultural Machinery |  |
| BSE/M E 476 | Engineering Principles of Off-Road Vehicles |  |
| $\begin{aligned} & \text { BSE/ } \\ & \text { FOOD SCI } 642 \end{aligned}$ | Food and Pharmaceutical Separations |  |

Total Credits

## TECHNICAL ELECTIVES

Select courses from one or more of the following four technical elective categories to bring the total number of credits in the General Program Area or in the selected specialization area to 43 . See the BSE Undergraduate Student Handbook for a list of recommended technical electives for various areas of specialization.

## A. INTRODUCTION TO ENGINEERING COURSES (FRESHMEN ONLY)

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTEREGR 101 | Contemporary Issues in the <br> Engineering Profession | 2 |
| INTEREGR 102 | Introduction to Society's <br> Engineering Grand Challenges | 2 |
| INTEREGR 110 | Introduction to Engineering | 1 |
| INTEREGR 111 | Introduction to the Engineering <br> Design Process and Profession | 2 |
| INTEREGR 160 | Introduction to Engineering Design | 3 |
| INTEREGR 170 | Design Practicum | 3 |

## B. INDEPENDENT STUDY/INSTRUCTION COURSES

CALS or CoE courses with a 001, 299, 399, or 699 course number. No more than 3 credits of coursework in this category can be used to meet technical elective requirements.

## C. UPPER-LEVEL COURSES

## Part 1. Upper-Level Engineering Courses

This includes BSE courses not taken to meet other curricular requirements. This does not include independent study/ instruction courses.

## Code

Title
Credits
Any Engineering course numbered 300 or above

| E M A 202 | Dynamics | 3 |
| :---: | :--- | :---: |
| or M E 240 | Dynamics |  |

## Part 2. Upper-Level Science Courses

This includes BSE courses not taken to meet other curricular requirements. This does not include independent study/ instruction courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Advanced biological, natural, and physical science |  |  |
| courses (i.e., courses with a B, N, or P designation) |  |  |
| CHEM 341 | Elementary Organic Chemistry |  |
| CHEM 342 | Elementary Organic Chemistry |  |
|  | Laboratory | 3 |
| CHEM 343 | Introductory Organic Chemistry |  |
| CHEM 344 | Laboratory | 1 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| CHEM/M S \& E 421 | Polymeric Materials | 2 |
| AGRONOMY/ATM | Environmental Biophysics | 3 |
| OCN/SOIL SCI 532 |  | 3 |

## D. LOWER-LEVEL SCIENCE AND ENGINEERING COURSES, BREADTH COURSES

Elementary and intermediate biological, natural and physical science courses except elementary and intermediate math courses; College of Engineering courses with a 100 or 200 level designation; College of Agricultural and Life Sciences courses, Institute of Environmental Studies courses, and/or School of Business courses. Independent study/instruction courses cannot be counted in this category. No more than 12 credits of coursework in this category can be used to meet technical elective requirements.

## CAPSTONE

| Code | Title | Credits |
| :---: | :---: | :---: |
| BSE 508 | Biological Systems Engineering Design Practicum I | 2 |
| BSE 509 | Biological Systems Engineering Design Practicum II ${ }^{1}$ | 3 |
| Fundamentals of Engineering Exam ${ }^{1}$ |  |  |
| 1 Grades for BSE 509 will not be posted until proof of examination is presented. |  |  |

## FOUR-YEAR PLAN

## SAMPLE BIOLOGICAL SYSTEMS ENGINEERING FOUR-YEAR PLAN-NATURAL RESOURCES AND ENVIRONMENT SPECIALIZATION

## Freshman

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 221 | 5 MATH 222 | 4 |
| E P D 155 | 2 SOIL SCI 301 or 230 | 3-4 |
| CHEM $109{ }^{1}$ | 5 COMP SCI 310 | 3 |
| General Education Course | 3 INTEREGR 170 or 110 | 2 |
|  | Biological Sciences Course | 3 |
|  | 15 | 15-16 |
| Total Credits 30-31 |  |  |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| E M A 201 | 3 STAT 324 | 3 |
| MATH 234 | 4 BSE 349 | 3 |
| BSE 249 | 3 PHYSICS 202 | 5 |
| BSE 270 | 3 BSE 472 | 3 |
| BSE 201 | 1 BSE 308 | 1 |
| General Education Course | 3 |  |

17
15
Total Credits 32

| Junior |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| MATH 320 | 3 E P D 397 | 3 |
| BSE 473 | 2 E M A 303 | 3 |
| CIV ENGR 310 | 3 BSE 508 | 2 |
| BSE/CIV ENGR/ SOIL SCI 372 | 2 BSE 571 | 3 |
| I SY E 313 | 3 General Education Courses | 3 |
| Technical Elective | 3 BSE 365 | 3 |
|  | 16 | 17 |
| Total Credits 33 |  |  |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| BSE 509 | 3 Technical Electives | 6 |
| M E 361 | 3 General Education Courses | 6 |
| Technical Elective | 3 Free Elective Course | 3 |
| BSE Breadth Requirement | 3 |  |

Total Credits 30

1
If CHEM 103 \& CHEM 104 is taken in place of CHEM 109, it is suggested to take CHEM 103 in the fall semester and CHEM 104 in the spring semester of year 1, and move Biological Science to the fall semester of year 2 . SOIL SCI 301 SOIL SCI 301 is offered fall semesters and is a 4-credit alternative to SOIL SCI/ENVIR ST/ GEOG 230. Plan BSE 473BSE 473 for fall term of year 3 or 4 as available in odd years.

- Need 125 credits to complete degree.


## COMMUNITY AND ENVIRONMENTAL SOCIOLOGY

Sociologists study human social behavior and how societies are organized. The Department of Community and Environmental Sociology's focus is on the relationship between people and their natural environment and with the communities in which people live, work, and play.

A major in community and environmental sociology is good preparation for jobs that involve an understanding of social issues, require knowledge of the functioning and organization of communities and the relationship between people and the natural environment, and involve data collection or data analysis. Community and environmental sociology graduates may be employed in nongovernmental organizations (NGOs) that focus on a number of issues surrounding community development, environment, and advocacy, governmental planning or social service agencies, agricultural or environmental organizations, and cooperative or agribusiness enterprises. A major in community and environmental sociology also provides excellent preparation for careers in international development, law, and further academic work in sociology or other social sciences.

The Department of Community and Environmental Sociology offers a wide range of courses for both beginning and advanced students. The department's introductory course, C\&E SOC/SOC 140 Introduction to Community and Environmental Sociology, is designed to explore the changing nature of rural development in the global economy.

UW-Madison community and environmental sociologists teach about a wide range of issues that are of critical importance to people and communities from Wisconsin to the low-income countries of the developing world. For example, students can study such matters as the growing controversies around energy, the implementation of environmental laws, sustainability, and the special problems and unique concerns of people in resource-dependent communities. Students can also focus on issues such as the effect of new agricultural technologies on family farms, the ways gender and race affect educational and occupational opportunities, and how community leaders and citizens address problems such as urban sprawl or rural poverty. In addition, students can examine issues such as population growth, the causes of world hunger, tropical rainforest destruction, and the prospects for achieving sustainable development in poor countries.

Many community and environmental sociology students build on their major by selecting one of the certificate programs available from the College of Agricultural and Life Sciences or from other UW-Madison
schools or colleges. Certificate programs enable students to expand their skills and study particular topics or issues in more depth. Community and environmental sociology majors often choose certificate programs in the concentration in analysis and research, global health, food systems, criminology, and environmental studies. Many students choose to pursue a double major, combining C\&E sociology with fields such as Spanish, environmental studies, nutritional sciences, agronomy, biology, wildlife ecology, or environmental science. Students have also combined their undergraduate major in C\&E sociology with graduate work in public policy through the La Follette School of Public Affairs accelerated master's of public affairs program.

## DEGREES/MAJORS/CERTIFICATES

- Community and Environmental Sociology, B.S. (p. 133)
- Food Systems, Certificate (p. 137)


## PEOPLE

## PROFESSORS

Bell, Collins, Green (chair), Stoecker, Tigges

## ASSOCIATE PROFESSORS

Alatout, Curtis, Feinstein

## ASSISTANT PROFESSORS

Garoon, Rios, White

## COMMUNITY AND ENVIRONMENTAL SOCIOLOGY, B.S.

Sociologists study human social behavior and how societies are organized. The Department of Community and Environmental Sociology's focus is on the relationship between people and their natural environment and with the communities in which people live, work, and play.

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The Department of Community and Environmental Sociology offers a wide range of courses for both beginning and advanced students. The department's introductory course, C\&E SOC/SOC 140 Introduction to Community and Environmental Sociology, is designed to explore the changing nature of rural development in the global economy.

UW-Madison community and environmental sociologists teach about a wide range of issues that are of critical importance to people and
communities from Wisconsin to the low-income countries of the developing world. For example, students can study such matters as the growing controversies around energy, the implementation of environmental laws, sustainability, and the special problems and unique concerns of people in resource-dependent communities. Students can also focus on issues such as the effect of new agricultural technologies on family farms, the ways gender and race affect educational and occupational opportunities, and how community leaders and citizens address problems such as urban sprawl or rural poverty. In addition, students can examine issues such as population growth, the causes of world hunger, tropical rainforest destruction, and the prospects for achieving sustainable development in poor countries.

Many community and environmental sociology students build on their major by selecting one of the certificate programs available from the College of Agricultural and Life Sciences or from other UW-Madison schools or colleges. Certificate programs enable students to expand their skills and study particular topics or issues in more depth. Community and environmental sociology majors often choose certificate programs in the concentration in analysis and research, global health, food systems, criminology, and environmental studies. Many students choose to pursue a double major, combining C\&E sociology with fields such as Spanish, environmental studies, nutritional sciences, agronomy, biology, wildlife ecology, or environmental science. Students have also combined their undergraduate major in C\&E sociology with graduate work in public policy through the La Follette School of Public Affairs accelerated master's of public affairs program.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

Code
Title
Credits
Core

| C\&E SOC/SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| :---: | :---: | :---: |
| C\&E SOC/SOC 475 | Classical Sociological Theory | 3 |
| C\&E SOC/SOC 357 | Methods of Sociological Inquiry | 3-4 |
| C\&E SOC/SOC 360 | Statistics for Sociologists I ${ }^{1}$ | 4 |
| Electives within the Major ${ }^{2}$ |  |  |
| Select 6-9 credits from the Community course set ${ }^{3}$ |  | 6-9 |
| Select 6-9 credits from the Environment course set ${ }^{3}$ |  | 6-9 |
| Capstone |  |  |
| C\&E SOC 500 | Capstone Experience | 3 |
| Total Credits |  | 28-35 |
| 1 We strongly enc Statistics for So statistics cours courses other th I are: STAT 301 Introductory Ap Statistics: Meas for Psychology, Analysis, MATH Mathematical S Please note that count toward th | urage our majors to take C\&E SOC ologists I, if they have not already at time of major declaration. Acce n C\&E SOC/SOC 360 Statistics fo troduction to Statistical Methods, ied Statistics for the Life Sciences, rement in Economics, PSYCH 210 EOG 360 Quantitative Methods in STAT 310 Introduction to Probabilit tistics II, and GEN BUS 303 Busin statistics courses taken outside th credit requirement in the major. |  |
| 2 Must complete electives. No mo At least 6 credit | total of 15 credits of Community e than 6 credits may be 100 or 200 must be taken in each course set. |  |
| 3 Consult advisor Independent Stu Cooperative Edu the Community credits may be | request permission to use C\&E y, C\&E SOC 399 Coordinative Int ation, or C\&E SOC 699 Special Pr Environmental course sets. No unted toward the major. |  |

## ELECTIVE COURSES WITHIN THE MAJOR

## COMMUNITY COURSE SET

| Code | Title | Credits |
| :--- | :--- | ---: |
| C\&E SOC/SOC 210 | Survey of Sociology | $3-4$ |
| C\&E SOC/SOC 211 | The Sociological Enterprise | 3 |
| C\&E SOC/GEN\&WS/ | Gender and Work in Rural America | 3 |
| SOC 215 |  | 3 |
| C\&E SOC/SOC 245 | Technology and Society | $3-4$ |
| C\&E SOC/ | Latin America: An Introduction |  |
| AFROAMER/ |  |  |
| ANTHRO/GEOG/ |  | $3-4$ |
| HISTORY/LACIS/ |  | $1-4$ |
| POLI SCI/SOC/ |  | 3 |
| SPANISH 260 |  |  |
| C\&E SOC/SOC 341 | Labor in Global Food Systems |  |
| C\&E SOC/SOC 365 | Data Management for Social |  |
| C\&E SOC 375 | Science Research | Special Topics |


| C\&E SOC/SOC 532 | Health Care Issues for Individuals, Families and Society | 3 |
| :---: | :---: | :---: |
| C\&E SOC/SOC 533 | Public Health in Rural \& Urban Communities | 3 |
| C\&E SOC/ENVIR ST/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/ <br> AGRONOMY/ <br> MED HIST/ <br> PHILOS 565 | The Ethics of Modern Biotechnology | 3-4 |
| C\&E SOC/SOC 573 | Community Organization and Change | 3 |
| C\&E SOC/AMER IND/ SOC 578 | Poverty and Place | 3 |
| C\&E SOC/SOC 610 | Knowledge and Society | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |
| C\&E SOC/SOC 622 | Advanced Topics in Critical Sociology | 3 |
| C\&E SOC/SOC 623 | Gender, Society, and Politics | 3 |
| C\&ESOC/SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| C\&E SOC/SOC/ URB R PL 645 | Modern American Communities | 3 |
| C\&ESOC/SOC 649 | Sociology of Work and Employment | 3 |
| C\&ESOC/SOC 652 | Sociology of Economic Institutions | 3 |
| C\&ESOC/SOC 655 | Microfoundations of Economic Sociology | 3 |
| C\&E SOC/SOC 676 | Applied Demography: Planning and Policy | 3 |
| C\&E SOC/SOC 693 | Practicum in Analysis and Research | 3 |

## ENVIRONMENT COURSE SET

| Code | Title | Credits |
| :---: | :---: | :---: |
| C\&E SOC/ <br> AGROECOL/ <br> AGRONOMY/ <br> ENTOM/ <br> ENVIR ST 103 | Agroecology: An Introduction to the Ecology of Food and Agriculture | 3 |
| C\&E SOC/SOC 222 | Food, Culture, and Society | 3 |
| C\&E SOC/ HIST SCI 230 | Agriculture and Social Change in Western History | 3 |
| C\&E SOC/F\&W ECOL/ SOC 248 | Environment, Natural Resources, and Society | 3 |
| $\begin{aligned} & \text { C\&E SOC/A A E/ } \\ & \text { SOC } 340 \end{aligned}$ | Issues in Food Systems | 3-4 |
| C\&E SOC 375 | Special Topics | 1-4 |
| C\&E SOC/CURRIC/ ENVIR ST 405 | Education for Sustainable Communities | 3 |
| C\&E SOC/ENVIR ST/ GEOG 434 | People, Wildlife and Landscapes | 3 |
| $\begin{aligned} & \text { C\&E SOC/ENVIR ST/ } \\ & \text { SOC } 540 \end{aligned}$ | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC 541 | Environmental Stewardship and Social Justice | 3 |

C\&E SOC/
AGRONOMY/
MED HIST/
PHILOS 565
C\&E SOC/SOC 650
C\&E SOC/SOC 693

The Ethics of Modern
Biotechnology

## CREDIT REQUIREMENT

Must complete a total of 30 credits of C\&E SOC courses. Students may count up to 4 credits of Independent Study (C\&E SOC 299 Independent Study, C\&E SOC 699 Special Problems), Internship (C\&E SOC 399 Coordinative Internship/Cooperative Education), or Thesis (C\&E SOC 681 Senior Honors Thesis/C\&E SOC 682 Senior Honors Thesis/C\&E SOC 691 Senior Thesis/C\&E SOC 692 Senior Thesis) here, with permission of their advisor.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Understand how social science arguments are constructed and evaluated.
2. Develop ability to assess data quality and understand whether particular data is appropriate to answer specific questions.
3. Learn general theories on basic social processes, especially those related to the relationships between society and the environment and the social organization of communities.
4. Learn communication skills in the social sciences.

## SOCIOLOGY FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| COMM A or COMM B | 2-3 COMM A or COMM B | 2-3 |
| Course | Course |  |
| C\&E SOC/SOC 140 | 3 CHEM 103, 108, or 109 | 4-5 |
| First Year Seminar | 1 C\&E SOC Elective ${ }^{2}$ | 3 |
| Electives ${ }^{1}$ | 9 Electives (to reach ~15 credits) | 4-6 |
|  | 15-16 | 13-17 |

Total Credits 28-33

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| C\&E SOC/SOC 357 | 3 C\&E SOC/SOC 360 | 4 |
| C\&E SOC Elective | 3 C\&E SOC Elective | 3 |
| Ethnic Studies | 3 Biological Science | 2 |
| Electives | Course |  |
|  | 6 Humanities Elective | 3 |
|  | Additional Electives | 3 |

Total Credits 30

Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| C\&E SOC/SOC 475 | 3 C\&E SOC Elective | 3 |
| C\&E SOC Elective 2 | 3 International Studies | 3 |
| Biological Science | 3 Additional Science | 3 |
|  | Course | 6 |
| Additional Electives | 6 Electives | 15 |
|  | 15 | 6 |

Total Credits 30

Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| C\&E SOC $500^{3}$ | 3 Humanities | 3 |
| Electives | 12 Electives | 12 |
|  | 15 | 15 |

## Total Credits 30

1 Electives should be chosen in order to satisfy UW and CALS requirements. See Requirements tab for details.
2
C\&E SOC electives include the Community course set and the Environmental course set. See Requirements tab for details.
3 Students may take the capstone course either semester of their senior year. The fall semester and spring semester courses may have different content.

The above plan assumes that a student enters with standard high school preparation (algebra, geometry, third-year math, two years' foreign language).

## ADVISING AND CAREERS

Students are assigned a faculty advisor once they declare the major. Prospective students are welcome to contact Professors Leann Tigges (Imtigges@wisc.edu) or Gary Green (gpgreen@wisc.edu) for more information.

Community and environmental sociology graduates may be employed in nongovernmental organizations (NGOs) that focus on a number of issues surrounding community development, environment, and advocacy, governmental planning or social service agencies, agricultural or environmental organizations, and public health. A major in community and environmental sociology also provides excellent preparation for graduate school and careers in international development, law, public policy and nursing, and further academic work in sociology and other social sciences. In addition, recent graduates have been employed by state and local governments and not-for-profit environmental organizations. Many have gone on to serve communities through Peace Corps, Teach for America, and AmeriCorps, and some have established their own business in food and health-related industries.

## PEOPLE

## PROFESSORS

Bell, Collins, Green (chair), Stoecker, Tigges

## ASSOCIATE PROFESSORS

Alatout, Curtis, Feinstein

## ASSISTANT PROFESSORS

Garoon, Rios, White

## WISCONSIN EXPERIENCE

The program excels in offering our majors high-impact experiences that characterize the Wisconsin Experience, from rich capstone courses to varied internships and study-abroad experiences.

- Many of our students spend a summer or a semester studying abroad. Some students attend universities in Europe, Latin America, and Asia, while other students participate in a variety of alternative learning experiences. Study abroad programs offer the opportunity to earn credits toward your degree while learning about new cultures, communities, and environments.
- Students also gain experiences outside of the classroom through internships and community based service learning courses, such as Professor Stoecker's offering of the Capstone Course (C\&E SOC 500 Capstone Experience).
- The variety of internships undertaken by our majors is vast but all offer students the opportunity to apply their knowledge to "real world" settings. A list of some of the internship opportunities is provided on our website (http://dces.wisc.edu/programs/opportunities/possibleinternships).
- Our majors have opportunities to enhance their research skills by working on a faculty member's research, undertaking a senior thesis
project, and through completion of the Concentration in Analysis and Research (https://www.ssc.wisc.edu/soc/ugrad/car.php).


## FOOD SYSTEMS, CERTIFICATE

The certificate in food systems is a 16-credit option open to all undergraduate students. It assembles an interdisciplinary curriculum, integrating different paradigms across all aspects of food production, distribution, and consumption, along with the context and values inherent to the systems.

For students in food or agriculture-related majors, the certificate in food systems will provide a broader context to their disciplinary studies. For students in fields that include food as a possible orientation of their studies, it will provide exposure to the full range of food systems, potentially inspiring an orientation to food as a focus of their studies. For students of any discipline, the certificate will help students be more informed consumers and citizens, hopefully leading to better choices about what they eat through knowledge of food and the social, economic, and environmental outcomes of different patterns of production, processing, distribution, and consumption.

## HOW TO GET IN

Undergraduate students of any major are welcome to pursue the certificate in food systems.

Students are eligible to declare the certificate once they complete one of the two core courses (AGROECOL/AGRONOMY/C\&E SOC/ENTOM/ ENVIR ST 103 Agroecology: An Introduction to the Ecology of Food and Agriculture and C\&E SOC/A A E/SOC 340 Issues in Food Systems) with a grade of $B$ or better. While there are different pathways to complete the certificate, students who declare and plan their coursework earlier in their careers will be in a better position to complete the required coursework.

Students who meet the eligibility criteria should fill out this short questionnaire (https://uwmadison.co1.qualtrics.com/jfe/form/ SV_OJPABAckGujKA2p) and then contact Megan Banaszak (mbanaszak@wisc.edu) to declare the certificate.

## REQUIREMENTS

The certificate in food systems requires that students take two highly interdisciplinary core courses ( 6 total credits), and at least one course in each of three thematic elective categories (for 9 total credits across electives), plus a one credit culminating activity such as an internship, independent study, or appropriate capstone. The course list below provides a complete list of courses that satisfy each requirement.

## MINIMUM REQUIREMENTS:

- 2.0 GPA in certificate courses
- At least $50 \%$ of certificate courses taken in-residence (i.e. at UWMadison or through a UW-Madison sponsored study abroad program)
- Minimum of 16 credits total
Code
Core Courses

Title
Credits

| AGROECOL/ AGRONOMY/ C\&E SOC/ENTOM/ ENVIR ST 103 | Agroecology: An Introduction to the Ecology of Food and Agriculture | 3 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { C\&E SOC/A A E/ } \\ & \text { SOC } 340 \end{aligned}$ | Issues in Food Systems | 3 |
| Elective Courses |  |  |
| Select at least one cour Context, and Values | urse from each list: Provisioning, or a total of 9 credits | 9 |
| Provisioning (production, processing, distribution) |  |  |
| AGRONOMY 100 | Principles and Practices in Crop Production |  |
| AGRONOMY 300 | Cropping Systems |  |
| AGRONOMY 377 | Cropping Systems of the Tropics |  |
| AN SCI/ DY SCI 101 | Introduction to Animal Sciences |  |
| AN SCI/ DY SCI 370 | Livestock Production and Health in Agricultural Development |  |
| BOTANY/ <br> PL PATH 123 | Plants, Parasites, and People |  |
| FOOD SCI 301 | Introduction to the Science and Technology of Food |  |
| HORT 120 | Survey of Horticulture |  |
| HORT 376 | Tropical Horticultural Systems |  |
| HORT 370 | World Vegetable Crops |  |
| HORT 378 | Tropical Horticultural Systems International Field Study |  |
| PL PATH/ BOTANY 123 | Plants, Parasites, and People |  |
| SOIL SCI/ <br> ENVIR ST/ <br> GEOG 230 | Soil: Ecosystem and Resource |  |
| Context (policy, economics, law, society) |  |  |
| A A E 215 | Introduction to Agricultural and Applied Economics |  |
| AGRONOMY/ HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy |  |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { FOOD SCI } 321 \end{aligned}$ | Food Laws and Regulations |  |
| $\begin{aligned} & \text { AN SCI/DY SCI/ } \\ & \text { FOOD SCI/ } \\ & \text { SOIL SCI } 472 \end{aligned}$ | Animal Agriculture and Global Sustainable Development |  |
| AN SCI/DY SCI/ FOOD SCI/ SOIL SCI 473 | International Field Study in Animal Agriculture and Sustainable Development |  |
| $\begin{aligned} & \text { C\&E SOC/ } \\ & \text { F\&W ECOL/ } \\ & \text { SOC } 248 \end{aligned}$ | Environment, Natural Resources, and Society |  |
| DY SCI/INTERAG 471 | Food Production Systems and Sustainability |  |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy |  |
| GEOG/ <br> ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems |  |

## GEOG/ Environmental Governance: <br> ENVIR ST 534 Markets, States and Nature

Values (nutrition, equity, environment)

| A A E 323 | Cooperatives |
| :--- | :--- |
| A A E/ | World Hunger and Malnutrition |
| AGRONOMY/ |  |
| INTER-AG/ |  |
| NUTR SCI 350 |  |
| AGRONOMY/ | Grassland Ecology |
| BOTANY/ |  |
| SOIL SCI 370 |  |
| BOTANY/ | Ethnobotany |
| AMER IND/ |  |
| ANTHRO 474 |  |
| C\&E SOC/ | Labor in Global Food Systems |
| SOC 341 |  |
| C\&E SOC/ | Food, Culture, and Society |
| SOC 222 |  |
| ENVIR ST/ <br> GEOG 309 | Comparative Study of Agriculture |
| FOLKLORE/ American Indian Women <br> AMER IND/  <br> ANTHRO/  <br> GEN\&WS 437  <br> HORT 350 Plants and Human Wellbeing <br> NUTR SCI 132 Nutrition Today <br> SOIL SCI/ Soil: Ecosystem and Resource <br> ENVIR ST/  <br> GEOG 230  |  |

## Food Systems Culmination Activity

Select one of the following: 1
Independent Study
C\&E SOC 299 Independent Study
C\&E SOC 699 Special Problems
Food Systems Internship
C\&E SOC $399 \quad$ Coordinative Internship/Cooperative Education

Total Credits

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

Upon completion of the Food Systems Certificate, students will be able to evaluate critically:

- The key elements of a food system
- How political, social, economic, and environmental forces interact to shape food systems
- The biophysical processes inherent in various agricultural production systems
- How individuals from different backgrounds interact with local and global food systems as humans, consumers, producers, and citizens
- The social, economic, and environmental outcomes of different food systems


## ADVISING AND CAREERS

## ADVISING

Questions about the certificate may be directed to the advisor, Megan Banaszak (mbanaszak@wisc.edu), or to the certificate coordinator, Alan Turnquist (alturnquist@wisc.edu (mbanaszak@wisc.edu)).

## CAREERS

For students in food or agriculture related majors, the certificate in food systems will provide a broader context to their disciplinary studies. As they seek careers, they will be able to provide evidence of enhancing their disciplinary learning and skills with a broader framework of food system concepts, including ideas for enhancing food system sustainability. For students in fields that include food as a possible orientation of their studies, it will provide exposure to the full range of food systems, potentially inspiring an orientation to food as a focus of their studies. For students in any discipline, the certificate in food systems will help them be more informed consumers and better informed citizens, hopefully leading to better choices about what they eat through knowledge of food and the social, economic, and environmental consequences of production, processing, distribution, and consumption.

## PEOPLE

Faculty across campus teach courses in the certificate. Please use the Guide to seek out information on individual courses.

For general certificate inquiries or questions about the culminating experience, please contact the certificate coordinator, Alan Turnquist (alturnquist@wisc.edu, 608-890-3917).

For direct advising on curricular requirements, or to declare the certificate, contact Megan Banaszak (mbanaszak@wisc.edu).

## WISCONSIN EXPERIENCE

- Integrated, interdisciplinary course work
- Professional development opportunities, including options to intern off campus
- Hands-on culminating experience


## DAIRY SCIENCE

Undergraduates in dairy science prepare for a variety of career opportunities that require a strong background in applied animal biology. Careers include: agribusiness, dairy farm management, technical service and consulting, research, and teaching. Students also enroll in the department to prepare for veterinary school, medical school, or graduate school. Coursework in the major includes animal genetics, lactation, reproduction, nutrition and management. The department may be consulted for additional details and for specific career information.

The dairy science major can be earned under the bachelor of science degree program. The dairy science major may be combined with other majors such as agricultural and applied economics, biological systems engineering, genetics, life sciences communication, and agronomy. Multiple out-of-classroom learning opportunities are included in the curriculum and internships on farms or with agribusiness are required to provide the practical training needed for success in any 21 st-century careers. Many students gain valuable experience through part-time employment in research labs or in the student-operated dairy cattle instruction and research center.

Discoveries from the research laboratories reach the classroom long before they appear in textbooks. Students benefit from integration of the instructional and research programs of the department. The co-curricular Badger Dairy Club (http://badgerdairyclub.com) involves students in dairy industry events that provide leadership and networking opportunities in a vibrant industry.

## DEGREES/MAJORS/CERTIFICATES

- Dairy Science, B.S. (p. 139)


## PEOPLE

## PROFESSORS

Combs, Fricke, Jones, Shaver, Wattiaux, Weigel (chair), Wiltbank

## ASSOCIATE PROFESSORS

Cabrera, Hernandez

## ASSISTANT PROFESSOR

Arriola Apelo, Van Os, White

## FACULTY ASSOCIATE

Halbach

## DAIRY SCIENCE, B.S.

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## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and
advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics and Statistics |  |  |
| Select one of the following (or may be satisfied by placement exam): |  | 3-5 |
| MATH 112 | Algebra |  |
| MATH 114 | Algebra and Trigonometry |  |
| MATH 171 | Calculus with Algebra and Trigonometry I |  |
| Select one of the following: |  | 3 |
| STAT 301 | Introduction to Statistical Methods |  |
| or STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| Chemistry |  |  |
| Select one of the following: |  | 4-5 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Biology |  |  |
| Select one of the following options: ${ }^{1}$ |  | 9-10 |
| Option 1: |  |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |  |


| AGRONOMY 100 | Principles and Practices in Crop Production |  |
| :---: | :---: | :---: |
| Option 2: |  |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany |  |
| Option 3: |  |  |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 151 | Introductory Biology |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology |  |
| Select one of the foll | wing: | 3 |
| GENETICS 466 | Principles of Genetics |  |
| CHEM 341 | Elementary Organic Chemistry |  |
| CHEM 343 | Introductory Organic Chemistry |  |
| MICROBIO 101 | General Microbiology |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| M M \& I 341 | Immunology |  |
| Biochemistry |  |  |
| Select one of the foll | wing: | 3-6 |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BIOCHEM 507 <br> \& BIOCHEM 508 | General Biochemistry I and General Biochemistry II |  |
| BMOLCHEM 314 | Introduction to Human Biochemistry (offered during summer session only) |  |
| Economics |  |  |
| Select one of the foll | wing: | 3-4 |
| A AE 215 | Introduction to Agricultural and Applied Economics |  |
| ECON 101 | Principles of Microeconomics |  |
| DAIRY SCIENCE |  |  |
| Core |  |  |
| AN SCI/DY SCI 101 | Introduction to Animal Sciences | 4 |
| DY SCI 233 | Dairy Herd Management I | 3 |
| DY SCI 234 | Dairy Herd Management II | 3 |
| DY SCI 305 | Lactation Physiology | 3 |
| AN SCI/DY SCI/NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| AN SCI/DY SCI 362 or AN SCI/DY SCI 363 | Veterinary Genetics <br> Principles of Animal Breeding | 2 |
| AN SCI/DY SCI 373 | Animal Physiology | 3 |
| AN SCI/DY SCI 414 | Ruminant Nutrition | 2 |
| AN SCI/DY SCI 434 | Reproductive Physiology | 3 |
| Capstone |  |  |


| DY SCI 399 | Coordinative Internship/Cooperative Education | 1-8 |
| :---: | :---: | :---: |
| DY SCI 535 | Dairy Farm Management Practicum | 3 |
| Dairy Science Electives |  |  |
| Select at least 3 cred | its from: | 3 |
| DY SCI 205 | Dairy Cattle Improvement Programs |  |
| DY SCI 272 | Pre-Capstone Seminar |  |
| DY SCI 289 | Honors Independent Study ${ }^{2}$ |  |
| DY SCI 299 | Independent Study ${ }^{2}$ |  |
| DY SCI/ <br> AN SCI 370 | Livestock Production and Health in Agricultural Development |  |
| DY SCI/ AGROECOL/ AGRONOMY 371 | Managed Grazing Field Study |  |
| DY SCI 375 | Special Topics ${ }^{2}$ |  |
| DY SCI/INTERAG 471 | Food Production Systems and Sustainability |  |
| $\begin{aligned} & \text { DY SCI/AN SCI/ } \\ & \text { FOOD SCI/ } \\ & \text { SOIL SCI } 472 \end{aligned}$ | Animal Agriculture and Global Sustainable Development |  |
| $\begin{aligned} & \text { DY SCI/AN SCI/ } \\ & \text { FOOD SCI/ } \\ & \text { SOIL SCI } 473 \end{aligned}$ | International Field Study in Animal Agriculture and Sustainable Development |  |
| DY SCI 534 | Reproductive Management of Dairy Cattle |  |
| DY SCI 681 | Senior Honors Thesis ${ }^{2}$ |  |
| DY SCI 682 | Senior Honors Thesis ${ }^{2}$ |  |
| DY SCI 699 | Special Problems ${ }^{2}$ |  |

1 Consult with your advisor regarding use of BIOCORE courses
(BIOCORE 381 Evolution, Ecology, and Genetics, BIOCORE 382
Evolution, Ecology, and Genetics Laboratory, BIOCORE 383 Cellular Biology, BIOCORE 384 Cellular Biology Laboratory, and BIOCORE 485 Organismal Biology) to satisfy Introductory Biology and Genetics for the major.

2 Consult with your advisor for details.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Gain knowledge of current and emerging research based information in animal biology and management sciences to support dairy production.
2. Gain intellectual, practical and attitudinal skills needed to identify and solve problems and challenges facing dairy producers and allied industries.
3. Gain in life-long learning skills to enable graduates to adapt to changing technological, economic and social circumstances throughout their professional career.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN <br> SAMPLE DAIRY SCIENCE FOUR-YEAR PLAN

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| AGRONOMY 100 | 4 A A E 215 | 3 |
| DY SCI/AN SCI 101 | 4 CHEM 103 | 4 |
| MATH 112 | 3 DY SCI 205 | 2 |
| First Year Seminar | 1 ZOOLOGY/BIOLOGY 101 | 3 |
| COMM A Course | 3 ZOOLOGY/BIOLOGY 102 | 2 |
|  | DY SCI 272 | 1 |
|  | 15 | 15 |


| Total Credits 30 |  |  |
| :---: | :---: | :---: |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| CHEM 104 | 5 DY SCI 234 | 3 |
| DY SCI 233 | 3 DY SCI/AN SCI 320 | 3 |
| GENETICS 466 | 3 DY SCI/AN SCI 361 | 2 |
| STAT 371 | 3 DY SCI/AN SCI 363 | 2 |
|  | DY SCI/AN SCI/ <br> FOOD SCI/SOIL SCI 472 | 1 |
|  | Humanities / Literature / Arts Course | 3 |
|  | 14 | 14 |

Total Credits 28

## Sophomore

Summer
DY SCI/AN SCI/FOOD SCI/ 2
SOIL SCI 473

Total Credits 2

| Junior |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| BIOCHEM 501 | 3 DY SCI/AN SCI/ <br> NUTR SCI 311 | 3 |
| DY SCI 305 | 3 DY SCI/AN SCI 313 | 1 |
| DY SCI/AN SCI 370 | 3 DY SCI/AN SCI 373 | 3 |
| Ethnic Studies Course | 3 COMM B Course | 3 |
| Free Elective Course | 3 Humanities / Literature / Arts Course | 3 |
|  | DY SCI/INTER-AG 471 <br> (or free elective course) | 3 |
|  | 15 | 16 |

Total Credits 31

## Junior

| Summer | Credits |
| :--- | ---: |
| DY SCI 399 | 1 |
|  | 1 |

Total Credits 1

## Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| DY SCI/AN SCI 414 | 2 DY SCI 535 | 3 |
| DY SCI/AN SCI 434 | 3 DY SCI 375 ${ }^{1}$ | 3 |
| DY SCI 690 | 1 Free Elective Courses | 8 |
| Free Elective Courses | 9 |  |
|  | 15 | 14 |
| Total Credits 29 |  |  |
| Reproductive Management of Dairy Cattle |  |  |
| SAMPLE DAIRY VETERINARY | NCE FOUR-YEAR PLAN- |  |

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 103 | 4 BIOLOGY/BOTANY/ | 5 |
|  | ZOOLOGY 151 |  |
| DY SCI/AN SCI 101 | 4 A A E 215 | 3 |
| MATH 221 | 5 CHEM 104 | 5 |
| COMM A Course | 3 DY SCI 205 | 2 |
|  | First Year Seminar | 1 |
|  | DY SCI 272 | 1 |
|  | 16 | 17 |

Total Credits 33

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| BIOLOGY/BOTANY/ | 5 CHEM 343 | 3 |
| ZOOLOGY 151 |  |  |
| DY SCI 233 | 3 DY SCI 234 | 3 |
| GENETICS 466 | 3 DY SCI/AN SCI 320 | 3 |
| STAT 371 | 3 DY SCI/AN SCI 361 | 2 |
|  | DY SCI/AN SCI 363 | 2 |


|  | DY SCI/AN SCI/ FOOD SCI/SOIL SCI 472 | 1 |
| :---: | :---: | :---: |
|  | 14 | 14 |
| Total Credits 28 |  |  |
| Sophomore |  |  |
| Summer |  | Credits |
| SOIL SCI 473 |  |  |
|  |  | 2 |
| Total Credits 2 |  |  |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| BIOCHEM 501 | 3 DY SCl $299{ }^{1}$ | 1 |
| DY SCI 305 | $\begin{gathered} 3 \text { DY SCI/AN SCI/ } \\ \text { NUTR SCI } 311 \end{gathered}$ | 3 |
| DY SCI/AN SCI 370 | 3 DY SCI/AN SCI 313 | 1 |
| PHYSICS 103 | 4 DY SCI/AN SCI 373 | 3 |
| Free Elective Course | 3 PHYSICS 104 | 4 |
|  | Humanities / Literature / Arts Course | 3 |
|  | 16 | 15 |

Total Credits 31

## Junior Summer Credits

| DY SCI 399 | 1 |
| :--- | :--- |

## Total Credits 1

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| DY SCI/AN SCI 414 | 2 DY SCI 535 | 3 |
| DY SCI/AN SCI 434 | 3 DY SCI $375^{2}$ | 3 |
| DY SCI 690 | 1 COMM B Course | 3 |
| Humanities / Literature / | 3 Free Elective Courses | 6 |
| Arts Course |  |  |
| Ethnic Studies Course | 3 | 15 |
| Free Elective Course | 3 | 15 |

Total Credits 30
1 Undergraduate Research
2 Reproductive Management of Dairy Cattle

## ADVISING AND CAREERS

Students are assigned a faculty advisor once they declare the major. Prospective students are welcome to contact Ted Halbach (tjhalbach@wisc.edu, 608-219-5289) for more information.

Undergraduates in dairy science prepare for a variety of career opportunities that require a strong background in applied animal biology. Careers include: agribusiness, dairy farm management, technical service
and consulting, research, and teaching. Students also enroll in the department to prepare for veterinary school, medical school, or graduate school. Coursework in the major includes animal genetics, lactation, reproduction, nutrition and management. The department may be consulted for additional details and for specific career information.

## PEOPLE

## PROFESSORS

Combs, Fricke, Jones, Shaver, Wattiaux, Weigel (chair), Wiltbank

## ASSOCIATE PROFESSORS <br> Cabrera, Hernandez

ASSISTANT PROFESSOR
White, Arriola Apelo

## FACULTY ASSOCIATE

Halbach

## WISCONSIN EXPERIENCE

See "Getting Involved in Dairy Science," as well as a link to scholarships, on this web page (https://dysci.wisc.edu/prospective-students/ undergraduate).

## ENTOMOLOGY

Insects have dominated the terrestrial planet for more than 350 million years. While entomologists have recognized and named more than one million different species of insects, experts vary widely on the true number of insects species-with estimates ranging as widely as from 3 to 30 million unique species. At any given moment, 200+ million insects live for every human on Earth; over 70 percent of all animal species are insects. They have achieved something that has eluded humans -sustainable development. Insects are the primary consumers of plants, yet they are also the dominant pollinators, thus ensuring plant reproduction. They play a critical role in disease transmission yet the service they provide to ecological maintenance is unparalleled.

Entomologists conduct insect-based research in numerous areas ranging from general biology, natural history, systematics, ecology and behavior, to molecular biology, physiology and development, to medical and agricultural entomology. Emerging areas include invasive species, biodiversity, pollination ecology, forensics, global health, and genomics. Entomology is a very specific discipline, yet at the same time, an immensely broad and diverse field of study touching a wide array of other subjects. As such, entomological training provides many choices and opportunities for those interested in the diversity of nature. While some entomologists work in the field, others work in the laboratory or classroom.

Students majoring in entomology study in a variety of fundamental and applied fields. Graduates find employment in college and university teaching, research and extension work, state and federal government service, industry, and research institutes.

Students can complete an undergraduate major in entomology under the bachelor of science degree program.

Students interested in graduate work should consult the Graduate Guide (http://guide.wisc.edu/graduate).

See the department website (http://www.entomology.wisc.edu) for current course rotation information.

## DEGREES/MAJORS/CERTIFICATES

- Entomology, B.S. (p. 144)


## PEOPLE

## PROFESSORS

Brunet, Johanne
Goodman, Walter
Gratton, Claudio
Groves, Russell
Lindroth, Richard
Paskewitz, Susan (chair)
Raffa, Kenneth
Williamson, R. Chris
Young, Daniel
Zhu, Jun

## ASSISTANT PROFESSORS

Guedot, Christelle
Schoville, Sean
Steffan, Shawn

## ADJUNCT \& AFFILIATED FACULTY

Bartholomay, Lyric (Pathobiological Sciences)
Currie, Cameron (Bacteriology)
Ives, Anthony (Integrated Biology)
Mattson, William (adjunct)
Peckarsky, Bobbi (adjunct)

## INSTRUCTIONAL STAFF

Brabant, Craig, Curator Wisconsin Insect Research Collection Liesch, Patrick (PJ), Assistant Faculty Associate Insect Diagnostic Lab

## ENTOMOLOGY, B.S.

Insects have dominated the terrestrial planet for more than 350 million years. While entomologists have recognized and named more than one million different species of insects, experts vary widely on the true number of insects species-with estimates ranging as widely as from 3 to 30 million unique species. At any given moment, 200+ million insects live for every human on Earth; over 70 percent of all animal species are insects. They have achieved something that has eluded humans -sustainable development. Insects are the primary consumers of plants, yet they are also the dominant pollinators, thus ensuring plant reproduction. They play a critical role in disease transmission yet the service they provide to ecological maintenance is unparalleled.

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genomics. Entomology is a very specific discipline, yet at the same time, an immensely broad and diverse field of study touching a wide array of other subjects. As such, entomological training provides many choices and opportunities for those interested in the diversity of nature. While some entomologists work in the field, others work in the laboratory or classroom.

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Students can complete an undergraduate major in entomology under the bachelor of science degree program.

Students interested in graduate work should consult the Graduate Guide (http://guide.wisc.edu/graduate).

See the department website (http://www.entomology.wisc.edu) for current course rotation information.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) |  |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

## Code

Title
Mathematics

| Select one of the following (or placement exam): |
| :--- |
| MATH 112 Algebra <br> \& MATH 113 and Trigonometry <br> MATH 114 Algebra and Trigonometry <br> MATH 171 Calculus with Algebra and <br> Trigonometry I <br> Select one of the following:  <br> MATH 211 Calculus <br> MATH 217 Calculus with Algebra and <br> Trigonometry II <br> MATH 221 Calculus and Analytic Geometry 1 <br> STAT 371Introductory Applied Statistics for <br> the Life Sciences |

## Chemistry

| Select one of the following: | $5-9$ |
| :--- | :--- |
| CHEM 103 | General Chemistry I |
| \& CHEM 104 | and General Chemistry II |
| CHEM 109 | Advanced General Chemistry |
| Biology |  |
| Option 1: |  |
| BIOLOGY/ | Introductory Biology |
| BOTANY/ | and Introductory Biology |
| ZOOLOGY 151 |  |
| \& BIOLOGY/ |  |
| BOTANY/ |  |
| ZOOLOGY 152 |  |

Option 2:

| ZOOLOGY/ | Animal Biology |
| :--- | :--- |
| BIOLOGY 101 | and Animal Biology Laboratory |
| \& ZOOLOGY/ | and General Botany |
| BIOLOGY 102 |  |
| \& BOTANY/ |  |
| BIOLOGY 130 |  |
| Option 3: |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| \& BIOCORE 382 | and Evolution, Ecology, and |
| \& BIOCORE 383 | Genetics Laboratory <br> \& BIOCORE 384 <br> and Cellular Biology <br> and Cellular Biology Laboratory |

Select 12 additional credits from any biological or physical science course (at least 8 credits must be 300level or 200-level courses with the intermediate-level designation). ${ }^{2}$

## Physics

Select one of the following: 3-5

| PHYSICS 103 | General Physics |  |
| :--- | :--- | :--- |
| PHYSICS 107 | The Ideas of Modern Physics |  |
| PHYSICS 109 | Physics in the Arts |  |
| PHYSICS 115 | Energy |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics | 4 |
| Entomology Core |  |  |
| ENTOM/ZOOLOGY | Introduction to Entomology |  |
| 302 |  | 11 |
| Select 11 credits as follows: |  |  |

Must select at least 3 credits from at least two subsets (organismal, suborganismal, or applied)
May select up to 3 credits from subset called "other"

## Capstone

| ENTOM 468 | Studies in Field Entomology ${ }^{3}$ | 3 |
| :--- | ---: | ---: |
| Total Credits |  | $36-43$ |

1 If MATH 171 is taken, student must take MATH 217.
2 Suggested courses/subjects include GENETICS 466, CHEM 341, CHEM 342 CHEM 343, CHEM 344, CHEM 345, PHYSICS 104, PHYSICS 202, PHYSICS 208, ENTOM not used elsewhere, BOTANY, ZOOLOGY, F\&W ECOL, MICRO, PL PATH.
3
ENTOM 468, taken after the junior year, is the recommended capstone course (can double count in Core Courses). ENTOM 681 Senior Honors Thesis, ENTOM 682 Senior Honors Thesis, ENTOM 691 Senior Thesis, ENTOM 699 Special Problems can be substituted in special circumstances (and can double count up to 3 credits in Core Category); see advisor.

## SUBSET COURSES

## ORGANISMAL

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENTOM 331 | Taxonomy of Mature Insects | 4 |
| ENTOM 432 | Taxonomy and Bionomics of <br> Immature Insects | 4 |
| ENTOM 450 | Basic and Applied Insect Ecology ${ }^{\text {1 }}$ |  |


| ENTOM/ | Ecotoxicology: The Chemical |
| :--- | :--- |
| AGRONOMY/ | Players |
| F\&W ECOL/ |  |
| M\&ENVTOX 632 |  |
| ENTOM/ | Ecotoxicology: Impacts on |
| AGRONOMY/ | Individuals |
| F\&W ECOL/ |  |
| M\&ENVTOX 633 |  |
| ENTOM/ Ecotoxicology: Impacts on <br> AGRONOMY/ Populations, Communities and <br> F\&W ECOL/ Ecosystems <br> M\&ENVTOX 634  <br> ENTOM 701 Advanced Taxonomy |  |

1 ENTOM 450 Basic and Applied Insect Ecology and ENTOM 451 Basic and Applied Insect Ecology Laboratory can count toward either the organismal or applied categories, not both

## SUBORGANISMAL

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENTOM 321 | Physiology of Insects | 3 |
| ENTOM/BOTANY/ | Plant-Microbe Interactions: | 3 |
| PL PATH 505 | Molecular and Ecological Aspects |  |

ENTOM/GENETICS/ Molecular Ecology

## APPLIED

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENTOM/M M \& I/ PATH-BIO/ ZOOLOGY 350 | Parasitology | 3 |
| ENTOM 351 | Principles of Economic Entomology | 3 |
| ENTOM/ <br> ZOOLOGY 371 | Medical Entomology | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology ${ }^{1}$ | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory ${ }^{1}$ | 1 |
| ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 |

1 ENTOM 450 Basic and Applied Insect Ecology and ENTOM 451 Basic and Applied Insect Ecology Laboratory can count toward either the organismal or applied categories, not both

## OTHER

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENTOM 375 | Special Topics | $1-4$ |
| ENTOM 399 | Coordinative Internship/Cooperative | $1-8$ |
|  | Education |  |
| ENTOM 681 | Senior Honors Thesis | $2-4$ |
| ENTOM 682 | Senior Honors Thesis | $2-4$ |
| ENTOM 691 | Senior Thesis | 2 |
| ENTOM 699 | Special Problems | $1-4$ |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Define and explain major concepts in the biological sciences focusing on insects.
2. Knowledge of laboratory and/or field methodology.
3. Explain and apply scientific methods including designing and conducting experiments and testing hypotheses.
4. Recognize relationships between structure and function at all levels including molecular, cellular, organismal and ecological.
5. Demonstrate a style appropriate for communicating scientific results in written and oral form.
6. Integrate math, physics, and technology to answer biological questions using the scientific method.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE ENTOMOLOGY FOUR-YEAR PLAN

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| CHEM 103 or 109 | 4-5 CHEM 104 | 5 |
| MATH 112, 113, 114, or 171 | $\begin{aligned} & \text { 3-5 MATH 113, 211, 217, or } \\ & 221 \end{aligned}$ | 3-5 |
| COMM A or Elective | 3 Electives (to reach ~15 credits) | 5-8 |
| First Year Seminar | 1 |  |
| Course ${ }^{1}$ |  |  |
|  | 14-17 | 13-18 |

Total Credits 27-35
Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 211, 217, 221, or | $3-5$ ZOOLOGY/BIOLOGY/ | 5 |
| STAT 371 | BOTANY 152 or BOTANY |  |
| 130 |  |  |
| ZOOLOGY/BIOLOGY 101 | 5 Electives | 10 |
| \& ZOOLOGY/ |  |  |
| BIOLOGY 102 (or |  |  |
| ZOOLOGY 151) | $4-6$ | 15 |
| Electives | $12-16$ |  |

Total Credits 27-31

| Junior |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| ENTOM/ZOOLOGY 302 | 4 Biological or Physical Elective | 3 |
| PHYSICS 103, 107, 109, 115,201 , or 207 | 4-5 Breadth Course in Core | 3 |
| Electives (to reach ~ 15 credits) | 4-8 Electives (to reach ~15 credits) | 6-9 |
|  | 12-17 | 12-15 |

Total Credits 24-32

## Junior

| Summer | Credits |
| :--- | ---: |
| ENTOM 468 (Capstone, even \#'d | 3 |
| summers) |  |

## Total Credits 3

## Senior

$\left.\begin{array}{lcr}\text { Fall } & \text { Credits Spring } & \text { Credits } \\ \begin{array}{l}\text { Biological or Physical } \\ \text { Elective Course }\end{array} & 3 \text { Biological or Physical } & 6 \\ \begin{array}{l}\text { Breadth Course(s) in } \\ \text { Core }\end{array} & \text { Elective }\end{array}\right)$

## Total Credits 27-33

1 When choosing electives, students should first consider UW and CALS requirements (ethnic studies, humanities, social science, international studies, etc.)
For additional Biological or Physical Science courses students may
want to choose from the following depending on interest

* Health/graduate school: CHEM 343/CHEM 344/CHEM 345,

PHYSICS 104 or PHYSICS 207, GENETICS 466,
MICROBIO 303/MICROBIO 304, BIOCHEM 501

* Ecology: F\&W ECOL/ENVIR ST/ZOOLOGY 360, BOTANY/F\&W ECOL/ ZOOLOGY 460 General Ecology, F\&W ECOL 550 Forest Ecology, ZOOLOGY/ANTHRO/BOTANY 410, BOTANY 400 or BOTANY 401
* Agriculture: PL PATH 300, AGRONOMY 300, SOIL SCI 301

Students may reduce the number of required courses via:

- Testing out of Comm-A
- Using ZOOLOGY/BIOLOGY/BOTANY 152 Introductory Biology to satisfy Comm-B
- Testing out of Quantitative Reasoning, Part A
- Earning AP/IB credits
- Using ENTOM/ZOOLOGY 371 Medical Entomology for International Course


## ADVISING AND CAREERS

## UNDERGRADUATE ADVISING IN ENTOMOLOGY

Undergraduate students are assigned to two advisors, the entomology undergraduate faculty advisor Dr. Dan Young (http:// labs.russell.wisc.edu/ento/people/faculty/young) and Sara Rodock (rodock@wisc.edu (p. 148); appointment scheduling link (http:// calendar.wisc.edu/scheduling-assistant/public/profiles/eBLVAOve.html)). However, since the vast majority of entomology B.S. students do independent research during their undergraduate career, it is important to meet with other entomology faculty members (http:// labs.russell.wisc.edu/ento/people/faculty) to learn about all of the research possibilities.

Undergraduates in entomology are strongly urged to meet with their advisor before they enroll for the upcoming term.

For more information about the entomology B.S. or the department in general, please contact Dr. Dan Young or the Student Services Coordinator, Sara Rodock (rodock@wisc.edu or 608-262-9926).

## CAREERS AND PROFESSIONAL DEVELOPMENT

For more information on careers available to entomology students, please visit our Internship \& Job Resources (http://labs.russell.wisc.edu/ ento/graduate-study/internships-and-job-resources) page. For more information on other academic, co-curricular, financial aid, and career opportunities and services available to entomology B.S. students, please visit the CALS Career Services (https://cals.wisc.edu/academics/ undergraduate-students/career-services) page. Students in the major are welcome to make an individual appointment with Sara Rodock (rodock@wisc.edu; appointment link for current UW-Madison students (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ eBLVAOve.html)) to discuss a number of career related topics such as career exploration, search strategies, graduate school, and review of application materials (resume, CV, letters, etc.).

## PEOPLE

## PROFESSORS

Brunet, Johanne
Goodman, Walter
Gratton, Claudio
Groves, Russell
Lindroth, Richard
Paskewitz, Susan (chair)
Raffa, Kenneth
Williamson, R. Chris
Young, Daniel
Zhu, Jun

## ASSISTANT PROFESSORS

Guedot, Christelle
Schoville, Sean
Steffan, Shawn

## ADJUNCT \& AFFILIATED FACULTY

Bartholomay, Lyric (Pathobiological Sciences)
Currie, Cameron (Bacteriology)
Ives, Anthony (Integrated Biology)
Mattson, William (adjunct)
Peckarsky, Bobbi (adjunct)

## INSTRUCTIONAL STAFF

Brabant, Craig, Curator Wisconsin Insect Research Collection Liesch, Patrick (PJ), Assistant Faculty Associate Insect Diagnostic Lab

## WISCONSIN EXPERIENCE

While entomology clearly is "big science," our department prides itself on a "small campus" feel in which we get to know our undergraduate students during their time with us.

In the classroom, we strive to maintain labs at not more than 15-20 students to maximize individualized and participatory learning. Students are given additional opportunities for deep and engaged learning
experiences through honors options that are generally available for most courses and field and/or lab experiences in many of the upper-level courses.

Very nearly all our majors have opportunities to work alongside our faculty and graduate students in research labs and in the field. Our major accommodates $1-3$ credits (of the 15 entomology credits required to major) in the area of directed/independent study and internships to promote extracurricular and outside the traditional classroom learning.

Many of our undergraduate majors are also involved in service learning and teaching through our departmental "Insect Ambassadors (http:// labs.russell.wisc.edu/insectambassadors)" outreach program to K/12, various clubs, and organizations. We are committed (http:// labs.russell.wisc.edu/ento/outreach) to the UW System goal to provide Wisconsin's citizens with opportunities to benefit from, and contribute to, the state's growing "knowledge economy" through the land-grant university three-fold mission of teaching, research and public service. We also have an active Undergraduate Entomology Society for majorsor any UW-Madison students interested in entomology. Research and internship opportunities are also available in the UW Insect Research Collection (WIRC) (http://labs.russell.wisc.edu/wirc) as well as possible participation in WIRC sponsored collecting expeditions in Wisconsin and around the United States.

## FOOD SCIENCE

Food science is the application of science and engineering to the production, processing, distribution, preparation, and evaluation of food.

The Department of Food Science at the University of Wisconsin-Madison has been a part of the College of Agricultural and Life Sciences for more than 100 years instructing generations of food science and industry leaders. Housed in the recently remodeled Babcock Hall, the Department of Food Science offers students a truly unique undergraduate and graduate experience. Known for our distinguished and dedicated faculty and staff, students find the Department of Food Science a stimulating and encouraging environment to study and conduct research.

The Department of Food Science's undergraduate program offers students valuable real-world experience and leadership skills by providing an innovative curriculum; varied club and extracurricular activities; research lab opportunities; access to a fully functional and award winning dairy plant; professional and industry contacts and experience; numerous internships and scholarships, and nearly $100 \%$ job placement.

Students find career opportunities in product development, quality assurance/control, processing and engineering, technical sales, management, research, sensory analysis, and food law and regulations.

## DEGREES/MAJORS/CERTIFICATES

- Food Science, B.S. (p. 149)
- Science of Fermented Food and Beverages, Certificate (p. 153)


## PEOPLE

## PROFESSORS

Damodaran, Etzel, Hartel, Ingham, Lucey, Parkin, Rankin (chair)

ASSISTANT PROFESSORS<br>Bolling, Huynh, Ikeda, vanPijkeren

## FOOD SCIENCE, B.S.

Food science is the application of science and engineering to the production, processing, distribution, preparation, and evaluation of food.

The Department of Food Science at the University of Wisconsin-Madison has been a part of the College of Agricultural and Life Sciences for more than 100 years, instructing generations of food science and industry leaders. Housed in the recently remodeled Babcock Hall, the Department of Food Science offers students a truly unique undergraduate experience. Known for our distinguished and dedicated faculty and staff, students find the Department of Food Science a stimulating and encouraging environment to study and conduct research.

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Students find career opportunities in product development, quality assurance/control, processing and engineering, technical sales, management, research, sensory analysis, and food law and regulations.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General •Breadth-Humanities/Literature/Arts: 6 credits Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33) 1
International Studies (p. 33) 3
Physical Science Fundamentals 4-5

Biological Science 5
Additional Science (Biological, Physical, or Natural) 3
Science Breadth (Biological, Physical, Natural, or Social) 3
CALS Capstone Learning Experience: included in
Requirements") (p. 33)

## MAJOR REQUIREMENTS

NUTR SCI/A A E/AGRONOMY/INTER-AG 350 World Hunger and Malnutrition is recommended to fulfill the CALS International Studies requirement.

| Code | Title |
| :--- | :--- | ---: |
| Mathematics and Statistics |  | Credits

Foundation
Econ or Ag \& Applied Econ
Select one of the following:

| A A E 215 | Introduction to Agricultural and Applied Economics |  |
| :---: | :---: | :---: |
| A A E 323 | Cooperatives |  |
| ECON 101 | Principles of Microeconomics |  |
| ECON 111 | Principles of Economics- <br> Accelerated Treatment |  |
| Nutritional Science |  |  |
| NUTR SCI/ <br> BIOCHEM 510 <br> or NUTR SCI 332 | Biochemical Principles of Human and Animal Nutrition Human Nutritional Needs | 3 |
| Core |  |  |
| FOOD SCI 301 | Introduction to the Science and Technology of Food | 3 |
| AN SCI/FOOD SCI | Food Laws and Regulations | 1 |


| FOOD SCI/MICROBIO Food Microbiology | 3 |  |
| :--- | :--- | ---: |
| 325 |  | 3 |
| FOOD SCI 410 | Food Chemistry | 4 |
| FOOD SCI 412 | Food Analysis | 3 |
| FOOD SCI 432 | Principles of Food Preservation | 3 |
| FOOD SCI 440 | Principles of Food Engineering | 4 |
| FOOD SCI 514 | Integrated Food Functionality | 4 |
| FOOD SCI 532 | Integrated Food Manufacturing |  |
| Integrated Food Product Elective | 2 |  |
| Select one of the following (2 credits minimum): |  |  |
| FOOD SCI 511 | Chemistry and Technology of Dairy |  |
|  | Products |  |

## Science Elective

Any 400-level or above course with Physical Science 3 designation
Capstone
FOOD SCI 602 Senior Project 2
FOOD SCI 603 Senior Seminar 1

Total Credits 85-92
1 MATH 217 Calculus with Algebra and Trigonometry II requires MATH 171 Calculus with Algebra and Trigonometry I as a prerequisite.

## BIOLOGY PATHS BIOCHEM/BOTANY/MICROBIO/ZOOLOGY (PATH 1)

Code

Title

Credits

BIOLOGY/BOTANY/ Introductory Biology 5
ZOOLOGY 151
Select one of the following:3-5

Any 400-level or above course with Biological Science designation
BIOLOGY/ Introductory Biology
BOTANY/
ZOOLOGY 152
MICROBIO 101 General Microbiology 3
or MICROBIO 303 Biology of Microorganisms
MICROBIO 102 General Microbiology Laboratory 2
or MICROBIO 304 Biology of Microorganisms Laboratory
BIOCHEM 501 Introduction to Biochemistry 3

BIOCORE (PATH 2)
Code Title

Credits
Evolution, Ecology, and Genetics

| BIOCORE 383 | Cellular Biology | 3 |
| :--- | :--- | :--- |
| BIOCORE 485 | Organismal Biology | 3 |
| BIOCORE 587 | Biological Interactions | 3 |
| Select two of the following: | 4 |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics <br> Laboratory |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| Total Credits |  | 16 |

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take FOOD SCI 681 Senior Honors Thesis and FOOD SCI 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http:// www.cals.wisc.edu/academics/undergraduate-programs/get-involved/ honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of 30 } \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes }\end{array}
$$ <br>
UW-Madison courses offered in distance or online <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- | :--- |

## LEARNING OUTCOMES

1. Clearly and effectively communicate, both verbally and written, to a diverse range of audiences including technical experts and a lay audience.
2. Apply quantitative problem solving and critical thinking skills in all aspects of food science.
3. Rigorously apply scientific principles and quantitative reasoning to solve food science problems (technical competence).
4. Demonstrate the ability to work both independently and in groups across a wide range of situations.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE FOOD SCIENCE FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| CHEM 103 or $109{ }^{1}$ | 4-5 CHEM $104{ }^{1}$ | 5 |
| MATH $221^{2}$ | $\begin{aligned} & 5 \text { BIOLOGY/BOTANY/ } \\ & \text { ZOOLOGY } 151 \end{aligned}$ | 5 |
| General Education course ${ }^{3}$ | 0-3 General Education Course ${ }^{3}$ | 0-3 |
| COMM A Course | 3 FOOD SCI 201 (recommended) | 1 |
| First Year Seminar | 1 |  |
|  | 13-17 | 11-14 |

Total Credits 24-31

## Sophomore

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| CHEM 343 | $\begin{aligned} & 3 \text { CHEM } 344 \\ & \& \text { CHEM } 345 \end{aligned}$ | 5 |
| FOOD SCI 301 | 3 STAT 371 or 301 | 3 |
| MICROBIO 101 <br> \& MICROBIO 102 | 5 PHYSICS 207 | 5 |
| FOOD SCI 375 (The <br> Practicing Professional: <br> Pathway to Leadership (recommended)) | 1 General Education Course ${ }^{4}$ | 0-3 |
| General Education Course ${ }^{3}$ | 3 |  |
|  | 15 | 13-16 |

Total Credits 28-31

## Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| BIOCHEM 501 | 3 NUTR SCI 332 or 510 | 3 |
| FOOD SCI 440 | 3 FOOD SCI/AN SCI 321 | 1 |
| FOOD SCI 410 | 3 FOOD SCI 432 | 3 |
| MICROBIO/ <br> FOOD SCI 324 <br> \& MICROBIO/ <br> FOOD SCI 325 | 5 FOOD SCI 412 | 4 |
| General Education <br> Courses $^{3}$ | $0-6$ Food Science course |  |

## Total Credits 25-39

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| FOOD SCI 532 | 4 FOOD SCI 514 | 4 |
| FOOD SCI 602 | 2 FOOD SCI $603^{6}$ | 1 |


| Food Science Course ${ }^{4}$ | $0-3$ Food Science Course ${ }^{4}$ | $0-3$ |
| :--- | :--- | ---: |
| Science Elective Course $^{5}$ | $0-3$ Science Elective Course ${ }^{5}$ | $0-3$ |
| General Education $_{\text {Courses }^{3}}{ }^{3}$ $3-6$ General Education <br> Courses $^{3}$ $3-6$ <br>  $9-18$ $8-17$ |  |  |

## Total Credits 17-35

Students taking CHEM 109 do not take CHEM 104.
MATH 221 will satisfy the Quantitative Reasoning B requirement.
Electives can be found on the Requirements tab.
4 Students must select at least one course from FOOD SCI 511 Chemistry and Technology of Dairy Products (spring semester), FOOD SCI/AN SCI 515 Commercial Meat Processing (fall semester), FOOD SCI 535 Confectionery Science and Technology (fall semester), or FOOD SCI 550 Fermented Foods and Beverages (spring semester) and either FOOD SCI 551 Food Fermentation Laboratory (spring semester) or FOOD SCI 552 Food Fermentation Laboratory: The Science of Wine (fall semester).
Students must complete two science elective courses:
(1) at least 3 credits of any 400 -level or above biological science course or BIOLOGY/BOTANY/ZOOLOGY 152 Introductory Biology (2) at least 3 credits of any 400 -level or above physical science course.
6 Combination of FOOD SCI 602 Senior Project and FOOD SCI 603 Senior Seminar satisfy Comm B requirement.
Note: Students must complete a minimum of 120 credits. This may require taking 16 credits per semester for at least four semesters.

## ADVISING AND CAREERS

Students are assigned a faculty or staff advisor once they declare the major. Advisors are prepared to help with curricular planning and course access; major and degree questions; discussion of independent study and lab research experience; and navigating internship and scholarship opportunities. Declared food science majors must meet with their assigned advisor prior to registration. Additional information can be found on the department's website (https://foodsci.wisc.edu/ advising.php).

Prospective food science majors should contact the Department of Food Science at foodsci@wisc.edu or 608-262-3046 for more information.

## PEOPLE

## PROFESSORS

Damodaran, Etzel, Hartel, Ingham, Lucey, Parkin, Rankin (chair)

## ASSISTANT PROFESSORS

Bolling, Huynh, Ikeda, vanPijkeren

## WISCONSIN EXPERIENCE

Food science students are strongly encouraged to develop leadership skills through a variety of extracurricular experiences.

## FOOD SCIENCE CLUB

The Food Science Club has garnered Gold status from the Institute of Food Technologists Student Association for many years, placing highly
every year in the Chapter of the Year competition. This acclaim comes from the wide array of activities offered by the club each year.

- Product Development teams. Join teams of students who develop new products, from idea conception to manufacture, for submission to national competitions. Our student teams place highly every year, in part because of the extremely supportive culture within the program.
- Outreach. Each semester, club members participate in outreach activities (WI Science Festival, Science Expeditions, local school activities, etc.) that promote food science to grade school and high school students. Activities such as Peeps Jousting, gummy bear production, chocolate rheology, flavor and sensory science, and many others, help demonstrate various science principles and generate interest in science among younger students.
- Fundraising activities. A Bucky Puck, an ice cream sandwich with Cookies and Cream ice cream, is the main fundraising product of the club. You can help make them and then help sell them to various events. Other fundraising activities include selling Babcock ice cream at Taste of Madison, silent auctions at professional meetings, and merchandise sales. Funds raised through these activities help support other club activities.
- Food and Health Initiative. Are you interested in developing healthy food alternatives? This program is for you then. Hear from a variety of experts on various topics of interest, including gluten-free pasta, sugar and health, GMO foods, and many others.
- Food Systems Initiative. Food science focuses on converting raw materials into edible food products. But there is so much more to the broader food landscape. This initiative focuses on the wider scope of food, investigating how food scientists can interact with food production and social issues related to food.
- Social activities. Each month, a fun social activity allows students to mingle in a friendly environment. For example, you can make (and eat) Thanksgiving dinner in November and enjoy chocolate-covered anything at the February social.
- College Bowl. Which state has the largest production of ginseng? Questions like this serve as the focal point of College Bowl, a food science trivia competition for both undergraduate and graduate students. The team competes first in the regional competition, and if successful then moves on to the national competition. Yes, Wisconsin is the largest producer of ginseng in the United States.
- Company info sessions. Each club meeting is sponsored by a food company that also gives a brief presentation about itself. Additional info sessions are sponsored on an individual basis.


## SUMMER INTERNSHIPS

Spending a summer working and gaining experience at a food company is a great way to apply classroom learning to the real world. With over 40 companies visiting the program each year, numerous opportunities are available for any student interested in a summer internship. Students spend their summers at companies that include General Mills, Pepsico, Kraft-Heinz, Foremost Farms, Agropur, Schreiber Cheese, and many more. These internships are generally paid (sometimes quite well) and many have lodging subsidies.

## RESEARCH/WORK EXPERIENCE

Another way to gain practical experience is to work in the building or on campus.

[^8]- Babcock Dairy Plant. Want practical experience in a fully operational dairy plant? Consider signing up for part-time work in the Babcock Dairy Plant gaining experience in a wide range of practical jobs, from quality control to production.
- Center for Dairy Research (CDR). Also within Babcock Hall is the internationally renowned Center for Dairy Research. Students can conduct research, work in the analytical labs or participate on the CDR Sensory Panel to gain invaluable practical experience.
- Food Research Institute (FRI). Housed in the Microbial Sciences Building, FRI conducts industry oriented research on a wide range of food safety topics.
- Meat Lab/Bucky's Butchery. Interested in meat science? The meat processing facilities within the Animal Science department actually apply many food science principles and provide a unique opportunity for students to get hands-on experience with all aspects of meat production.


## SCIENCE OF FERMENTED FOOD AND BEVERAGES, CERTIFICATE

The purpose of this certificate program is to provide undergraduates at UW-Madison with an opportunity to gain unique knowledge and skill sets specific to the fermented food and beverage industries. Students that successfully complete this program will graduate with a competitive edge and leadership potential specific to career opportunities in this unique and growing field.

## HOW TO GET IN

This certificate is open to all degree-seeking undergraduate students. Students must be over the age of 21 by the time they take the lab requirements (FOOD SCI 551 Food Fermentation Laboratory or FOOD SCI 552 Food Fermentation Laboratory: The Science of Wine). For more information, or to declare the certificate, contact Monica Theis (mltheis@wisc.edu (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/food-science/science-fermented-food-beverages-certificate/ email:mltheis@wisc.edu)). Students are strongly encouraged to declare the certificate early in their academic career to ensure timely completion of certificate requirements.

## REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| FOOD SCI 410 | Food Chemistry | 3 |
| FOOD SCI 550 | Fermented Foods and Beverages | 2 |
| FOOD SCI 551 | Food Fermentation Laboratory | 1 |
| or FOOD SCI 552 | Food Fermentation Laboratory: <br>  <br> Wine |  |
| MICROBIO/ Science of | Food Microbiology |  |
| FOOD SCI 325 | Diversity, Ecology and Evolution of | 3 |
| MICROBIO 450 | Microrrganisms | 3 |
| MICROBIO 526 | Physiology of Microorganisms | 3 |
| MARKETNG 300 | Marketing Management | 3 |
| Total Credits |  | 18 |

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Identify and describe how microbial and chemical features of ingredients and raw materials influence the quality and functionality of fermented foods and beverages.
2. Explain the compositional features of ingredients and raw materials specific to various fermented foods and beverages.
3. Identify and describe the operational units and transformational processes unique to the production of fermented foods and beverages.
4. Design and produce fermented foods and/or beverages that meet specified standards for styles or varieties.
5. Measure and interpret analytics to assess quality and correct defects.
6. Describe the concept of branding and its impact on marketing fermented foods and beverages.

## ADVISING AND CAREERS

For more information or to declare the certificate in the science of fermented food and beverages, contact:

Monica Theis
mltheis@wisc.edu
608-263-2225
Babcock Hall Room 127A
1605 Linden Dr, Madison, WI 53706

## PEOPLE

David Ryder, adjunct professor, Food Science
Monica Theis, senior lecturer, Food Science
Nick Smith, ecologist and instructor

## WISCONSIN EXPERIENCE

The experiences offered through this certificate provide students with a number of opportunities to fulfill the Wisconsin Experience. In addition to 17 credits of rigorous course work with a focus on the science of fermentations, students work directly with local brewers, winemakers and bakers where they can explore innovations in product development, apply their knowledge and help local industries solve problems specific to their craft. Engagement allows for intellectual growth as well as an appreciation for the influence of local culture and values on what makes for "good" food and beverages.

Our industry and campus partners celebrate curiosity and exploration by allowing students to experiment with novel ingredients such as wild yeast, winter hardy grapes and local hops. Most exciting of all, students
find that they can make a direct contribution to food and beverage products that are launched into the Wisconsin marketplace.

## FOREST AND WILDLIFE ECOLOGY

The Department of Forest and Wildlife Ecology provides sciencebased teaching that prepares future natural resource professionals to sustainably manage and conserve forests and wildlife. Building on the rich traditions of Aldo Leopold (the Department's first chair), we offer students an interdisciplinary environment to learn about the natural world, apply science to management toward sustainable ecological systems, and understand complex human-environment relationships. We offer two undergraduate majors-forest science and wildlife ecology -that provide opportunities for employment in the public, private, and non-governmental sectors. Students can also gain a strong foundation for graduate training in forestry, wildlife, ecology, and related fields. The forest science program is accredited by the Society of American Foresters. The wildlife ecology major provides a path to becoming a certified wildlife biologist. Both degrees provide a mix of field, lab, and classroom experiences.

The department also offers graduate programs at the M.S. and Ph.D. levels. See the Graduate Guide (http://guide.wisc.edu/graduate) for additional information.

## DEGREES/MAJORS/CERTIFICATES

- Forest Science, B.S. (p. 154)
- Wildlife Ecology, B.S. (p. 162)


## PEOPLE

## PROFESSORS

Bowe, Scott
Drake, David
Karasov, William
Kruger, Eric
Mladenoff, David
Radeloff, Volker
Ribic, Christine
Rickenbach, Mark (chair)
Samuel, Michael
Stanosz, Glen
Townsend, Philip
Van Deelen, Timothy

## ASSOCIATE PROFESSORS

Lutz, R. Scott
Ozdogan, Mutlu
Pauli, Jonathan
Peery, M. Zach
Pidgeon, Anna
Rissman, Adena

AFFILIATED AND ADJUNCT FACULTY<br>Alix-Garcia, Jennifer (Agriculture and Applied Economics)<br>Allison, R. Bruce (adjunct)<br>Balster, Nick (Soil Science)<br>Lindroth, Richard (Entomology)<br>Marin-Spiotta, Erika (Geogrgaphy)<br>Meine, Curt (adjunct)<br>Meyer, Michael (adjunct)<br>Raffa, Kenneth (Entomology)<br>Santana-Castellon, Eduardo (adjunct)<br>\section*{FACULTY ASSOCIATE}<br>Berkelman, James

## FOREST SCIENCE, B.S.

Forest ecosystems cover one third of the world's land area and nearly half of Wisconsin. They provide a range of benefits to society including wood and fiber, wildlife habitat, biological diversity, clean water, carbon storage, recreation, beauty, and cultural values. The Department of Forest and Wildlife Ecology trains foresters to sustainably manage forests toward sustainable ecological, social, and economic outcomes. Forest science students also learn how to respond to forest disturbances from insects, diseases, fire, and other changes. Beyond a core of basic science and forestry coursework, students have flexibility to customize their learning experience within one of three tracks: forest conservation, forests and the environment, and forest management. All three tracks meet accreditation standards of the Society of American Foresters, a key credential that employers seek. Students are also well positioned to pursue graduate training in forestry, ecology, remote-sensing, natural resource policy, and related fields.

Students learn through a mix of classroom, laboratory, and field instruction that emphasizes independent thinking and problem-solving. Students make frequent visits to forests to develop and hone their skills, essential for future job opportunities. Students also engage professional and student-led trainings and networking that further build skills. Graduates go on to jobs in private, public, and non-governmental sectors or pursue graduate degrees.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## ASSISTANT PROFESSORS

Johnston, Craig
Zuckerberg, Benjamin

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code Title

Credits
Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33)

International Studies (p. 33)
Physical Science Fundamentals 4-5

| CHEM 103 or CHEM 108 or CHEM 109 | General Chemistry I <br> Chemistry in Our World <br> Advanced General Chemistry |
| :---: | :---: |
| Biological Science |  |
| Additional Science (Biological, Physical, or Natural) |  |
| Science Breadth (Biological, Physical, Natural, or Social) |  |
| CALS Capstone Lear the requirements for Requirements") (p. | ing Experience: included in each CALS major (see "Major ) |

## MAJOR REQUIREMENTS

Code Title Credits

Select one of the following (or may be satisfied by 5-6 placement exam):

| MATH 112 <br> \& MATH 113 | Algebra and Trigonometry |  |
| :---: | :---: | :---: |
| MATH 114 | Algebra and Trigonometry |  |
| Select one of the following: |  | 3 |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences (recommended) |  |
| Chemistry |  |  |
| Select one of the following: |  | 4-5 |
| CHEM 103 | General Chemistry I |  |
| CHEM 108 | Chemistry in Our World |  |
| CHEM 109 | Advanced General Chemistry |  |
| Biology |  |  |
| Select one of the | wing options: | 10 |

Option 1 (recommended introduction to biology
sequence):

BOTANY/
BIOLOGY 130
\& ZOOLOGY/
BIOLOGY 101
\& ZOOLOGY/
BIOLOGY 102
Option 2:
BIOLOGY
BOTANY/
ZOOLOGY 151
\& BIOLOGY/
BOTANY/
ZOOLOGY 152
Option 3:
BIOCORE 381
\& BIOCORE 382
\& BIOCORE 383
\& BIOCORE 384

## Economics

A A E 215
or ECON 101

General Botany and Animal Biology and Animal Biology Laboratory

| Conservation |  |  |
| :---: | :---: | :---: |
| Select one of the follo | wing: ${ }^{2}$ | 2-4 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology |  |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species (recommended) ${ }^{3}$ |  |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology |  |
| F\&W ECOL/ <br> BOTANY/ <br> ENVIR ST/ <br> ZOOLOGY 651 | Conservation Biology (recommended) |  |
| GEOG/ <br> ENVIR ST 339 | Environmental Conservation |  |
| Core |  |  |
| Grade of C or better required in each core course |  |  |
| SOIL SCI 301 | General Soil Science | 4 |
| F\&W ECOL 300 | Forest Biometry | 4 |
| GEOG/CIV ENGR/ ENVIR ST 377 <br> or F\&W ECOL/ ENVIR ST/G LE/ GEOG/GEOSCI/ LAND ARC 371 | An Introduction to Geographic Information Systems Introduction to Environmental Remote Sensing | 3-4 |
| F\&W ECOL/ HORT/LAND ARC/ PLPATH 309 | Diseases of Trees and Shrubs | 3 |
| F\&W ECOL 399 | Coordinative Internship/Cooperative Education | 1-8 |
| BOTANY/F\&W ECOL $402$ | Dendrology | 2 |
| F\&W ECOL 410 <br> \& F\&W ECOL 411 | Principles of Silviculture and Practices of Silviculture | 4 |
| F\&W ECOL 415 | Tree Physiology | 3 |
| F\&W ECOL/ ENTOM 500 | Insects in Forest Ecosystem Function and Management | 2 |
| F\&W ECOL 501 | Forest Fire Behavior and Management | 1 |
| ENVIR ST/F\&W ECOL $515$ | Natural Resources Policy | 3 |
| F\&W ECOL 550 \& F\&W ECOL 551 | Forest Ecology and Forest Ecology Lab | 4 |
| A A E/ENVIR ST/F\&W ECOL 652 | Decision Methods for Natural Resource Managers | 4 |
| F\&W ECOL 658 | Forest Resources Practicum | 3 |
| Electives |  |  |
| Select one of the following tracks: |  | 12 |
| Forest Management Track |  |  |
| Forest Conservation Track |  |  |
| Forests \& Environment Track |  |  |
| Capstone |  |  |
| Grade of C or better re | equired in Capstone |  |


| F\&W ECOL 590 Integrated Resource Management | 3 |
| :--- | :--- | ---: |
| Total Credits | $83-96$ |
| 1 | A A E 215 only carries QR-B credit if taken fall 2011 or later. |
| 2 | These courses may double count as track electives. |
| 3 | F\&W ECOL/ENVIR ST/ZOOLOGY 360 Extinction of Species may also |
|  | fulfill CALS International Studies requirement. |

## MINIMUM GRADE REQUIREMENT

Students who declare the major in fall 2012 or later will be required to receive a grade of C or higher on all of the Forest Science Core courses and the Capstone. Students who receive a grade of $D$ or below will be required to retake the course for graduation.

## TRACKS

## FOREST MANAGEMENT TRACK

Code Title Credits
Select 12 credits from any of the following courses: 12
Soils and Landscapes:
F\&W ECOL/ Principles of Landscape Ecology
LAND ARC/
ZOOLOGY 565
GEOG 329 Landforms and Landscapes of North America
SOIL SCI 325 Soils and Landscapes
SOIL SCI/ Environmental Biogeochemistry F\&W ECOL 451
Economics and Business:

| A A E/ | The Environment and the Global |
| :--- | :--- |
| ENVIR ST 244 | Economy |
| A A E/ECON/ |  |
| ENVIR ST 343 |  | Environmental Economics | A A E 419 | Agricultural Finance |
| :--- | :--- |
| GEN BUS 310 | Fundamentals of Accounting and <br> Finance for Non-Business Majors |
| GEN BUS 311 | Fundamentals of Management and <br> Marketing for Non-Business Majors |
| INTL BUS 200 | International Business |
| LSC 270 | Communication in Life Science <br> Industries |
| M H R 300 | Managing Organizations |
| M H R 305 | Human Resource Management |
| M H R 401 | The Management of Teams |
| OTM 300 | Operations Management |

LAND ARC 263
HORT/
AGRONOMY/
SOIL SCI 326


| A A E/ECON/ | Natural Resource Economics |
| :--- | :--- |
| F\&W ECOL 531 |  |
| ENVIR ST/ | Environmental Law, Toxic |
| M\&ENVTOX/ | Substances, and Conservation |
| PL PATH 368 |  |
| ENVIR ST/ | Government and Natural Resources |
| ECON/POLI SCI/ |  |
| URB R PL 449 |  |
| ENVIR ST/ | Assessment of Environmental |
| SOIL SCI 575 | Impact |
| F\&W ECOL 379 | Principles of Wildlife Management |
| F\&W ECOL 450 | Communities and Forests |
| F\&W ECOL/ | World Forest History |
| ENVIR ST/ |  |
| HISTORY 452 |  |
| F\&W ECOL 561 | Wildlife Management Techniques |
| F\&W ECOL/ | Principles of Landscape Ecology |
| LAND ARC/ |  |
| ZOOLOGY 565 |  |
| GEOG/CIV ENGR/ An Introduction to Geographic |  |
| ENVIR ST 377 | Information Systems |
| LAND ARC 668 | Restoration Ecology |
| Total Credits |  |

## FORESTS \& ENVIRONMENT TRACK

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select 12 credits from | any of the following courses: | 12 |
| Earth and Atmospheric Science: |  |  |
| ATM OCN 100 | Weather and Climate |  |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems |  |
| ATM OCN/ <br> ENVIR ST/ <br> GEOG 332 | Global Warming: Science and Impacts |  |
| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution |  |
| GEOG 329 | Landforms and Landscapes of North America |  |
| GEOG 342 | Geography of Wisconsin |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| MICROBIO 304 | Biology of Microorganisms Laboratory |  |
| SOIL SCI 321 | Soils and Environmental Chemistry |  |
| $\begin{aligned} & \text { SOIL SCI/ } \\ & \text { PL PATH } 323 \end{aligned}$ | Soil Biology |  |
| SOIL SCI 325 | Soils and Landscapes |  |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry |  |
| Plant and Animal Ecology: |  |  |
| BOTANY/ PL PATH 332 | Fungi |  |
| BOTANY 401 | Vascular Flora of Wisconsin |  |
| BOTANY 422 | Plant Geography |  |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin |  |



| uman Dimensions of | Resources: |
| :---: | :---: |
| A A E/ <br> ENVIR ST 244 | The Environment and the Global Economy |
| A A E/ECON/ ENVIR ST 343 | Environmental Economics |
| A A E/ECON/ F\&W ECOL 531 | Natural Resource Economics |
| C\&E SOC/ <br> F\&W ECOL/ <br> SOC 248 | Environment, Natural Resources, and Society |
| ENVIR ST 307 | Literature of the Environment: Speaking for Nature |
| ENVIR ST/ HIST SCI 353 | History of Ecology |
| ENVIR ST/ <br> M\&ENVTOX/ <br> PL PATH 368 | Environmental Law, Toxic Substances, and Conservation |
| ENVIR ST/ PHILOS 441 | Environmental Ethics |
| ENVIR ST/GEOG/ HISTORY 460 | American Environmental History |
| F\&W ECOL 450 | Communities and Forests |
| F\&W ECOL/ ENVIR ST/ HISTORY 452 | World Forest History |
| GEOG/ <br> ENVIR ST 339 | Environmental Conservation |

Total Credits

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take F\&W ECOL 681 Senior Honors Thesis and F\&W ECOL 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http://www.cals.wisc.edu/academics/undergraduate-programs/get-involved/honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. }\end{array} \\
& \begin{array}{l}\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Quality of |
| Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (Ecology) Understanding of taxonomy and ability to identify forest and other tree species, their distribution, and associated vegetation and wildlife.
2. (Ecology) Understanding of soil properties and processes, hydrology, water quality, and watershed functions.
3. (Ecology) Understanding of ecological concepts and principles including the structure and function of ecosystems, plant and animal communities, competition, diversity, population dynamics, succession, disturbance, and nutrient cycling.
4. (Ecology) Ability to make ecosystem, forest, and stand assessments.
5. (Ecology) Understanding of tree physiology and the effects of climate, fire, pollutants, moisture, nutrients, genetics, insects and diseases on tree and forest health and productivity.
6. (Forest Resources Measurement and Management) Ability to identify and measure land areas and conduct spatial analysis.
7. (Forest Resources Measurement and Management) Ability to design and implement comprehensive inventories that meet specific objectives using appropriate sampling methods and units of measurement.
8. (Forest Resources Measurement and Management) Ability to analyze inventory data and project future forest, stand, and tree conditions.
9. (Forest Resources Measurement and Management) Ability to develop and apply silvicultural prescriptions appropriate to management objectives, including methods of establishing and influencing the composition, growth, and quality of forests, and understand the impacts of those prescriptions.
10. (Forest Resources Measurement and Management) Ability to analyze the economic, environmental, and social consequences of forest resource management strategies and decisions.
11. (Forest Resources Measurement and Management) Ability to develop management plans with specific multiple objectives and constraints.
12. (Forest Resources Measurement and Management) Understanding of the valuation procedures, market forces, processing systems, transportation and harvesting activities that translate human demands for timber-based and other consumable forest products into the availability of those products.
13. (Forest Resources Measurement and Management) Understanding of the valuation procedures, market, and non-market forces that avail humans the opportunities to enjoy non-consumptive products and services of forests.
14. (Forest Resources Measurement and Management) Understanding of the administration, ownership, and organization of forest management enterprises.
15. (Forest Resource Policy, Economics, and Administration) Understanding of forest policy and the processes by which it is developed.
16. (Forest Resource Policy, Economics, and Administration) Understanding of how federal, state, and local laws and regulations govern the practice of forestry.
17. (Forest Resource Policy, Economics, and Administration) Ability to understand the integration of technical, financial, human resources, and legal aspects of public and private enterprises.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE FOREST SCIENCE FOUR-YEAR PLAN

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| F\&W ECOL 100 | 2 MATH 113 or 114 | 3 |
| Economics Course | $3-4$ CHEM 103, 108, or 109 | 4-5 |
| MATH 112, 113, or 114 | 3 BOTANY/BIOLOGY 130 ${ }^{2}$ | 5 |
| COMM A Course | 3 Electives (to reach ~15 credits) | 0-4 |
| INTER-AG 155 (1st Yr Seminar) | 1 |  |
| Electives (to reach~15 credits) ${ }^{1}$ | 0-3 |  |
|  | 12-16 | 12-17 |

Total Credits 24-33

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| ZOOLOGY/BIOLOGY 101 | 5 F\&W ECOL 300 | 4 |
| \& ZOOLOGY/ |  |  |
| BIOLOGY 102 | 4 GEOG/CIV ENGR/ |  |
| SOIL SCI 301 | ENVIR ST 377 | 4 |
| F\&W ECOL/BOTANY 402 | 2 Statistics Courses | 9 |
| F\&W ECOL 415 | 3 | 17 |

## Total Credits 31

## Sophomore

Spring Credits
F\&W ECOL 658 (even \#'d summers) 3

Total Credits 3

## Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| F\&W ECOL 550 | 3 F\&W ECOL 410 | 3 |
| F\&W ECOL/ENTOM 500 | 2 F\&W ECOL 501 (odd | 1 |
| (odd falls only) | springs only) |  |
| Track Course | 3 Track Course | 3 |
| Elective Courses | 4 Elective Courses | 6 |
|  | 12 | 13 |

## Total Credits 25

## Junior

| Summer | Credits |
| :--- | ---: |
| F\&W ECOL $399^{4}$ | 1 |
|  | 1 |

Total Credits 1

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| F\&W ECOL 590 | 3 F\&W ECOL/A A E/ |  |
| (Capstone) | ENVIR ST 652 |  |$\quad 4$

## Total Credits 30-32

1 When choosing electives, students should first consider UW and CALS requirements (ethnic studies, humanities, social science, international studies, etc.)
2 BOTANY/BIOLOGY 130 + ZOOLOGY/BIOLOGY 101 \& ZOOLOGY/ BIOLOGY 102 are strongly recommended to satisfy the introductory biology requirement for forest science, but students may use ZOOLOGY/BIOLOGY 101 \& ZOOLOGY/BIOLOGY 102.
3 F\&W ECOL/ENVIR ST/G L E/GEOG/GEOSCI/LAND ARC 371 is available in fall semesters only.
4 Summer (following second or third year): F\&W ECOL 658 ( 3 cr., evennumbered summers) and F\&W ECOL 399 ( 1 cr .) -4 cr . total. Students may reduce the number of required courses via: testing out of Comm-A; using ZOOLOGY/BIOLOGY/BOTANY 152 to satisfy Comm-B; testing out of Quantitative Reasoning, Part A; earning AP/IB credits; and/or using F\&W ECOL/ENVIR ST/ZOOLOGY 360 to satisfy International Studies requirement.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISING IN FOREST SCIENCE

All undergraduate students are assigned to an advisor when they declare the major. If you were not assigned an advisor, do not know who your advisor is, would like to talk to someone about switching advisors, or if your advisor is not available, please contact our student services coordinator, Sara Rodock (rodock@wisc.edu, 608-262-9926 or appointment link for current UW-Madison students (http:// calendar.wisc.edu/scheduling-assistant/public/profiles/eBLVAOve.html)).

Undergraduates in forest science are required to meet with their advisor before they can enroll for the upcoming term. Please remember to bring a DARS report with you to any advising appointment. You can request a DARS through your student center in MyUW (http://my.wisc.edu). Although drop-ins and emergencies may be accommodated by someone in the department, the student is best served by making an appointment with the assigned advisor.

For more information about the forest science B.S. or the department in general, please contact the student services coordinator, Sara Rodock (rodock@wisc.edu, 608-262-9926 or appointment link for current UWMadison students (http://calendar.wisc.edu/scheduling-assistant/public/ profiles/eBLVAOve.html)).

## CAREERS AND PROFESSIONAL DEVELOPMENT

For more information on careers available to forest science and wildlife ecology students, please visit our Internship \& Job Resources page (https://forestandwildlifeecology.wisc.edu/academics/undergraduate-programs/internship-job-resources). For more information on other academic, co-curricular, financial aid, and career opportunities and services available to forest science B.S. students, please visit the CALS Career Services page (https://cals.wisc.edu/academics/ undergraduate-students/career-services). Students in the major are welcome to make an individual appointment with Sara Rodock (rodock@wisc.edu) (appointment link for current UW-Madison students (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ eBLVAOve.html)) to discuss a number of career-related topics such as career exploration, search strategies, graduate school, and review of application materials (resume, CV, letters, etc.).

The federal Bureau of Labor Statistics updated its Career Outlook: Careers in Forestry (http://www.bls.gov/careeroutlook/2016/article/ forestry-careers.htm) page in August 2016 and it gives a great overview of the types of jobs related to forestry. This website is an excellent way to learn more about careers in forestry, upcoming trends, and related careers.

## PEOPLE

## PROFESSORS

Bowe, Scott
Drake, David
Karasov, William
Kruger, Eric
Mladenoff, David
Radeloff, Volker
Ribic, Christine
Rickenbach, Mark (chair)
Samuel, Michael
Stanosz, Glen
Townsend, Philip
Van Deelen, Timothy

## ASSOCIATE PROFESSORS

Lutz, R. Scott
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Pauli, Jonathan
Peery, M. Zach
Pidgeon, Anna
Rissman, Adena

## ASSISTANT PROFESSORS

Johnston, Craig
Zuckerberg, Benjamin

## AFFILIATED AND ADJUNCT FACULTY

Alix-Garcia, Jennifer (Agriculture and Applied Economics)

Allison, R. Bruce (adjunct)
Balster, Nick (Soil Science)
Lindroth, Richard (Entomology)
Marin-Spiotta, Erika (Geogrgaphy)
Meine, Curt (adjunct)
Meyer, Michael (adjunct)
Raffa, Kenneth (Entomology)
Santana-Castellon, Eduardo (adjunct)

## FACULTY ASSOCIATE

Berkelman, James

## WISCONSIN EXPERIENCE

## FORESTRY FIELD CAMP AT THE KEMP NATURAL RESOURCES STATION

F\&W ECOL 658 Forest Resources Practicum is an intensive, three-week field course conducted in even-numbered years at the Kemp Natural Resources Station (http://www.kemp.wisc.edu) in Woodruff, Wisconsin. Affectionately known as Forestry Camp, F\&W ECOL 658 Forest Resources Practicum introduces students to the complexities of forest ecosystems. Through a series of integrated exercises, students learn first hand about forest ecosystem structure, function, processes, and services. Along the way students develop the knowledge necessary to conduct a comprehensive forest resource assessment. Subject areas include: basic field skills, plant identification, GPS \& GIS, timber cruising, forest soils, wildlife identification and survey methods, forest ecology, and forest habitat classification. Forestry Camp also provides students with opportunities to work closely with faculty and "real world" natural resource professionals in a beautiful north woods setting.

## INTERNSHIPS

All forest science students are required to complete either an internship or professional work experience for their degree. Students are encouraged to talk to their advisor about internship possibilities and departmental internship policies.In order to receive credit for an internship for the forest science major, students must find an internship, get it approved by their advisor through the agreement form (http:// forestandwildlifeecology.triforce.cals.wisc.edu/wp-content/uploads/ sites/111/2017/07/forest_internship_agreement_form_1182.docx), and enroll in F\&W ECOL 675 Professional Development in Forest \& Wildlife Ecology in the following fall semester. These steps need to be completed by May 15. Students who have questions about the internship can also talk to Sara Rodock (rodock@wisc.edu), the student services coordinator.

## INDEPENDENT STUDY CREDITS

Any student completing either F\&W ECOL 299 Independent Study or F\&W ECOL 699 Special Problems credits is required to complete the Forest \& Wildlife Ecology Independent Study Agreement form (http:// forestandwildlifeecology.triforce.cals.wisc.edu/wp-content/uploads/ sites/111/2017/07/IS_agreement_form_fwe_1176.docx) with the independent study instructor. A copy of this form should be kept by both the student and the instructor.

## FORESTRY CLUB

Forest science undergraduates have an active student organization called the Forestry Club. For more information on the club and their activities, please see their website (http://labs.russell.wisc.edu/ forestryclub) or their Facebook Page (http://go.wisc.edu/pq634x).

## ACCREDITATION

## Accreditation

Society of American Foresters (https://www.eforester.org)

Accreditation status: Accredited. Next accreditation review: 2027.

## WILDLIFE ECOLOGY, B.S.

Wildlife ecologists apply science to manage and conserve wildlife populations and their habitats. The Department of Forest and Wildlife Ecology trains wildlife ecologists and managers to meet the complex needs of wildlife in a human-dominated world. Students receive training in species ecology, physiology and habitat management, techniques of monitoring species, and conservation, through a curriculum solidly grounded in the natural sciences. Beyond a core of basic science and wildlife coursework, students have flexibility to customize their learning experience within one of two tracks: natural sciences and natural resources. The natural sciences track includes coursework that will qualify a student for certification as a wildlife biologist by The Wildlife Society.

Students learn through a mix of classroom, laboratory, and field instruction that emphasize independent thinking and problem-solving. Students make frequent visits to the field to develop and hone their skills, essential for future jobs or graduate work. There is intense competition for career openings in the wildlife field. Most opportunities are with state and federal agencies, but options also exist with private conservation groups and educational institutions. To be most competitive for limited job opportunities, students should pursue a master's degree. The Graduate Guide (http://guide.wisc.edu/graduate) describes the department's graduate programs.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to
the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.

Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33)
International Studies (p. 33) 3

Additional Science (Biological, Physical, or Natural) 3
Science Breadth (Biological, Physical, Natural, or Social) 3
CALS Capstone Learning Experience: included in

Requirements") (p. 33)

## MAJOR REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Mathematics and Statistics | $5-6$ |  |
| Select one of the following (or may be satisfied by |  |  |
| placement exam): |  |  |
| MATH 112 Algebra <br> \& MATH 113 and Trigonometry |  |  |
| MATH 114 | Algebra and Trigonometry |  |
| MATH 171 | Calculus with Algebra and |  |
|  | Trigonometry I |  |

Select one of the following:
STAT 301 Introduction to Statistical Methods
STAT 371 Introductory Applied Statistics for the Life Sciences
STAT/B M I 541 Introduction to Biostatistics
STAT/F\&W ECOL/ Statistical Methods for Bioscience I HORT 571
Chemistry
Select one of the following: 4-5

| CHEM 103 | General Chemistry I |
| :--- | :--- |
| CHEM 108 | Chemistry in Our World (only for |
|  | Natural Resources track students) |
| CHEM 109 | Advanced General Chemistry |


| Select one of the following options: | 10 |
| :--- | :--- |
| Option 1 (recommended): |  |


| BIOLOGY/ | Introductory Biology |
| :--- | :--- |
| BOTANY/ | and Introductory Biology |
| ZOOLOGY 151 |  |
| \&BIOLOGY/ |  |
| BOTANY/ |  |
| ZOOLOGY 152 |  |

Option 2:
ZOOLOGY/
BIOLOGY 101
\& ZOOLOGY/
BIOLOGY 102
\& BOTANY/
BIOLOGY 130
Option 3:
BIOCORE 383
\& BIOCORE 384
\& BIOCORE 485
Cellular Biology
and Cellular Biology Laboratory
and Organismal Biology
\& BIOCORE 486
and Organismal Biology Laboratory

## Core

Wildlife Ecology

| F\&W ECOL 101 | Orientation to Wildlife Ecology | 1 |
| :--- | :--- | :--- |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History <br> and Ecology | 4 |


| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| :--- | :--- | :--- |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 |

F\&W ECOL 561 Wildlife Management Techniques 3
F\&W ECOL 655 Animal Population Dynamics 3

Plant Taxonomy

| BOTANY 400 | Plant Systematics | 4 |
| :---: | :---: | :---: |
| or BOTANY 401 | Vascular Flora of Wisconsin |  |
| Anatomy/Physiology |  |  |
| Select one of the following: |  | 3-5 |
| F\&W ECOL 401 | Physiological Animal Ecology (recommended) |  |
| ANAT\&PHY 335 | Physiology |  |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates |  |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology |  |
| Evolution/Genetics |  |  |
| Select one of the following: |  | 3-5 |
| ZOOLOGY/ <br> ANTHRO/ <br> BOTANY 410 | Evolutionary Biology |  |
| GENETICS 466 | Principles of Genetics |  |
| BIOCORE 381 <br> \& BIOCORE 382 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory |  |
| Wildlife Biology |  |  |
| Select one of the fol | wing: | 5-6 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { AN SCI/ } \\ & \text { F\&W ECOL } 520 \\ & \text { \& ZOOLOGY/ } \\ & \text { AN SCI/ } \\ & \text { F\&W ECOL } 521 \end{aligned}$ | Ornithology and Birds of Southern Wisconsin ${ }^{2}$ |  |
| ZOOLOGY/ <br> ENVIR ST 510 <br> \& ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes and Ecology of Fishes Lab |  |

Breadth
Select 3 credits from breadth courses (below) 3

## Track Courses

Select one of the following: 14-17

Natural Sciences Track
Natural Resources Track

## Capstone

Select one of the following (or see advisor): 3
F\&W ECOL 577 Complexity and Conservation of White-tailed Deer (formerly 375,
Complexity \& Conservation of White-tailed Deer)
F\&W ECOL 599 Wildlife Research Capstone
Total Credits
1 Only allowed for students who completed the rest of the Biocore curriculum listed under Biology.
2 Required for TWS certification

## BREADTH COURSES

Code
Title
Credits
AGRONOMY/ Grassland Ecology 3

BOTANY/
SOIL SCI 370

| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| :---: | :---: | :---: |
| ENVIR ST 375 | Field Ecology Workshop | 3 |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species | 3 |
| F\&W ECOL 375 | Special Topics (Conservation Genetics, Wildlife-Habitat Relationships) | 1-4 |
| F\&W ECOL/ BOTANY 402 | Dendrology | 2 |
| F\&W ECOL 404 | Wildlife Damage Management | 3 |
| F\&W ECOL 424 | Wildlife Ecology Summer Field Practicum (this course, taken for 2 credits, will complete the requirement) | 2 |
| F\&W ECOL/ <br> ENVIR ST 515 | Natural Resources Policy | 3 |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| F\&W ECOL/ AGRONOMY/ ENTOM/ M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |
| F\&W ECOL/ AGRONOMY/ ENTOM/ M\&ENVTOX 633 | Ecotoxicology: Impacts on Individuals | 1 |
| F\&W ECOL/ AGRONOMY/ ENTOM/ M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems | 1 |
| F\&W ECOL/ BOTANY/ENVIR ST/ ZOOLOGY 651 | Conservation Biology | 3 |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY 535 | Ecosystem Analysis | 3 |

## TRACKS <br> NATURAL SCIENCES TRACK

Code Title
Credits

| MATH 211 | Calculus |  |
| :---: | :---: | :---: |
| MATH 217 | Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| CHEM 104 | General Chemistry II ${ }^{1}$ | 5 |
| Select one of the following: |  | 4-5 |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| Total Credits |  | 14-15 |
| 1 If CHEM 109 was taken instead of CHEM 103, CHEM 104 is not required. |  |  |

## NATURAL RESOURCES TRACK

| Code | Title | Credits |
| :---: | :---: | :---: |
| Wildlife Resource Electives |  |  |
| Select two of the following: |  | 3-7 |
| F\&W ECOL 375 | Special Topics (Wildlife-Habitat Relationships) |  |
| F\&W ECOL 375 | Special Topics (Forest \& Climate Change Policy) |  |
| F\&W ECOL 404 | Wildlife Damage Management |  |
| F\&W ECOL 424 | Wildlife Ecology Summer Field Practicum |  |
| F\&W ECOL/ ENVIR ST 515 | Natural Resources Policy |  |
| Conservation Biology Electives |  |  |
| Select one of the fo | wing: | 3 |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species |  |
| F\&W ECOL/ BOTANY/ ENVIR ST/ ZOOLOGY 651 | Conservation Biology |  |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology |  |

## Forest Management Electives

Select one of the following: 2-4
F\&W ECOL $410 \quad$ Principles of Silviculture
F\&W ECOL/ World Forest History
ENVIR ST/
HISTORY 452
F\&W ECOL/ Insects in Forest Ecosystem
ENTOM 500 Function and Management
F\&W ECOL/A A E/ Decision Methods for Natural
ENVIR ST 652 Resource Managers
F\&W ECOL 658 Forest Resources Practicum

## Natural Resources Management Electives

Select one of the following:

| C\&E SOC/ | Environment, Natural Resources, |
| :--- | :--- |
| F\&W ECOL/ | and Society |
| SOC 248 |  |

Environment, Natural Resources,
SOC 248

| C\&E SOC/ | People, Wildlife and Landscapes |
| :--- | :--- |
| ENVIR ST/ |  |
| GEOG 434 |  |
| C\&E SOC/ | Environmental Stewardship and <br> SOC 541 |
| F\&W ECOL/ | Human/Animal Relationships: |
| ZOOLOGY 335 | Biological and Philosophical Issues |
| F\&W ECOL/A A E/ | Natural Resource Economics |
| ECON 531 |  |
| ENVIR ST/ | Environmental Conservation |
| GEOG 339 |  |
| ENVIR ST/A A E/ | Environmental Economics |
| ECON 343 |  |
| ENVIR ST/ | Environmental Law, Toxic |
| M\&ENVTOX/ | Substances, and Conservation |
| PL PATH 368 |  |
| ENVIR ST/ | Government and Natural Resources |
| ECON/POLI SCI/ |  |
| URB R PL 449 |  |
| ENVIR ST/ | Assessment of Environmental |
| SOIL SCI 575 | Impact |
| Total Credits |  |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Define and explain basic principles in biological sciences and major concepts in wildlife ecology including, population ecology, organismal biology, plant ecology/taxonomy, and genetics/evolution.
2. Explain and discuss principles of wildlife management including natural resource legislation, policy, and applications.
3. Explain and apply the scientific methods including designing and conducting experiments and testing hypotheses.
4. Explain and demonstrate techniques for collection of data in laboratory and field settings, keep accurate records, and analyze data to address hypotheses.
5. Demonstrate a style appropriate for communicating scientific results in written and oral form. Provide opportunity to develop these communication skills.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

## SAMPLE WILDLIFE ECOLOGY FOUR-YEAR PLANNATURAL SCIENCES TRACK

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| F\&W ECOL 101 | 1 F\&W ECOL 379 | 3 |
| F\&W ECOL 318 | 3 MATH 113, 114, 171, 211, 217, or 221 | 3-5 |
| MATH 112, 113, 114, or 171 | $3-5$ CHEM 103 or 109 | 4 |
| General Education Courses ${ }^{1}$ | 3-12 General Education Courses ${ }^{1}$ | 0-9 |
|  | 10-21 | 10-21 |
| Total Credits 20-42 |  |  |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| MATH 211, 217, or 221 | 5 ZOOLOGY/BIOLOGY/ BOTANY 152 or BOTANY 130 | 5 |
| ZOOLOGY/BIOLOGY/ 5 Statistics Course $3-4$ <br> BOTANY 151 (or   <br> ZOOLOGY 101 \&   <br> ZOOLOGY 102)   |  |  |
| CHEM 104 | 5 BOTANY 401 ${ }^{2}$ | 4 |
|  | General Education Courses ${ }^{1}$ | 0-6 |
|  | 15 | 12-19 |

Total Credits 27-34

## Junior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| PHYSICS 103, 201, or 207 | 4-5 F\&W ECOL 306 | 4 |
| Breadth Elective Course | 3 ZOOLOGY/ANTHRO/ BOTANY 410 or GENETICS 466 | 3 |
| F\&W ECOL 561 | 3 ZOOLOGY/AN SCI/ <br> F\&W ECOL 520 <br> \& ZOOLOGY/AN SCI/ <br> F\&W ECOL 521 | 6 |
| General Education Courses ${ }^{1}$ | 1-8 General Education Courses ${ }^{1}$ | 0-7 |
|  | 11-19 | 13-20 |

[^9]| Senior |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| F\&W ECOL $401{ }^{3}$ | 3 Capstone Course ${ }^{5}$ | 3 |
| F\&W ECOL/ENVIR ST/ ZOOLOGY $360^{4}$ | 3 F\&W ECOL 655 | 3 |
| General Education Courses ${ }^{1}$ | 4-12 General Education Courses ${ }^{1}$ | 6-12 |
|  | 10-18 | 12-18 |

Total Credits 22-36
1 Gen\#Ed requirements include communications, ethnic studies, humanities, social science, or international studies. See
Requirements tab for more details.
BOTANY 400 offered in fall
3 Or other physiology
4
Recommended to fulfill the CALS International Studies requirement, also a Breadth Elective option
5
F\&W ECOL 577 offered in fall
Possible places where students may cut down on courses: COMM\#A placement test, COMM\#B taken as ZOOLOGY/BIOLOGY/ BOTANY 152, QR\#A placement test, AP/IB credits (biology, social sciences, humanities, language, chemistry, physics, math, statistics)

- Students should take elective courses in place of the Gen\#Ed courses once they have completed their Gen\#Ed requirements


## SAMPLE WILDLIFE ECOLOGY FOUR-YEAR PLANNATURAL RESOURCES TRACK

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| F\&W ECOL 101 | 1 F\&W ECOL 379 | 3 |
| F\&W ECOL 318 | 3 MATH 113, 114, or 171 | 3-5 |
| MATH 112, 113, 114, or 171 | $3-5$ CHEM 103 or 109 | 4-5 |
| General Education Courses ${ }^{1}$ | 3-12 General Education Courses ${ }^{1}$ | 0-9 |
|  | 10-21 | 10-22 |

Total Credits 20-43
Sophomore
$\left.\begin{array}{lcr}\text { Fall } & \text { Credits Spring } & \text { Credits } \\ \text { ZOOLOGY/BIOLOGY/ } & \text { 5 ZOOLOGY/BIOLOGY/ } & 5 \\ \begin{array}{l}\text { BOTANY 151 (or }\end{array} & \text { BOTANY 152 or BOTANY }\end{array}\right]$

## Total Credits 25-36

## Junior

Fall
Breadth Elective Course
Credits Spring
Credits 3 F\&W ECOL 306

| F\&W ECOL 561 | ```3 ZOOLOGY/AN SCI/ F&W ECOL 520 & ZOOLOGY/AN SCI/ F&W ECOL 521``` | 6 |
| :---: | :---: | :---: |
| General Education Courses ${ }^{1}$ | 3-12 Wildlife Resources Course | 3 |
|  | Forest Management Course ${ }^{3}$ | 3-4 |
|  | 9-18 | 16-17 |

Total Credits 25-35

## Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| F\&W ECOL $401{ }^{4}$ | 3 Capstone Course ${ }^{6}$ | 3 |
| F\&W ECOL/ENVIR ST/ ZOOLOGY $360^{5}$ | 3 F\&W ECOL 655 | 3 |
| General Education Courses ${ }^{1}$ | 4-12 ZOOLOGY/ANTHRO/ BOTANY 410 or GENETICS 466 | 3 |
|  | General Education Courses ${ }^{1}$ | 3-9 |
|  | 10-18 | 12-18 |

Total Credits 22-36
1 Gen\#Ed requirements include communications, ethnic studies, humanities, social science, or international studies. See Requirements tab for more details.
2
Or fall
4 Or other physiology
5 Or F\&W ECOL/BOTANY/ENVIR ST/ZOOLOGY 651 in spring; F\&W ECOL/ENVIR ST/ZOOLOGY 360 counts for the CALS International Studies requirement, but F\&W ECOL/BOTANY/ ENVIR ST/ZOOLOGY 651 does not
F\&W ECOL 577 offered in Fall
Possible places where students may cut down on courses: COMM\#A placement test, COMM\#B taken as ZOOLOGY/BIOLOGY/ BOTANY 152, QR\#A placement test, AP/IB credits (biology, social sciences, humanities, language, chemistry, physics, math, statistics), Natural Resources Management electives course for social science course, F\&W ECOL/ENVIR ST/ZOOLOGY 360 for international studies

- Students should take elective courses in place of the Gen\#Ed courses once they have completed their Gen\#Ed requirements


## ADVISING AND CAREERS

## UNDERGRADUATE ADVISING IN WILDLIFE ECOLOGY

All undergraduate students are assigned to an advisor when they declare the major. If you were not assigned an advisor, do not know who your advisor is, would like to talk to someone about switching advisors, or if your advisor is not available, please contact our student services coordinator, Sara Rodock (rodock@wisc.edu, 608-262-9926 or appointment link for current UW-Madison students (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/eBLVAOve.html)).

Undergraduates in wildlife ecology are required to meet with their advisor before they can enroll for the upcoming term. Please remember to bring a DARS report with you to any advising appointment. You can request a DARS through your student center in MyUW (http:// my.wisc.edu). Although drop-ins and emergencies can be accommodated by someone in the department, the student is best served if they make an appointment with their assigned advisor.

For more information about the wildlife ecology B.S. or the department in general, please contact the student services coordinator, Sara Rodock (rodock@wisc.edu, 608-262-9926 or appointment link for current UWMadison students (https://calendar.wisc.edu/scheduling-assistant/ public/profiles/eBLVAOve.html)).

## CAREERS AND PROFESSIONAL DEVELOPMENT

For more information on careers available to forest and wildlife ecology students please visit our Internship \& Job Resources (https:// forestandwildlifeecology.wisc.edu/academics/undergraduate-programs/internship-job-resources) page. For more information on other academic, co-curricular, financial aid, and career opportunities and services available to forest \& wildlife ecology students, please visit the CALS Career Services page (https://cals.wisc.edu/academics/ undergraduate-students/career-services). Students in the major are welcome to make an individual appointment with Sara Rodock (rodock@wisc.edu) (appointment link for current UW-Madison students (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ eBLVAOve.html)) to discuss a number of career-related topics such as career exploration, search strategies, graduate school, and review of application materials (resume, CV, letters, etc.).

## PEOPLE

## PROFESSORS

Bowe, Scott
Drake, David
Karasov, William
Kruger, Eric
Mladenoff, David
Radeloff, Volker
Ribic, Christine
Rickenbach, Mark (chair)
Samuel, Michael
Stanosz, Glen
Townsend, Philip
Van Deelen, Timothy

## ASSOCIATE PROFESSORS

Lutz, R. Scott
Ozdogan, Mutlu
Pauli, Jonathan
Peery, M. Zach
Pidgeon, Anna
Rissman, Adena

## ASSISTANT PROFESSORS <br> Johnston, Craig <br> Zuckerberg, Benjamin

## AFFILIATED AND ADJUNCT FACULTY

Alix-Garcia, Jennifer (Agriculture and Applied Economics)
Allison, R. Bruce (adjunct)
Balster, Nick (Soil Science)
Lindroth, Richard (Entomology)
Marin-Spiotta, Erika (Geogrgaphy)
Meine, Curt (adjunct)
Meyer, Michael (adjunct)
Raffa, Kenneth (Entomology)
Santana-Castellon, Eduardo (adjunct)

## FACULTY ASSOCIATE

Berkelman, James

## WISCONSIN EXPERIENCE

## WILDLIFE ECOLOGY SUMMER FIELD CAMP AT KEMP NATURAL RESOURCES STATION <br> Every other summer, wildlife ecology students have the option of participating in the Wildlife Ecology Summer Field Camp at Kemp Natural Resources Station (http://www.kemp.wisc.edu) in northern Wisconsin as F\&W ECOL 424 Wildlife Ecology Summer Field Practicum. The two-week field class emphasizes research and habitat management techniques through individual and group field work, tours, demonstrations, and lectures. Transportation and lodging are provided to the participants.

## INDEPENDENT STUDY CREDITS

Any student completing either F\&W ECOL 299 Independent Study or F\&W ECOL 699 Special Problems credits is required to complete the Forest \& Wildlife Ecology Independent Study Agreement form (http:// forestandwildlifeecology.triforce.cals.wisc.edu/wp-content/uploads/ sites/111/2017/07/IS_agreement_form_fwe_1176.docx) with the independent study instructor. A copy of this form should be kept by both the student and the instructor. The only exception is for students using the independent study credits for their capstone; those students should use the capstone agreement form.

## INDEPENDENT STUDY CAPSTONE

The majority of wildlife ecology majors complete one of the two capstone courses (F\&W ECOL 577 Complexity and Conservation of White-tailed Deer or F\&W ECOL 599 Wildlife Research Capstone), but students also have the option of completing an independent study capstone, typically F\&W ECOL 699 Special Problems. Students who wish to pursue this option will need to submit the independent study capstone form (http:// forestandwildlifeecology.triforce.cals.wisc.edu/wp-content/uploads/ sites/111/2017/05/capstone_agreement_form_we_1176.doc) to their faculty advisor in order to receive permission to use the independent study option towards the capstone requirement for graduation.

## INTERNSHIPS

Even though it is not required for graduation, wildlife ecology students often elect to do a summer internship to gain additional skills. Students are encouraged to talk to their advisor about internship possibilities, departmental internship policies and how to receive credit (F\&W ECOL 399 Coordinative Internship/Cooperative Education) for an internship. The Departmentof Forest and Wildlife Ecology strongly encourages all students pursuing an internship to use the following two forms:

- F\&W ECOL 399 Internship agreement form (http:// forestandwildlifeecology.triforce.cals.wisc.edu/wp-content/uploads/ sites/111/2017/05/399_agreement_form_1176.docx)
- F\&W ECOL 399 Internship evaluation form (http:// forestandwildlifeecology.triforce.cals.wisc.edu/wp-content/uploads/ sites/111/2017/05/internship_evaluation_form_1176.docx)

Students should note that any internship done for credit will require a faculty sponsor to enroll in a section of F\&W ECOL 399 Coordinative Internship/Cooperative Education.

## THE WILDLIFE SOCIETY

There is a UW-Madison chapter of the Wildlife Society. For more information on the society please visit the Wildlife Society University of Wisconsin-Madison Student Chapter website (http:// labs.russell.wisc.edu/tws) or its Facebook Page (http://go.wisc.edu/ toat54).

## GENETICS

This department offers an undergraduate major under the bachelor of science degree program. The basic requirements of this curriculum include: two years of chemistry, one year of physics, one year of general biology, one semester of calculus, and biostatistics. The major requirements include: one year of general genetics, introductory biochemistry, laboratory experience, and 12 credits of genetics and genetics-related courses chosen from an approved list.

Genetics is a bachelor's program for students seeking to understand how genes shape life, from fundamental cellular functions to population dynamics, and for students preparing to apply genetic and genomic concepts in such areas as medicine, biotechnology, biomedical research, agriculture, journalism, and public policy.

Advances in genome sequencing, bioinformatics, and our ability to manipulate the DNA of many organisms, including humans, have brought genetics to the forefront of many issues facing our society. These advances drive the growing need for health care providers, scientists and other professionals with a strong foundation in genetic and genomic analysis. Through coursework and diverse research opportunities, genetics majors gain broad insight into inheritance, gene function, genome organization, evolution, cutting-edge genetic technologies and therapies, and more.

A B.S. degree with a major in genetics positions students for many jobs in the biotechnology industry. Genetics majors are well prepared to pursue research-focused Ph.D. programs that provide further training for careers in biomedical and agricultural research. Genetics majors are highly competitive for admission to top medical schools, where there is a growing focus on personalized medicine, and genetic counseling programs.

## DEGREES/MAJORS/CERTIFICATES

[^10]
## PEOPLE

## PROFESSORS

Doebley, John (chair); Engels, Bill; Gasch, Audrey; Ikeda, Aki; Laughon, Al; Masson, Patrick; Payseur, Bret; Pelegri, Francisco; Perna, Nicole; Prolla, Tom; Schwartz, David; Skop, Ahna; Wassarman, David; Yin, Jerry

## ASSOCIATE PROFESSORS

Chang, Qiang; Hittinger, Chris; Pool, John

ASSISTANT PROFESSORS<br>Loewe, Laurence; Zhong, Xuehua

FACULTY ASSOCIATES;
Tilmann, Kit; Vermillion Kalmon, Katie

## UNDERGRADUATE ADVISORS

Reck, Martha; Tilmann, Kit; Vermillion Kalmon, Katie

## GENETICS AND GENOMICS, B.S.

Genetics and genomics is a bachelor's program for students seeking to understand how genes shape life, from fundamental cellular functions to population dynamics, and for students preparing to apply genetic and genomic concepts in such areas as medicine, biotechnology, biomedical research, agriculture, journalism, and public policy.

Advances in genome sequencing, bioinformatics, and our ability to manipulate the DNA of many organisms, including humans, have brought genetics to the forefront of many issues facing our society. These advances drive the growing need for health care providers, scientists and other professionals with a strong foundation in genetic and genomic analysis. Through coursework and diverse research opportunities, genetics majors gain broad insight into inheritance, gene function, genome organization, evolution, cutting-edge genetic technologies and therapies, and more.

A B.S. degree with a major in genetics and genomics positions students for many jobs in the biotechnology industry. Genetics and genomics majors are well prepared to pursue research-focused Ph.D. programs that provide further training for careers in biomedical and agricultural research. Genetics and genomics majors are highly competitive for admission to top medical schools, where there is a growing focus on personalized medicine, and genetic counseling programs.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code Title Credits
Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33)

International Studies (p. 33) 3
Physical Science Fundamentals 4-5
$\left.\begin{array}{lll}\text { CHEM 103 } & \text { General Chemistry I } \\ \text { or CHEM } 108 & \text { Chemistry in Our World } \\ \text { or CHEM } 109 & \text { Advanced General Chemistry }\end{array}\right] 5$

## MAJOR REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | :--- |
| Mathematics and Statistics |  |  |

Select one of the following: 5-10

| MATH 221 | Calculus and Analytic Geometry 1 |
| :--- | :--- |
| MATH 171 | Calculus with Algebra and |
| \& MATH 217 | Trigonometry I <br> and Calculus with Algebra and <br> Trigonometry II |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |

## Chemistry

Select one of the following: 5-9

| CHEM 103 | General Chemistry I |  |
| :---: | :--- | ---: |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry <br>  <br> CHEM 345 | Laboratory |

Physics
Select one of the following: 10
PHYSICS 103 General Physics
\& PHYSICS 104 and General Physics (recommended)
PHYSICS 201 General Physics
\& PHYSICS 202 and General Physics
PHYSICS 207 General Physics
\& PHYSICS 208 and General Physics
(recommended)

## Biology

Select one of the following options:
Option 1:
BIOLOGY/
BOTANY/ and Introductory Biology
ZOOLOGY 151 (recommended)
\& BIOLOGY/
BOTANY/
ZOOLOGY 152
Option 2:
BOTANY/ General Botany
BIOLOGY 130

| ZOOLOGY/ <br> BIOLOGY 101 <br> \& ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology and Animal Biology Laboratory |  |
| :---: | :---: | :---: |
| Option 3: |  |  |
| BIOCORE 381 <br> \& BIOCORE 383 | Evolution, Ecology, and Genetics and Cellular Biology |  |
| Select two of the following labs: |  |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| Core Biology Requirements |  |  |
| Select one of the following options: |  | 6 |
| Option 1: |  |  |
| GENETICS 467 <br> \& GENETICS 468 | General Genetics 1 and General Genetics 2 (recommended) |  |
| Option 2: ${ }^{1}$ |  |  |
| GENETICS 466 | Principles of Genetics |  |
| additional 3 credit below) | subset 1 course (see course list |  |
| BIOCHEM 501 or BIOCHEM 507 | Introduction to Biochemistry ${ }^{2}$ General Biochemistry I | 3 |
| Select 2 credits from the following: |  | 2 |
| GENETICS 545 | Genetics Laboratory |  |
| GENETICS 299 | Independent Study ${ }^{3}$ |  |
| GENETICS 699 | Special Problems ${ }^{3}$ |  |
| GENETICS 681 | Senior Honors Thesis |  |
| GENETICS 682 | Senior Honors Thesis |  |
| GENETICS 399 | Coordinative Internship/Cooperative Education |  |
| Electives |  |  |
| Select 12 credits with 6 credits minimum from subset 1 (see course list below) |  | 12 |
| Capstone |  |  |
| Select one of the following: |  | 3-9 |
| Option 1: |  |  |
| GENETICS 566 | Advanced Genetics (offered in spring semester) |  |
| Option 2: |  |  |
| GENETICS 564 | Genomics and Proteomics (offered in spring semester) ${ }^{4}$ |  |
| Option 3 (must be taken concurrently): ${ }^{4}$ |  |  |
| GENETICS 699 | Special Problems (offered in fall semester) |  |
| GENETICS 567 | Companion Research Seminar (offered in fall semester) |  |
| Option 4 (must be taken concurrently): |  |  |
| GENETICS 681 | Senior Honors Thesis |  |
| GENETICS 682 | Senior Honors Thesis |  |
| GENETICS 567 | Companion Research Seminar (offered in fall semester) |  |

Total Credits

1 Subset 1 course will not count toward 12 subset credits.
2 If BIOCHEM 507 is taken, it must be taken as a part of BIOCHEM 507 General Biochemistry I \& BIOCHEM 508 General Biochemistry II, which counts in Subset 2 of electives.

3
Consult with your advisor if genetics-related research will be performed in a department other than Genetics.
4 May count for Subset 1 or Capstone.

## SUBSET COURSES

## SUBSET 1

| Code | Title | Credits |
| :---: | :---: | :---: |
| GENETICS 520 | Neurogenetics | 2 |
| GENETICS 525 | Epigenetics | 2 |
| GENETICS 546 | EvoSysBio: Modeling in Evolutionary Systems Biology | 3 |
| GENETICS 548 | Comparative and Functional Genomics | 3 |
| GENETICS/HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| GENETICS/ <br> MD GENET/ ZOOLOGY 562 | Human Cytogenetics | 2 |
| GENETICS 564 | Genomics and Proteomics | 3 |
| GENETICS/ MD GENET 565 | Human Genetics | 3 |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics | 3 |
| GENETICS/ <br> BIOCHEM/ <br> MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| GENETICS/ | Eukaryotic Molecular Biology | 3 |

BIOCHEM/
MD GENET 620
GENETICS/ Genomic Science 2
CHEM 626
GENETICS 627 Animal Developmental Genetics 3
GENETICS 631 Plant Genetics 2
GENETICS 633 Population Genetics 3
GENETICS/BOTANY/ Biology and Genetics of Fungi 3
M M \& I/MICROBIO/
PLPATH 655
GENETICS 662 Cancer Genetics 2
GENETICS/ Advanced Topics in Genetics ${ }^{1}$ 1-3
MD GENET 677
MICROBIO $470 \quad 3$

| AGRONOMY/ | Plant Biotechnology: Principles and | 4 |
| :--- | :--- | :--- |
| BOTANY/HORT 339 | Techniques I |  |
| BIOCHEM 550 | Topics in Medical Biochemistry | 2 |

1 May choose only Evolutionary Systems Biology, Developmental Genetics for Conservation, Neurogenetics or Epigenetics.

## SUBSET 2

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology | 3 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering | 4 |
| AGRONOMY/HORT 501 | Principles of Plant Breeding | 3 |
| AGRONOMY/HORT $502$ | Techniques of Plant Breeding | 1 |
| BIOCHEM 508 | General Biochemistry II | 3-4 |
| BIOCORE 485 | Organismal Biology | 3 |
| BIOCORE 587 | Biological Interactions | 3 |
| B M I/COMP SCI 576 | Introduction to Bioinformatics | 3 |
| BMOLCHEM 504 | Human Biochemistry Laboratory | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| $\begin{aligned} & \text { BOTANY/ZOOLOGY } \\ & 410 \end{aligned}$ | Evolutionary Biology | 3 |
| DY SCI/AN SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| DY SCI/AN SCI 362 | Veterinary Genetics | 2 |
| DY SCI/AN SCI 363 | Principles of Animal Breeding | 2 |
| GENETICS/ BIOLOGY 522 | Evolution Seminar SeriesUndergraduate | 1 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques | 3 |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory | 2 |
| MICROBIO/M M \& I/ PATH-BIO 528 | Immunology | 3 |
| MICROBIO/ ONCOLOGY 545 | Topics in Biotechnology | 1 |
| MICROBIO/ <br> PLPATH 622 | Plant-Bacterial Interactions | 2-3 |
| MICROBIO 632 | Industrial Microbiology/ Biotechnology | 2 |
| MICROBIO/ <br> ONCOLOGY/ <br> PL PATH 640 | General Virology-Multiplication of Viruses | 3 |
| M M \& I 341 | Immunology | 3 |
| M M \& 1460 | Techniques in DNA Science for Microbiologists | 3 |
| PL PATH/BOTANY/ ENTOM 505 | Plant-Microbe Interactions: <br> Molecular and Ecological Aspects | 3 |
| ZOOLOGY/ENVIR ST/ <br> F\&W ECOL 360 | Extinction of Species | 3 |
| ZOOLOGY 425 | Behavioral Ecology | 3 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| A biological science cour have significant genet | course as approved by advisor (must tics component) |  |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Demonstrate an understanding of genetic principles at the level of molecules, cells, systems, organisms, populations and ecosystems.
2. Use quantitative approaches to evaluate experimental design, critically interpret, and analyze data sets from primary research papers.
3. Integrate genetic data and apply the scientific method to formulate research questions.
4. Communicate genetic concepts to multiple audiences with written, oral and visual presentations.
5. Understand mechanisms of segregation and expression of genetic material during development and homeostasis.
6. Apply primary genetic approaches used to study biological processes, including the use of model organisms.
7. Describe how environmental influences may modify the inheritance and expression of the genetic material.
8. Apply the use of quantitative methods to implement genetic analysis, including the linkage of gene variants with traits.
9. Appreciate how the fields of genomics, proteomics and other datadriven approaches facilitate research and clinical assessment.
10. Understand the contribution of genetics analysis to elucidating population history and evolution.
11. Address the connection between genetics and trends in clinical practice, such as personalized medicine, cloning and regenerative biology.
12. Understand evolutionary processes, with current variation in human traits as its natural outcome.
13. Appreciate the contributions of genetic methods to sustainability, including food production, bio-energy generation and the preservation of ecosystems and biodiversity.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN <br> SAMPLE GENETICS AND GENOMICS FOUR YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| CHEM 103 or 109 | 4-5 CHEM 104 (or elective course) | 5 |
| MATH 221 (or math placement) | 5 International Studies | 3 |
| GENETICS 155 <br> (Freshman Seminar) | 1 COMM A Course (if needed) | 3 |
| Electives (Humanitites, Social Science, Ethnic Studies) | 3 Humanities / Literature / <br> Arts / Ethnic Studies Course | 3 |
|  | 13-14 | 14 |

Total Credits 27-28

## Sophomore

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| CHEM 343 | 3 CHEM 344 <br> \& CHEM 345 | 5 |
| ZOOLOGY/BIOLOGY/ BOTANY $151{ }^{1}$ | 5 ZOOLOGY/BIOLOGY/ BOTANY $152^{2}$ | 5 |
| Biostatistics Course | 3 Humanities / Literature / Arts / Ethnic Studies Course | 5 |
| Humanities / Literature / Arts / Ethnic Studies Course | 3 GENETICS 299 <br> (Independent Research) | 2 |
|  | 14 | 17 |
| Total Credits 31 |  |  |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| PHYSICS 103, 207, or $201{ }^{3}$ | 4-5 PHYSICS 104, 208, or $202^{3}$ | 4-5 |
| GENETICS 467 or 466 (\& BIOCORE 485 if applicable) | 3 GENETICS 468 (or Subset 1 elective \& BIOCORE 587 if applicable) | 3 |
| BIOCHEM 501 or 507 | 3 BIOCHEM 508 (or Advanced course) | 3 |
| Electives | 5 Genetics Elective | 5 |
|  | 15-16 | 15-16 |

## Total Credits 30-32

## Senior

## Fall

Advanced Genetics
Electives

## Credits Spring

6 Advanced Genetics Electives

| Senior Thesis (681- | $2-3$ Senior Thesis (682- <br> Research) | $2-3$ |
| :--- | :---: | ---: |
| Electives (Humanities,  <br> Social Sciences, Ethnic  <br> Studies) 3 Genetics Capstone | 3 |  |
| Electives | 6 Electives | 6 |
|  | $17-18$ | $14-15$ |

## Total Credits 31-33

1 Instead of BIOLOGY/BOTANY/ZOOLOGY 151 Introductory Biology, students can take either (BIOCORE 381 Evolution, Ecology, and Genetics \& BIOCORE 382 Evolution, Ecology, and Genetics Laboratory) or (ZOOLOGY/BIOLOGY 101 Animal Biology \& ZOOLOGY/ BIOLOGY 102 Animal Biology Laboratory).
Instead of BIOLOGY/BOTANY/ZOOLOGY 152 Introductory Biology, students can take either (BIOCORE 383 Cellular Biology \& BIOCORE 384 Cellular Biology Laboratory) or BOTANY/BIOLOGY 130 General Botany.
Physics could be taken in year 2 (consult your advisor).
4 If in CALS Honors in Research.
Notes:

- 120 total credits required for bachelor's degree-aim for 15 credits per semester.
- Students who have not maintained a GPA of at least 2.5 by the end of their first two years, or transfer students by the end of their first year in residence, need to evaluate their major and career options with an advisor.
- Freshmen are recommended to take GENETICS 155 Freshman Seminar in Genetics, 1-credit freshman seminar course offered in the fall to fulfill the first year seminar requirement.
- Study Abroad is an enriching experience. Check with your advisor on how you can fulfill your curriculum and study abroad.
- UGA (Undergraduate Genetics Association): check out the club's website: facebook.com/groups/UGA.UWMadison (https://www.facebook.com/ groups/UGA.UWMadison)


## ADVISING AND CAREERS

## UNDERGRADUATE ADVISORS

Reck, Martha; Tilmann, Kit; Vermillion Kalmon, Katie

Current students may use scheduling assistant (https:// calendar.wisc.edu/scheduling-assistant) to schedule an appointment with an undergraduate advisor.

## CAREERS

The biotechnology industry has exploded within the last decade, providing many diverse career opportunities for our graduates. A strong background in genetics will prepare you for careers in research technical support, technical writing, quality control, assay development, technical services, and sales or marketing. Entry level job titles: Research Laboratory Technician, Assistant Scientist, Clinical Research Associate, Agricultural Consultant, Science Writer

Many of our graduates continue their education by pursuing an advanced degree. Our students are competitive for admission to medical schools, veterinary schools, and graduate schools throughout the country. Students may elect a Ph.D. in genetics to prepare them for careers in research, academia, and industry. Others may elect an M.S. program for a 3

## PEOPLE

## PROFESSORS

Doebley, John (chair); Engels, Bill; Gasch, Audrey; Ikeda, Aki; Laughon, Al; Masson, Patrick; Payseur, Bret; Pelegri, Francisco; Perna, Nicole; Prolla, Tom; Schwartz, David; Skop, Ahna; Wassarman, David; Yin, Jerry

## ASSOCIATE PROFESSORS

Chang, Qiang; Hittinger, Chris; Pool, John

ASSISTANT PROFESSORS<br>Loewe, Laurence; Zhong, Xuehua

## FACULTY ASSOCIATES;

Tilmann, Kit; Vermillion Kalmon, Katie

## UNDERGRADUATE ADVISORS

Reck, Martha; Tilmann, Kit; Vermillion Kalmon, Katie

## WISCONSIN EXPERIENCE

Students are highly encouraged to apply what they are learning in the classroom to out-of-classroom experiences, connect with other students in genetics and other biological science majors, and to build relationships with faculty and staff.

- A minimum of one semester of mentored research is required, and most students elect to participate in more. The Genetics website (https://genetics.wisc.edu) and undergraduate advisors can help students find these experiences. Students conduct research experiences for course credit or pay, depending on the lab. Many students present their work during lab meetings, professional conferences, and campus events.
- The Undergraduate Genetics Association (UGA) (https:// www.facebook.com/groups/UGA.UWMadison) is the pre-professional student organization for majors in genetics or students interested in genetics. They provide professional development opportunities, networking, information about current genetic research, how to get involved in research or internships, and career and job information.
- Students are also involved in pre-health organizations, volunteer and shadowing opportunities, publishing in an undergraduate science journal, biotechnology and agricultural internships, and other related experiences on and off campus.


## HORTICULTURE

The Department of Horticulture at the University of Wisconsin-Madison is one of the four original departments of the College of Agricultural and Life Sciences and was founded in 1889. The department provides programs that are focused on fundamental studies of plant biology, crop production, and utilization of horticultural crops. It also seeks to provide educational opportunities for the pursuit of careers in horticulture, strengthen the competitive position of Wisconsin's horticulture industry, and increase the use of plants for environmental improvement and as a source of personal enrichment. The work of department faculty, staff, and students has made substantial impacts in the state and nation for over 125 years and continues to do so.

The department prides itself on cutting edge research focusing on horticultural plants, solving problems for our horticultural industry partners and farmers, helping students gain key experiences in research and outreach during their degree programs, and serving both the State of Wisconsin and the broader scientific community through the generation of new knowledge, techniques, and discoveries that can benefit society.

The department maintains a vibrant undergraduate major. Instruction is offered in all of the primary areas of horticulture and additional coursework is available in a number of subjects including molecular biology and bioinformatics. Approximately $\$ 25,000$ in scholarship funds are available annually to undergraduate students in the department each year. The department's graduate program offers both M.S. and Ph.D. degrees in a variety of specialties. Many graduate students advised by horticulture faculty also pursue graduate degrees in programs such as plant breeding and plant genetics, cell and molecular biology, and agroecology. The department has also recently created a new M.S. program that has an emphasis in organic and sustainable production. The department offers some unique international opportunities in Costa Rica and other Central American countries that focus on tropical horticulture.

The Department of Horticulture is home to a number of successful outreach programs that serve the citizens, public sector, and businesses of the State of Wisconsin. These include the Nutrient and Pest Management Program, the Integrated Pest and Crop Management Program, the Crop Diagnostic Training program, the IR-4 program, the Wisconsin Institute for Sustainable Agriculture, the Master Gardener Program, and the Allen Centennial Gardens. In addition to these activities, faculty and staff are active in field days, Extension programs, courses, seminars, and webinars, and author newsletters and other media that are distributed statewide.

## DEGREES/MAJORS/CERTIFICATES

- Horticulture, B.S. (p. 174)


## PEOPLE

## PROFESSORS

Bamberg, Colquhoun, Goldman (chair), Havey, Jiang, Krysan, Nienhuis, Palta, Patterson, Simon, Spooner, Yandell

## ASSOCIATE PROFESSORS

Bethke, Jansky, Jull, Weng, Zalapa

## ASSISTANT PROFESSORS

Atucha, Dawson, Endelman, Wang
INSTRUCTIONAL STAFF
Calderon, Nelson, Oosterwyk

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS

The Department of Horticulture offers several departmental scholarships (https://horticulture.wisc.edu/academics/undergraduate-program/ scholarships-and-awards) that students can apply for through the CALS Scholarship Application (https://cals.wisc.edu/academics/
undergraduate-students/financing-your-education). The application opens at the beginning of November and remains open until the beginning of February each academic year. Students only need to fill out one single application to be considered for all CALS scholarships.

## FACILITIES

Several important supporting facilities are associated with the Department of Horticulture, including:

- Allen Centennial Garden (https://allencentennialgarden.org)
- D.C. Smith Greenhouse (http://
dcsmithgreenhouse.cals.wisc.edu)
- Arlington Horticulture Farms (http://arlington.ars.wisc.edu)
- U.S. Potato Genebank (https://www.ars-grin.gov/nr6)
- O.J. Noer Turfgrass Center (http://ojnoer.ars.wisc.edu)
- Longenecker Gardens (https://arboretum.wisc.edu)


## HORTICULTURE, B.S.

Horticulturists work to enrich our lives by integrating and applying plant science, environmental science, molecular biology, biotechnology, genetics, physiology, and management. Specifically, horticultural science deals with the development, production, growth, distribution, and use of fruits, vegetables, greenhouse crops, ornamentals, turf, and specialty plant crops (used for flavoring and medicine). Horticultural science is one of the most diverse biological sciences one can study at a university. Not only are the biology and genetics of crop plants interesting, but the application of this knowledge is equally important in a myriad of situations. Undergraduate horticulture majors will obtain specialized training in greenhouse/field management and the production and use of fruits, vegetables, nuts, herbaceous/woody ornamentals, and turfgrass through the bachelor of science degree program.

In addition to obtaining a job with an undergraduate degree in horticulture, the major provides an excellent background for graduate study in the field of plant sciences. Areas of graduate study include plant breeding and plant genetics, horticulture, agronomy, plant pathology, or other related fields such as biology, environmental science, natural resource management, agroecology, and genetics.

Students with either undergraduate or graduate degrees in horticulture have a variety of career opportunities. Recent studies show that there are more jobs in agriculture in the U.S. than there are students graduating with agricultural bachelor of science degrees to fill them. Estimates in 2015 showed that there were 57,900 job openings in agriculture and related fields and only 35,400 students graduating annually in those areas. As our world grapples with the need to contribute science-based solutions to feeding 9 billion people by 2050, students trained in the agricultural and horticultural sciences will be called on to contribute.

Horticulture graduates may find opportunities in working on developing higher yielding crops or crops that can withstand more stressful growing conditions. Others may find opportunities working on improving qualities such as flavor, appearance, texture, and postharvest shelf life for a wide range of horticultural commodities from fruits to vegetables to flowers. Sustainable production is a particular area of growth where horticultural expertise can make a contribution. Students may wish to read a recent report from the United States Department of Agriculture and Purdue University (https://www.purdue.edu/usda/employment/wp-
content/uploads/2015/04/2-Page-USDA-Employ.pdf) on the subject of employment opportunities in this area.

The horticulture degree serves as excellent preparation for careers in food production, plant nurseries, community supported agriculture (CSA), public gardens, landscaping, greenhouse production, teaching, public parks, vegetable fields, golf courses, urban agriculture, extension and community based educational work, work in research labs, and the health sciences. In addition, many horticultural science majors go on to work in public sector jobs including city and state positions with the Department of Natural Resources, the Wisconsin Department of Agriculture, and University of Wisconsin Extension. Students with degrees in horticulture also work in hospitals (horticultural therapy), aerospace (food and recycling in space labs), and zoos (managing environments for animals and visitors). Although the career opportunities are numerous, horticulture students have a common desire to work intensively with plants to improve our environment and our health.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement.

A minimum of 15 credits must be completed in the major that are not used elsewhere.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics and Statistics |  |  |
| Select one of the following (or may be satisfied by placement exam): |  | 5-6 |
| MATH 112 \& MATH 113 | Algebra and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| MATH 171 | Calculus with Algebra and Trigonometry $I^{1}$ |  |
| Select one of the following: |  | 3-5 |
| MATH 211 | Calculus |  |
| MATH 217 | Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| COMP SCI 300 | Programming II |  |
| Chemistry |  |  |
| Select one of the following: |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Biology |  |  |
| Select one of the following options: |  | 10-12 |
| Option 1: |  |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |  |
| ZOOLOGY/ BIOLOGY 102 | Animal Biology Laboratory |  |
| Option 2: |  |  |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 151 | Introductory Biology |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology |  |

Option 3:
BIOCORE $381 \quad$ Evolution, Ecology, and Genetics
BIOCORE $383 \quad$ Cellular Biology
And select two of the following:
$\left.\begin{array}{lll}\text { BIOCORE 382 } & \begin{array}{l}\text { Evolution, Ecology, and Genetics } \\ \text { Laboratory }\end{array} \\ \text { BIOCORE 384 } & \text { Cellular Biology Laboratory }\end{array}\right]$

ZOOLOGY 302
or ENTOM 351

Principles of Economic Entomology



| POLI SCI 272 | Introduction to Public Policy | 3-4 |
| :---: | :---: | :---: |
| POLI SCI/ECON/ <br> ENVIR ST/ <br> URB R PL 449 | Government and Natural Resources | 3-4 |
| Soil Science |  |  |
| SOIL SCI 305 | Field Study of Soil | 1 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| SOIL SCI 322 | Physical Principles of Soil and Water Management | 3 |
| $\begin{aligned} & \text { SOIL SCI/ } \\ & \text { PL PATH } 323 \end{aligned}$ | Soil Biology | 3 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| SOIL SCI/ ENVIR ST 575 | Assessment of Environmental Impact | 3 |
| Weather and Climate Change |  |  |
| ATM OCN 101 | Weather and Climate | 4 |
| ATM OCN/ENVIR ST/ GEOSCI 102 | Climate and Climate Change | 3 |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems | 2-3 |
| ATM OCN/ENVIR ST/ GEOG 332 | Global Warming: Science and Impacts | 3 |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 |

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take HORT 289 Honors Independent Study, HORT 681 Senior Honors Thesis and HORT 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist for Horticulture (http://www.cals.wisc.edu/ academics/undergraduate-programs/get-involved/honors-program/ honors-in-the-major) for more information. The Department of Horticulture also works collaboratively to strongly support students through the Honors in Research program.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Acquire, integrate and apply knowledge of plant science to horticultural systems.
2. Demonstrate interdisciplinary knowledge and competency in managing horticultural systems.
3. Synthesize knowledge and use insight and creativity to better understand and improve horticultural systems.
4. Appreciate and communicate the diverse impacts of horticulture on people.
5. Demonstrate professionalism and proficiency in skills that relate to horticulture.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE HORTICULTURE FOUR-YEAR PLAN (WITH BOTANY 130 IN THE FIRST SEMESTER)

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| HORT 120 | 3 MATH 113 | 3 |
| HORT 121 | 1 Ethnic Studies Course | 3 |
| BOTANY/BIOLOGY 130 ${ }^{1}$ | $\begin{aligned} & 5 \text { ZOOLOGY/BIOLOGY } 101 \\ & \text { \& ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | 5 |
| MATH 112 | 3 International Studies / Electives Courses | 5 |
| COMM A Course | 3 |  |
| First Year Seminar | 1 |  |
|  | 16 | 16 |

Total Credits 32

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| HORT 320 | 3 CHEM 104 | 5 |
| CHEM 103 | 4 HORT 334 | $3-4$ |
|  | \& HORT 335 (Organic |  |
|  | Vegetable Production) |  |
| COMM B Course | 3 HORT 227 | 3 |
| Electives | $4-5$ Electives | $4-5$ |
|  | $14-15$ | $15-17$ |

Total Credits 29-32

## Junior

Fall
Credits Spring
Credits
SOIL SCI 301
4 SOIL SCI/AGRONOMY/ 3 HORT 326
PL PATH 300 or 309
4 ENTOM/ZOOLOGY 302 3-4
or 351


## CAREERS

A degree in horticulture serves as excellent preparation for careers in: applied plant science, food crop production, plant breeding \& plant genetics, urban agriculture, gardening, landscaping, community supported agriculture (CSA), extension and community based educational work, horticulture education, research, greenhouse production, horticultural therapy, etc. For sample career profiles in horticulture, see Career Opportunities (https://horticulture.wisc.edu/academics/ undergraduate-program/research-career-opportunities-3) on the department website.

## PEOPLE

## PROFESSORS

Bamberg, Colquhoun, Goldman (chair), Havey, Jiang, Krysan, Nienhuis, Palta, Patterson, Simon, Spooner, Yandell

## ASSOCIATE PROFESSORS

Bethke, Jansky, Jull, Weng, Zalapa
ASSISTANT PROFESSORS
Atucha, Dawson, Endelman, Wang

## INSTRUCTIONAL STAFF

Calderon, Nelson, Oosterwyk

## WISCONSIN EXPERIENCE

Students in the horticulture program have some unique opportunities for learning outside the classroom. Our introductory horticulture course, HORT 120 Survey of Horticulture, is known campus-wide for its extensive engagement with service learning. Service learning projects in a variety of settings, where students gain hands-on experiences in community projects, are a core part of student engagement in the horticulture program. Many of our students participate in internships during the summer and even during academic semesters at locations that vary from seed companies to wineries to public gardens. Multiple internship opportunities for horticulture students exist on or near campus at facilities such as the Allen Centennial Garden (https://allencentennialgarden.org), the UW Arboretum (https:// arboretum.wisc.edu), and the Agricultural Research Stations (http:// ars.wisc.edu).

Horticulture students have a unique opportunity to study tropical horticulture during the fall semester and then travel to Costa Rica and other countries in Central America for a two week intensive field experience during winter break. Spring break opportunities also exist for tropical horticultural experiential learning.

The Department of Horticulture has a very active undergraduate club known as the Horticulture Society (https://win.wisc.edu/organization/ hortsociety). The mission of the Horticulture Society is to interest and acquaint students in the college with career opportunities and requirements in the field of Horticulture and related fields. They aim to provide opportunities to further this interest through combined effort and achievement; to create awareness and interest in students entering the college with the field of horticulture; to be available to industrious students interested in expanding their knowledge of horticulture; and promote an exchange of ideas and mutual understanding. The Society is
made up of undergraduates, some of whom are majoring in Horticulture. A faculty advisor works with the group, and the group meets bi-monthly. The Society travels to horticultural events and meetings, visits botanical gardens and arboreta around the country, has traveled internationally, and runs programming for children at elementary schools and gardens around Wisconsin. The Society runs a large and successful plant sale each fall on campus.

Embedded in the department is the Wisconsin Institute for Sustainable Agriculture (http://wisa.cals.wisc.edu), or WISA. WISA's long-term vision is to develop an Institute whose networking with client groups helps develop and share knowledge that promotes a diverse Wisconsin agricultural and food system that is environmentally sound, socially just, and economically viable. The Institute promotes research, education and outreach programs that are trans-disciplinary and implement a systems approach to the study of food and agricultural production throughout the supply chain. These include development and enhancement of undergraduate and graduate student learning experiences.

## LIFE SCIENCES COMMUNICATION

The Department of Life Sciences Communication (LSC) prepares students for careers as professional communicators in scientific and technical fields or for graduate school. Scientific areas of expertise include the environment and natural resources, health and nutrition, agriculture, new technologies such as biotechnology, and social sciences. LSC became the first department of what was then termed Agricultural Journalism in the world and has retained its leadership position in science communication ever since.

Graduates of the program are highly sought after by employers across scientific and communication industries. Key to the education that LSC students receive is a combination of theoretical grounding and state-of-the-art practical applications. Our instructors are a mix of world-class researchers and real-world practitioners of regional or national profiles.

Students receive instruction across multimedia channels such as print, audio, video and web. They learn to target and create communications for both news and marketing. Most important, they learn to plan strategically and implement the most effective communications for diverse audiences.

Students complete an undergraduate major in life sciences communication under the bachelor of science degree program. Students in this program have the flexibility to explore science, environmental and health communication, agricultural business, industry, social marketing, or the international context.

College regulations permit a student to major simultaneously in life sciences communication while pursuing another major in a different department. This provides a student with strong communication skills and solid grounding in another subject matter area. Nonmajors will also benefit from taking communication courses.

## DEGREES/MAJORS/CERTIFICATES

- Life Sciences Communication, B.S. (p. 181)


## PEOPLE

PROFESSORS
Brossard (chair), Reaves, Scheufele, Shepard
ASSOCIATE PROFESSOR
Shaw
ASSISTANT PROFESSOR
Stenhouse

## FACULTY ASSOCIATES

Botham, Stanley
LECTURERS
Flaherty, Meyer, Nelson, Seely, Smith, Still

## LIFE SCIENCES COMMUNICATION, B.S.

The Department of Life Sciences Communication (LSC) prepares students for careers as professional communicators in scientific and technical fields or for graduate school. Scientific areas of expertise include the environment and natural resources, health and nutrition, agriculture, new technologies such as biotechnology, and social sciences. In 1908, LSC became the first department of what was then termed Agricultural Journalism in the world and has retained its leadership position in science communication ever since.

Graduates of the program are highly sought after by employers across scientific and communication industries. Key to the education that LSC students receive is a combination of theoretical grounding and state-of-the-art practical applications. Our instructors are a mix of world-class researchers and real-world practitioners of regional or national profiles.

Students receive instruction across multimedia platforms such as print, audio, video and web. They are taught how to target and create communications for both news and marketing. Most important, they learn how to plan strategically and implement the most effective communications for diverse audiences.

Students complete an undergraduate major in life sciences communication under the Bachelor of Science degree program. Students in this program have the flexibility to explore science, environmental and health communication; agricultural business; industry; social marketing; or the international context.

College regulations permit a student to major simultaneously in life sciences communication while pursuing another major in a different department. This provides a student with strong communication skills and solid grounding in another subject matter area. Nonmajors will also benefit from taking communication skills courses.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information
about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. Students must have a minimum of 15 credits within the LSC major that do not double count with CALS or university "general education" requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics and Statistics |  |  |
| Select one of the following (or placement exam recommended to fulfill the CALS Quantitative Reasoning Part A requirement): |  | 3-5 |
| MATH 112 or MATH 114 | Algebra <br> Algebra and Trigonometry |  |
| Select one of the following (recommended to fulfill the CALS Quantitative Reasoning Part B requirement): |  | 3-4 |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| $\begin{aligned} & \text { C\&E SOC/ } \\ & \text { SOC } 360 \end{aligned}$ | Statistics for Sociologists I |  |
| Foundation Course |  |  |
| LSC 111 | Science and Technology <br> Newswriting | 3 |
| or LSC 212 | Introduction to Scientific Communication |  |
| Core |  |  |
| LSC 250 | Research Methods in the Communication Industry | 3 |
| LSC 251 | Science, Media and Society | 3 |
| Select two of the following: |  | 6 |


| LSC 270 | Communication in Life Science <br> Industries |
| :--- | :--- | Industries

messuasive messages for a variety of media, such as newswriting, documentary photography, publications editing, web design and video production.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select two of the following: | 6 |  |
| LSC 430 | Communicating Science with <br>  <br> LSC 432 | Social Media for the Life Sciences <br> LSC 450 | | Documentary Photography for the |
| :--- |
|  |


| LSC 532 | Web Design for the Sciences |
| :--- | :--- |
| LSC 614 | Advanced Video Production |

UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. |
| formats and credits earned in UW-Madison Study |  |

## LEARNING OUTCOMES

1. Specialized knowledge in theoretical and applied communication of science and technology, along with an education broad enough to meet the challenges of changing careers and opportunities.
2. The ability to think critically and creatively: to synthesize, analyze, and integrate ideas for decision making and problem solving.
3. The ability to communicate effectively across media and a broad range of audiences.
4. A global perspective; an appreciation for the interdependencies among individuals and their workplaces, communities, environments, and world; and an understanding of the interrelationships between science and society.
5. The ability to work with others in small or large groups, to recognize civic and social responsibilities, and to appreciate the uses of public policy in a democracy.
6. A respect for truth, a tolerance for diverse views, and a strong sense of personal and professional ethics.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE LIFE SCIENCES COMMUNICATION FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 112 | 3 LSC 111 or 212 | 3 |
| COMM A Course | 3 Chemistry | $4-5$ |
| Humanities Elective | 3 Humanities Elective | 3 |



Current or prospective students should contact the advisor, Tera Holtz (tholtz@wisc.edu), with questions. Declared majors are required to meet with the advisor at least once per semester prior to registration.

Our graduates get jobs as reporters, editors, advertising and marketing professionals, technical writers, broadcast producers, and public information staff at universities, and in many other science- and agriculture-related industries. Some work for specialized publications. Others work for print, online or broadcast media reporting on science, health, agriculture, or the environment. Many have careers with advertising agencies and public relations firms handling accounts for food, biotechnology, or related industries. Still others work with companies, cooperatives, government agencies, and universities.

## PEOPLE

## PROFESSORS

Brossard (chair), Reaves, Scheufele, Shepard

## ASSOCIATE PROFESSOR

Shaw

## ASSISTANT PROFESSOR

Stenhouse

## FACULTY ASSOCIATES

Botham, Stanley

## LECTURERS

Flaherty, Meyer, Nelson, Seely, Smith, Still

## WISCONSIN EXPERIENCE

## STUDYING ABROAD

LSC majors can find study abroad and internship abroad opportunities at International Academic Programs (https:// www.studyabroad.wisc.edu) and the International Internship Program (http://internships.international.wisc.edu) websites. Travel opportunities range from one to two weeks to an entire academic year, and many students pursue volunteer, research or internship opportunities while abroad.

## INTERNSHIPS

LSC notifies majors of abundant opportunities to apply for summer and academic year internships related to science communication. Students intern with marketing agencies, environmental and sustainability organizations, and healthcare and agricultural agencies. The Wisconsin Technology Council and Farm Journal, Inc. actively offer internship opportunities to LSC seniors.

## LSC CAPSTONES ARE SERVICELEARNING COURSES

All LSC seniors can select their final capstone course from either LSC 515 or LSC 640. LSC 515 Public Information Campaigns and Programs partners with a real-life client to create a strategic marketing campaign for issues of social significance, such as environmental conservation. Students in LSC 640 Case Studies in the Communication of Science and Technology participate in internships throughout the semester that put their communication skillset into practice for science and technology organizations.

## NUTRITIONAL SCIENCES

Nutritional sciences is an independent discipline rooted in biology and biochemistry. The major integrates the study of nutrition with studies of the role of diet in health and disease, and with studies of the biological, genetic, social, and economic factors influencing the diet and nutritional status of humans. Nutritional sciences combines the basic and applied sciences that address issues relevant to agriculture and medicine. The Department of Nutritional Sciences offers two areas of study, both
of which require a core of courses that emphasize the chemistry and physiology of nutrition. Additional courses focus on the biochemical, clinical, business, or public health aspects of nutrition. Students who complete the nutritional sciences major in the dietetics degree program receive the bachelor of science-dietetics degree, and students who complete the nutritional sciences major in the bachelor of science degree program receive the bachelor of science degree.

Students who wish to gain practical experience are encouraged to participate in independent studies and coordinative internships, as well as laboratory and clinical research projects offered through the department, the Waisman Center and Interdepartmental Graduate Program in Nutritional Sciences. In addition to the financial support offered by these opportunities, the department annually awards a number of scholarships. All students are also encouraged to apply for scholarships awarded by the College of Agricultural and Life Sciences and UW-Madison.

The department also serves as the administrative home for the popular undergraduate certificate in global health. The certificate is open to all undergraduate UW-Madison students and complements a variety of majors.

## DEGREES/MAJORS/CERTIFICATES

- Global Health, Certificate (p. 185)
- Nutritional Sciences, B.S. (p. 190)
- Nutritional Sciences, B.S. Dietetics (p. 195)


## PEOPLE

## PROFESSORS

Dave Eide (Chair), Ph.D. 1987
Richard Eisenstein, Ph.D. 1985
Guy Groblewski, Ph.D. 1991
Huichuan Lai, Ph.D., R.D.N. 1994
Denise Ney (Director, Didactic Program in Dietetics) , Ph.D., R.D.N. 1986
James Ntambi, Ph.D. 1985
Roger Sunde, Ph.D. 1980
Sherry Tanumihardjo, Ph.D. 1993
ASSOCIATE PROFESSOR
Beth Olson, Ph.D.
ASSISTANT PROFESSORS
Adam Kuchnia, Ph.D., R.D.N. 2017
Brian Parks, Ph.D. 2008
Eric Yen, Ph.D. 2000

## ASSOCIATE FACULTY ASSOCIATE <br> Amber Haroldson, Ph.D., R.D.N., M.S.

Tara LaRowe (Coordinator, Didactic Program Dietetics), Ph.D., R.D.N.

Makayla Schuchardt, M.S., R.D.N., C.N.S.C.
Julie Thurlow, DR.PH., R.D.N.

## SENIOR LECTURER

Pete Anderson, M.S.

## STUDENT SERVICES COORDINATOR

Erika Anna, R.D.N.

## GRADUATE COORDINATOR

Katie Butzen, MS.Ed.

## GLOBAL HEALTH, CERTIFICATE

The undergraduate certificate in global health is a 15-credit program open to all undergraduate students at the University of Wisconsin-Madison.

All students, especially those who identify as pre-health, are familiar with the concept of health care, the idea of preventing and treating mental and physical health conditions in individuals. The certificate's coursework discusses medicine and particularly the need to improve access to care for all, but it also introduces students to the field of public health, a model for promoting health and well-being that seeks to identify and address the root causes of health problems for populations rather than for individuals.

Public health practitioners focus on preventive, population-level approaches to health promotion. For example, public health work related to substance abuse among UW-Madison students involves education and outreach to high-risk groups as well as facilitating access to treatment. Other public health researchers, government officials, nonprofit staff, and community leaders might work with entire rural communities in a developing country to improve access to clean water, or work on a global scale to try to reduce migration driven by climate change-related declines in food production.

Solutions to public health problems require expertise from many disciplines and the certificate welcomes both pre-health science students and diverse other students who are passionate about improving the wellbeing of humans, non-human animals, and the environment through changes in politics, economics, culture, and society in general.

Certificate students must complete credit-bearing field work but may or may not actually go abroad to do it-the "global" in "global health" refers both to our desire to achieve equity in health for all people worldwide and to the goal of studying and finding solutions to health issues that cross both geographic and socioeconomic boundaries. There are large differences or "disparities" in health and well-being between different populations in Madison and across the United States such that many students choose to study a health problem locally and make connections to the handling of the same problem in other populations and places.

The certificate is administered by the College of Agricultural and Life Sciences (CALS) and the Global Health Institute (GHI) in partnership with faculty and staff across campus.

Learn more about the program on its website (http://ghi.wisc.edu/ education/undergraduate-certificate).

## HOW TO GET IN

Undergraduate students from all majors on campus are encouraged to consider completing the certificate in global health.

Students may declare after completing any one of the program's three core courses. While admission to the certificate is not competitive, students should be aware that enrollment in the core courses occurs on a first-come, first-served basis. Information about declaring the certificate can be found on the program website (http://ghi.wisc.edu/education/ undergraduate-certificate/completing).

There is no guarantee that all interested students will be able to complete the certificate, but completion is most likely for students who take the program's core courses as early as possible.

## ENROLLMENT IN CERTIFICATE COURSES

While interested students would ideally take at least one of the certificate's core courses as freshmen or sophomores, many students do not get into these courses until their junior or senior years, which can make planning difficult. Students can complete the program's requirements in any order, but there are two important things to keep in mind:

- Many field experience options have a core course as a prerequisite.
- Whenever students are finished with the requirements of the degree/ major(s), they may not extend time on campus just to complete the certificate.

Though the courses may be taken in any order, the ideal timing for the program's requirements is as follows:

- AGRONOMY/ENTOM/NUTR SCI 203 Introduction to Global Health take fall of the freshman or sophomore year
- POP HLTH 370 Introduction to Public Health: Local to Global Perspectives and/or MED HIST/ENVIR ST 213 Global Environmental Health: An Interdisciplinary Introduction -take any spring from sophomore to senior year
- two or three elective courses-choose and complete these any time after taking one of the three core courses
- 1-3 credits of field experience-summer between junior and senior years or six months on either side of that summer


## REQUIREMENTS

| Code | Title C | Credits |
| :---: | :---: | :---: |
| Core Courses |  |  |
| NUTR SCI/ AGRONOMY/ ENTOM 203 | Introduction to Global Health | 3 |
| MED HIST/ <br> ENVIR ST 213 <br> or POP HLTH 370 | Global Environmental Health: An Interdisciplinary Introduction ${ }^{1}$ <br> Introduction to Public Health: Local to Global Perspectives | 3 |
| Field Experience |  |  |

Field experiences range in length from one week to one year and typically carry from one to four credits. The field experience can be completed in the US or abroad but must be completed for credit and must be approved by certificate staff. Some experiences are "preapproved" while others such as internships must be submitted for approval. Volunteering that includes clinical work is strongly discouraged and is not accepted as field experience. See the program's field experience web page and handbook for more details.

## Electives

Select from electives list (see below) to reach a minimum
of 15 credits total for the certificate. ${ }^{2}$
1 Completing both of these courses is encouraged, and students who do so can count one as an elective.
2 The certificate does not support tracks or specialties but students may choose to concentrate their electives in one or more functional areas (topics of study covered in graduate programs in public health and related fields). Note that many courses span multiple functional areas but are only listed once.
Some courses listed here are "special topics" courses. These are courses whose topic changes from semester to semester and even between sections in the same semester. Sections of these courses accepted by the certificate are shown in parentheses (like this). Use of approved sections to meet the certificate's electives requirement is fine but requires manual modification of a student's degree audit, typically during the student's last term on campus.

## GLOBAL HEALTH ELECTIVES GROUPED BY FUNCTIONAL AREA ${ }^{1}$

Code Title Credits

| Agronomy/Horticulture/Plant Breeding |  |  |
| :--- | :--- | ---: |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| BOTANY/ | Plants, Parasites, and People | 3 |
| PL PATH 123 |  |  |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/AMER IND/ |  |  |

BOTANY/AMER IND/ Ethnobotany 3-4
ANTHRO 474

| HORT 350 | Plants and Human Wellbeing | 2 |
| :--- | :--- | :--- |
| HORT 370 | World Vegetable Crops | 3 |

Animal Science/Dairy Science
AN SCI/DY SCI 370 Livestock Production and Health in 3


1-4 BOTANY/ENVIR ST/ Introductory Ecology ZOOLOGY 260
BOTANY/F\&W ECOL/ General Ecology 4
ZOOLOGY 460
CIV ENGR $422 \quad$ Elements of Public Health 3
Engineering

| CIV ENGR 423 | Air Pollution Effects, Measurement <br> and Control | 3 |
| :--- | :--- | :--- |
| ENVIR ST/ | Introduction to Environmental | 3 |


| POP HLTH 471 | Health |
| :--- | :--- |
| ENVIR ST/ | Air Pollution and Human Health |

POP HLTH 502

MED HIST 513 Perspective
SOIL SCI/ Earth's Water. Natural Science and 3
ATM OCN 132 Human Use
Epidemiology

| ENTOM/ Medical Entomology |  |
| :--- | :--- |
| ZOOLOGY 371 | 3 |

Exercise Science

| KINES 353 | Health and Physical Education in a <br> Multicultural Society | 2 |
| :--- | :--- | :--- |
| KINES 355 | Socio-Cultural Aspects of Physical <br> Activity | 3 |

Health Economics/Health Finance
ECON/POP HLTH/ The Economics of Health Care 3-4
PUB AFFR 548
Health Education/Behavioral Sciences
ED POL 150 Education and Public Policy 3
(Sexuality and Education; Education
and Global Change) ${ }^{2}$
ED POL/CURRIC 677 Education, Health and Sexuality: 3
Global Perspective and Policies
Health Policy
POLI SCI/ The Politics of Human Rights 3-4
INTL ST 434
POLI SCI 507 Health Policy and Health Politics 3-4
SOC WORK 206 Introduction to Social Policy 4
Health Promotion and Communications
COM ARTS/JOURN/ Health Communication in the 3
LSC 617 Information Age
LSC $515 \quad$ Public Information Campaigns and 3
Programs

| Infectious Diseases |  | 2 |
| :--- | :--- | ---: |
| M M \& I 301 | Pathogenic Bacteriology | 2 |
| M M \& I 554 | Emerging Infectious Diseases and |  |
|  | Bioterrorism | 3 |
| M M \& I 555 | Vaccines: Practical Issues for a <br>  Global Society |  |

PATH/PATH-BIO 210 HIV: Sex, Society and Science 3
PATH $404 \quad$ Pathophysiologic Principles of 3
Human Diseases
POP HLTH/ Clinical and Public Health 5
M M \& I 603 Microbiology
Maternal and Child Health
SOC WORK $646 \quad$ Child Abuse and Neglect

| DS 501 | Special Topics (Design Thinking for Health; Global Artisans: Pragmatic Design) ${ }^{2}$ | 1-3 |
| :---: | :---: | :---: |
| Minority Health and Health Disparities |  |  |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AMER IND 450 | Issues in American Indian Studies (Dangerous Memories) ${ }^{2}$ | 3 |
| ASIAN AM 240 | Topics in Asian American Studies (Hmong American Experiences in the US) ${ }^{2}$ | 3 |
| RP \& SE 660 | Special Topics (Health Promotion for Disabilities and Chronic Illness) ${ }^{2}$ | 1-6 |
| Multicultural Studies |  |  |
| ANTHRO 104 | Cultural Anthropology and Human Diversity | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| Nutrition/Public Health Nutrition |  |  |
| A A E/AGRONOMY/ INTER-AG/ <br> NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| C\&E SOC/SOC 222 | Food, Culture, and Society | 3 |
| NUTR SCI 132 | Nutrition Today (Students may count 132 OR 332, but not both) | 3 |
| NUTR SCI 332 | Human Nutritional Needs (Students may count 332 OR 132, but not both) | 3 |
| NUTR SCI/ BIOCHEM 510 | Biochemical Principles of Human and Animal Nutrition | 3 |
| PL PATH 311 | Global Food Security | 3 |
| Parasitology |  |  |
| M M \& I/ENTOM/ PATH-BIO/ ZOOLOGY 350 | Parasitology | 3 |
| Population Sciences |  |  |
| $\begin{aligned} & \text { POP HLTH/C\&E SOC/ } \\ & \text { SOC } 380 \end{aligned}$ | Contemporary Population Problems for Honors | 3 |
| SOC 170 | Population Problems | 3-4 |
| Poverty and Development |  |  |
| A A E/INTL ST 373 | Globalization, Poverty and Development | 3 |
| A A E/ECON 474 | Economic Problems of Developing Areas | 3 |
| A A E/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| $\begin{aligned} & \text { C\&E SOC/F\&W ECOL/ } \\ & \text { SOC } 248 \end{aligned}$ | Environment, Natural Resources, and Society | 3 |
| C\&E SOC/ENVIR ST/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| $\begin{aligned} & \text { C\&E SOC/AMER IND/ } \\ & \text { SOC } 578 \end{aligned}$ | Poverty and Place | 3 |
| C\&E SOC/SOC 630 | Sociology of Developing Societies/ Third World | 3 |


| ECON 448 | Human Resources and Economic Growth | 3-4 |
| :---: | :---: | :---: |
| HDFS/CNSR SCI 465 | Families \& Poverty | 3 |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy (Global Poverty and Inequality) | 3-4 |
| Public Health Ethics |  |  |
| MED HIST/ PHILOS 505 | Justice and Health Care | 3 |
| MED HIST/ PHILOS 515 | Public Health Ethics | 3 |
| MED HIST 559 | Topics in Ethics and History of Medicine (Climate Change Ethics) ${ }^{2}$ | 3 |
| Public Health Leadership |  |  |
| POP HLTH 504 | Health Care Quality Improvement in Low Resource Settings | 1 |
| SOC WORK 659 | International Aspects of Social Work (Check with global health advisors to see which sections are acceptable in any given term) ${ }^{2}$ | 2-3 |
| Public Health Medicine |  |  |
| INTER-AG/INTERLS 152 | Ways of Knowing: Medicine and Society | 1 |
| MED HIST/ HIST SCI 212 | Bodies, Diseases, and Healers: An Introduction to the History of Medicine | 3 |
| MED HIST 286 | Honors Seminar. Studies in Medical History (History of Global Disease Eradication) ${ }^{2}$ | 3 |
| NURSING/S\&A PHM/ SOC WORK 105 | Health Care Systems: Interdisciplinary Approach | 2 |
| NURSING 419 | Clinical III: Community Health Nursing Practicum (For nursing students, 419 can count for the certificate as either an elective, a field experience, or both, depending on where the credit is needed. ) | 4 |
| NURSING 590 | Contemporary Practices in Nursing (Nursing Leadership in Global Health Settings; Obesity Causes, Conseq \& Cures) ${ }^{2}$ | 1-4 |
| PHM SCI 310 | Drugs and Their Actions | 2 |
| PHM PRAC 305 | Consumer Self-Care and Over-theCounter Drugs | 2 |
| Public Health Practice |  |  |
| MED HIST/ HIST SCI 509 | The Development of Public Health in America | 3 |
| MED HIST/HIST SCI/ POP HLTH 553 | International Health and Global Society | 3 |


| POP HLTH 650 | Special Topics (These are typically graduate-only sections; interested students should contact the instructor of the section into which they would like to enroll for possible permission; past accepted sections include Community Health in Conflict Situations; The Public Health Laboratory; Introduction to Infectious Disease; Healthcare Quality Improvement and Innovation ) ${ }^{2}$ | 1-6 |
| :---: | :---: | :---: |
| Social Determinants of Health |  |  |
| HISTORY/HIST SCI/ MED HIST 504 | Society and Health Care in American History | 3 |
| MED HIST/HIST SCI/ HISTORY 564 | Disease, Medicine and Public Health in the History of Latin America and the Caribbean | 3 |
| RELIG ST 101 | Religion in Global Perspective | 3 |
| RELIG ST 102 | Exploring Religion in Sickness and Health | 3 |
| S\&A PHM 490 | Selected Topics in Social and Administrative Pharmacy (Health Equity and Social Justice) ${ }^{2}$ | 1-4 |
| SOC 531 | Sociology of Medicine | 3 |
| Toxicology |  |  |
| F\&W ECOL/ <br> AGRONOMY/ <br> ENTOM/ <br> M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |
| F\&W ECOL/ AGRONOMY/ ENTOM/ M\&ENVTOX 633 | Ecotoxicology: Impacts on Individuals | 1 |
| F\&W ECOL/ AGRONOMY/ ENTOM/ M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems | 1 |
| Veterinary Public Health |  |  |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 |
| Women's Health |  |  |
| GEN\&WS 102 | Gender, Women, and Society in Global Perspective | 3 |
| GEN\&WS 103 | Women and Their Bodies in Health and Disease | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS/ PSYCH 522 | Psychology of Women and Gender | 3 |
| GEN\&WS/ INTL ST 535 | Women's Global Health and Human Rights | 3 |

## Footnotes related to electives

1 "Functional areas"/topics for study commonly used in graduate programs in public health and related fields:

- Aging-Focuses on solutions to aging-related challenges, promoting healthy aging, longevity and disability prevention, and the relationship between health risk factors and aging.
- Agronomy/Horticulture/Plant Breeding-The management of crops, soils fertilizers, water, and other agricultural inputs and the assessment of the degree to which different practices meet goals for productivity, efficiency, human and animal nutrition, and environmental impact.
- Animal Science/Dairy Science-Study of the management of domesticated animals, including assessment of the degree to which different practices meet goals for productivity, efficiency, humane treatment, and environmental impact
- Biomedical Lab Sciences-Focuses on laboratory techniques in areas such as microbiology, immunology, virology, molecular biology, as applied to research on public health issues.
- Biostatistics-Study of theories and techniques for collecting, analyzing, and interpreting quantitative data relevant to public health issues.
- Chronic Disease-Focuses on the etiology and prevention of chronic disease, while addressing interventions such as policy change, education, and various services to reduce chronic disease morbidity and mortality at the level of community and individual behavior.
- Clinical Research-Use of statistical methods in the design and execution of studies involving a person or group of persons and addressing public health problems.
- Communication Sciences and Disorders-Focuses on the practice of public health as applied to disorders of speech production/perception, hearing, and language organization.
- Community Health-Focuses on work with defined communities to identify and resolve public health problems and to promote well-being.
- Dental Public Health-The science of preventing dental diseases and promoting dental health on a community basis, including dental education of the public, applied dental research, and administration of group dental care programs.
- Environmental Health/Environmental Science/Environmental Economics -Study of assessment, control, prevention, and cost implications of factors in the environment that can adversely affect the health of present and future generations.
- Epidemiology-Application of the scientific method to the study of disease in populations for the purpose of prevention and control.
- Exercise Science-The theory-based, research-led study of the impact of physical exercise on the body and health.
- Food Safety-Focuses on identification and decreasing the risk to the public from foodborne illness by surveillance, monitoring occurrences of bacterial pathogens, and response to public complaints.
- Genetics-Explores the impact of genes on public health and disease prevention, including how genes and the environment interact to affect distribution of disease in human populations.
- Health Administration-Study of the skills, values, and conceptual abilities needed for management roles in health care, health policy, and public health.
- Health Economics/Health Finance-Study of the composition, use, and impact of finances that fund all components of the public health system. This includes the pricing, production, and distribution of health services.
- Health Education/Behavioral Sciences-Interdisciplinary study focusing on how health education can affect behavior and lifestyle decisions that have an impact on public health.
- Health Law-The impact of law on the furnishing and administration of health services, and study of legal structures that define government's authority in the interest of public health.
- Health Promotion and Communications-Organized response to promote health and prevent illness, injury, and disability using communication mediums.
- Health Services Research-Research on the cost, access, and quality of the health care system, and on policy issues affecting the organization, financing, and delivery of health care services.
- Immunology-The relationship between body systems, pathogens, and immunity, the development and function of immune cells, and the mechanisms of disease and immunology.
- Infectious Diseases-Study of illnesses resulting from the transmission of microbial agents through diverse pathogens, disease surveillance, outbreak investigation, and the prevention of infectious diseases.
- Informatics-Interdisciplinary science dealing with the structure, acquisition, and use of biomedical information, ranging from theoretical model contraction to building and evaluating applied systems.
- Injury/Violence-The study of the epidemiology, risk factors, and effective prevention strategies for unintentional and violence-related injury.
- Management and Health Policy-Study of legislative, administrative, and budget systems affecting health services, competencies associated with health care management, and the role of leadership in public health.
- Maternal and Child Health-Focuses on the improvement of public health delivery systems for women, children, and their families through advocacy, education, and research.
- Mental Health-Emphasizes early intervention, prevention of mental illness, and promotion of mental health through public health education.
- Microenterprise and Microlending-Focuses on the development of small businesses using small amounts of credit, often but not always in developing country settings. Explores the impact of small businesses on individual, family, and community health and well-being.
- Minority Health and Health Disparities-Addresses factors causing gaps in quality of health care across social, ethnic, sexual orientation, and socioeconomic groups.
- Multicultural Studies-Focuses on the impact of social identities in determining behavior during illness and decisions regarding care, and the importance of understanding basic attitudes of a cultural group for successful health promotion and prevention programs.
- Neuroscience-An interdisciplinary field which may include research in areas such as molecular neuroscience, neurophysiology, and computational modeling, with applications for vaccine development, response to bioterrorism attacks, and control or prevention of diseases such as Alzheimer's and Parkinson's.
- Nutrition/Public Health Nutrition-Focuses on the improvement of the nutritional health of the whole population and vulnerable subgroups within the population, and emphasizes health promotion and disease prevention.
- Occupational Health/Industrial Hygiene-Focuses on the anticipation, recognition, evaluation, communication, prevention, and control of environmental stressors in the workplace that may result in injury, illness or impairment, or affect the wellbeing of the community.
- Parasitology-Study of human parasites and of public health measures that contribute to the prevention and control of diseases caused by parasites.
- Population and Reproductive Health-Factors influencing human reproductive health and dynamics of population growth with the goal of avoiding disease and disability related to sexuality and reproduction.
- Population Sciences-Study of the science of demography and health implications of major population issues, including population size, composition, distribution, and change.
- Poverty and Development-Involves exploration of the relative availability of resources and services between different populations and geographic areas.
- Preparedness Response and Recovery-Focuses on the public health infrastructure needed to monitor the environment, assess needs of vulnerable populations, and allocate resources in times of community emergency.
- Public Health Ethics-Involves a systematic process to clarify, prioritize, and justify possible courses of public health action based on ethical principles, values and beliefs of stakeholders, and scientific and other information. Public ethics is a field of study that seeks to clarify principles guiding actions, and a field of practice that applies relevant principles and values to decision making.
- Public Health Leadership-Prepares public health practitioners with knowledge and skills needed to mobilize, coordinate, and direct broad collaborative actions within the complex public health system.
- Public Health Medicine-Protects and improves the health of the community through preventive medicine by providing public health training for clinicians such as doctors, dentists, and nurses.
- Public Health Policy-The collected laws, regulations, and approaches taken to making decisions and implementing policy to protect the health of communities and populations. Public health policy issues include a wide range of topics including health care reform, insurance reform, prevention of communicable diseases, food safety, and stem cell research.
- Public Health Practice-Application of knowledge and competencies in performance of essential public health services.
- Risk Assessment-Determination of the probability that a specific public health environmental or other threat will occur, with a focus on adverse health effects, risk perception, communication, and management.
- Social Determinants of Health-Study of the political, cultural, and societal systems that influence behaviors and lifestyle decisions that have an impact on health.
- Substance Use/Harm Reduction-Study of theory and methods for research on substance use and community-based prevention, control, and treatment.
- Toxicology-Study of the adverse effects of chemicals or other physical agents on human beings and other living organisms.
- Tropical Medicine-Deals with infectious and other diseases occurring or originating primarily in tropical and subtropical regions.
- Veterinary Public Health-Study of the prevention and control of zoonotic diseases-transmissible from animals to humans-in both animal and human populations.
- Women's Health-Etiology, prevention, and treatment of public health problems affecting women and other high-risk groups.

2
This course is what UW calls a "special topics" course. These are courses whose topic changes from semester to semester and even between sections in the same semester. Sections of these courses accepted by the certificate in the past are shown in parentheses (like this). Use of approved sections to meet the certificate's electives requirement is fine, but they are not always seen automatically by the certificate's degree audit. Questions about these courses should be directed to certificate advising staff.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Understand the global burden of disease, threats to well-being, and the root causes of these conditions.
2. Identify parallels between local, domestic, and international health issues.
3. Become informed citizens in an increasingly interconnected world.
4. Collaborate and communicate effectively with diverse colleagues and local partners.
5. Respectfully engage with other cultures.

## ADVISING AND CAREERS

Details about advising for the certificate are available on the program's advising page (http://ghi.wisc.edu/education/undergraduate-certificate/ advising).

The certificate maintains a handbook (http://ghi.wisc.edu/education/ undergraduate-certificate/handbook) with lengthy sections about careers, including suggested global health-related work opportunities to pursue in students' first one to two years after college.

## Advisors:

Katie Freeman, advises last names A-M
kmfreeman2@wisc.edu
608-262-3718

Scheduling assistant (https://calendar.wisc.edu/scheduling-assistant/ public/profiles/FQybpanE.html)

Devika Suri, advises last names $\mathrm{N}-\mathrm{Z}$
dsuri@wisc.edu
608-262-3427
Scheduling assistant (https://calendar.wisc.edu/scheduling-assistant/ public/profiles/WxqFOGQx.html)

## PEOPLE

Please see the Certificate in Global Health website (http://ghi.wisc.edu/ education/undergraduate-certificate/\#Who) for a list of certificate staff and ways to contact them.

## WISCONSIN EXPERIENCE

A unique aspect of the certificate is the requirement of a field experience, which can take the form of a study abroad field course, an internship, or site visits right here in Wisconsin. You will have the opportunity to get out of the classroom and see the connections between human, animal, and environmental health while deepening your understanding of the social and cultural contexts that influence health and wellness. The experience also increases your comfort in working with a diversity of people and introduces you to many types of careers in global health.

Click here (http://ghi.wisc.edu/education/undergraduate-certificate/ field-experiences) to learn more about our field experiences or set up an appointment to talk with an advisor.

## NUTRITIONAL SCIENCES, B.S.

The bachelor of science with a major in nutritional science builds on a core set of nutrition courses with additional courses emphasizing the chemistry and biology of nutrients from the molecular to the systemic level. Students in this program often pursue graduate study in medicine, nutritional sciences, and other biological sciences. Graduates also find employment in agribusiness, the food industry, government agencies, health fields, and human services. Others may pursue advanced degrees in nutrition, the health and social sciences, and international studies. Students concerned with food and nutrition problems of developing countries can also enroll in courses that treat the agricultural, environmental, economic, and social context of such problems with the nutrition core.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code Title Credits

Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.

| International Studies (p. 33) | 3 |  |
| :--- | ---: | ---: |
| Physical Science Fundamentals | $4-5$ |  |
| CHEM 103 | General Chemistry I |  |
| or CHEM 108 | Chemistry in Our World |  |
| or CHEM 109 | Advanced General Chemistry |  |
| Biological Science | 5 |  |
| Additional Science (Biological, Physical, or Natural) | 3 |  |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |  |
| CALS Capstone Learning Experience: included in |  |  |
| the requirements for each CALS major (see "Major |  |  |
| Requirements") (p. 33) |  |  |

## MAJOR REQUIREMENTS

Code
Mathematics and Statistics
Select one of the following (or may be satisfied by placement exam):

| MATH 112 | Algebra |
| :--- | :--- |
| \& MATH 113 | and Trigonometry |
| MATH 114 | Algebra and Trigonometry |
| MATH 171 | Calculus with Algebra and <br>  <br>  <br> Trigonometry I ${ }^{1}$ |

Select one of the following: 3-5
STAT 301 Introduction to Statistical Methods
STAT 371 Introductory Applied Statistics for the Life Sciences

Chemistry
Select one of the following: $\quad 5-9$

| CHEM 103 | General Chemistry I |  |
| :---: | :--- | :---: |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry | 3 |
| CHEM 343 | Introductory Organic Chemistry | 2 |
| CHEM 344 | Introductory Organic Chemistry <br> Laboratory | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

Introductory Biology
Select one of the following options: 10
Option 1:
BOTANY/ General Botany
BIOLOGY 130
ZOOLOGY/ Animal Biology
BIOLOGY 101
ZOOLOGY/
BIOLOGY 102
Option 2:
BIOLOGY/ Introductory Biology
BOTANY/
ZOOLOGY 151
BIOLOGY/ Introductory Biology
BOTANY/
ZOOLOGY 152
Option 3:
BIOCORE 381 Evolution, Ecology, and Genetics

| BIOCORE 382 | Evolution, Ecology, and Genetics <br> Laboratory |
| :--- | :--- |
| BIOCORE 383 | Cellular Biology |
| BIOCORE 384 | Cellular Biology Laboratory |

## Nutritional Sciences Biology

Select one of the following options: 8-13

Option 1:

| ANAT\&PHY 335 | Physiology |
| :---: | :---: |
| GENETICS 466 | Principles of Genetics |
| And select one of the following: ${ }^{2}$ |  |
| MICROBIO 101 <br> \& MICROBIO 102 | General Microbiology and General Microbiology Laboratory |
| MICROBIO 303 <br> \& MICROBIO 304 | Biology of Microorganisms and Biology of Microorganisms Laboratory |
| Option 2: ${ }^{3}$ |  |
| BIOCORE 485 | Organismal Biology |
| BIOCORE 486 | Organismal Biology Laboratory |
| BIOCORE 587 | Biological Interactions |
| Physics |  |

Select one of the following: 8-10

| PHYSICS 103 | General Physics |
| :--- | :--- |
| \& PHYSICS 104 | and General Physics |
| PHYSICS 201 | General Physics |
| \& PHYSICS 202 | and General Physics |
| PHYSICS 207 | General Physics |
| \& PHYSICS 208 | and General Physics |

Core
NUTR SCI/AN SCI/ Comparative Animal Nutrition 3
DY SCI 311
or NUTR SCI 332 Human Nutritional Needs
NUTR SCI $431 \quad$ Nutrition in the Life Span 3
BIOCHEM/NUTR SCI Biochemical Principles of Human 3
510 and Animal Nutrition
Select one of the following: 3-7
BIOCHEM 501 Introduction to Biochemistry
BIOCHEM 507 General Biochemistry I
\& BIOCHEM 508 and General Biochemistry II
BMOLCHEM 503 Human Biochemistry
Electives within the Major
Select 6 credits from the following:
A A E/ World Hunger and Malnutrition
AGRONOMY/
INTER-AG/NUTR
SCI 350
ANAT\&PHY 337 Human Anatomy
ANAT\&PHY 338 Human Anatomy Laboratory
ANTHRO 365 Medical Anthropology
BIOCHEM 550 Topics in Medical Biochemistry
BIOCHEM/ Biology of Viruses ${ }^{4}$
M M \& I 575
BIOCHEM/ Molecular Control of Metabolism
NUTR SCI 645 and Metabolic Disease ${ }^{5}$
BMOLCHEM 504 Human Biochemistry Laboratory

| $\begin{aligned} & \text { C\&E SOC/ } \\ & \text { SOC } 533 \end{aligned}$ | Public Health in Rural \& Urban Communities |
| :---: | :---: |
| CHEM 311 | Chemistry Across the Periodic Table |
| CHEM 327 | Fundamentals of Analytical Science |
| CHEM 329 | Fundamentals of Analytical Science |
| DY SCI 305 | Lactation Physiology |
| FOOD SCI/ <br> AN SCI 321 | Food Laws and Regulations |
| FOOD SCI/ MICROBIO 325 | Food Microbiology |
| GENETICS 545 | Genetics Laboratory |
| HORT/ <br> AGRONOMY 338 | Plant Breeding and Biotechnology |
| HORT/ AGRONOMY/ BOTANY 339 | Plant Biotechnology: Principles and Techniques I |
| HORT/ AGRONOMY 360 | Genetically Modified Crops: Science, Regulation \& Controversy |
| MED HIST/ <br> PHILOS 515 | Public Health Ethics |
| MED HIST/ <br> PHILOS 558 | Ethical Issues in Health Care |
| M M \& I/ MICROBIO/PATHBIO 528 | Immunology |
| M M \& I/PATHBIO 529 | Immunology Laboratory |
| NEURODPT 533 | Molecular Physiology |
| NUTR SCI 375 | Special Topics |
| NUTR SCI/INTERAG 421 | Global Health Field Experience |
| NUTR SCI 500 | Undergraduate Capstone Seminar Laboratory |
| NUTR SCI/ <br> KINES 525 | Nutrition in Physical Activity and Health |
| NUTR SCI 540 | Community Nutrition Programs and Policy Issues |
| NUTR SCI/ BIOCHEM 619 | Advanced Nutrition: Intermediary Metabolism of Macronutrients ${ }^{4}$ |
| NUTR SCI/ POP HLTH 621 | Introduction to Nutritional Epidemiology ${ }^{4}$ |
| NUTR SCI/ M\&ENVTOX 623 | Advanced Nutrition: Minerals ${ }^{4}$ |
| NUTR SCI 625 | Advanced Nutrition: Obesity and Diabetes ${ }^{4}$ |
| NUTR SCI/ <br> AN SCI 626 | Experimental Diet Design ${ }^{4}$ |
| NUTR SCI 627 | Advanced Nutrition: Vitamins ${ }^{4}$ |
| NUTR SCI 631 | Clinical Nutrition I |
| NUTR SCI/PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements |
| NUTR SCI 681 | Senior Honors Thesis ${ }^{5}$ |
| NUTR SCI 682 | Senior Honors Thesis ${ }^{5}$ |
| NUTR SCI 691 | Senior Thesis-Nutrition ${ }^{5}$ |
| NUTR SCI 692 | Senior Thesis ${ }^{5}$ |
| NUTR SCI 699 | Special Problems ${ }^{6}$ |


| ONCOLOGY 401 | Introduction to Experimental <br> Oncology |
| :--- | :--- |
| PATH 404 | Pathophysiologic Principles of <br> Human Diseases |
| PHM SCI 401 | Survey of Pharmacology |
| POP HLTH 370 | Introduction to Public Health: Local <br> to Global Perspectives |
| ZOOLOGY 470 | Introduction to Animal Development |

## RECOMMENDED NUTRITIONAL SCIENCE ELECTIVES

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIOCHEM 550 | Topics in Medical Biochemistry | 2 |
| C\&E SOC/SOC 222 | Food, Culture, and Society | 3 |
| FOOD SCI/ | Food Microbiology Laboratory | 2 |
| MICROBIO 324 |  | 3 |
| FOOD SCI/ | Food Microbiology |  |
| MICROBIO 325 |  | 3 |
| FOOD SCI 410 | Food Chemistry | 3 |
| M M \& I/MICROBIO/ | Immunology | 3 |
| PATH-BIO 528 |  | 3 |
| MED HIST/ | Global Environmental Health: An |  |
| ENVIR ST 213 | Interdisciplinary Introduction | 3 |
| NUTR SCI/ | Introduction to Global Health | 3 |
| AGRONOMY/ |  | 3 |
| ENTOM 203 | Nutrition in Physical Activity and | 3 |
| NUTR SCI/ | Health |  |


| NUTR SCI/ <br> POP HLTH 621 | Introduction to Nutritional <br> Epidemiology | 1 |
| :--- | :--- | :---: |
| NUTR SCI/ <br> PHM PRAC 672 | Herbals, Homeopathy, and Dietary <br> Supplements | $2-3$ |
| PATH 404 | Introduction to Experimental <br> Oncology | 2 |
| PHM SCI 401 | Pathophysiologic Principles of <br> Human Diseases | 3 |
| POP HLTH 370 | Survey of Pharmacology <br> Introduction to Public Health: Local <br> to Global Perspectives | 3 |
| SOC 531 | Sociology of Medicine | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY/ | Cellular Signal Transduction | 3 |
| BIOCHEM/PHMCOL- | Mechanisms |  |
| M 630 |  | 3 |

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take NUTR SCI 681 Senior Honors Thesis and NUTR SCI 682 Senior Honors Thesis NUTR SCI 682 Senior Honors Thesis NUTR SCI 682 Senior Honors Thesis Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http://www.cals.wisc.edu/academics/undergraduate-programs/get-involved/honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Obtains and can articulate specialized knowledge in the field of nutritional sciences and dietetics along with an education broad enough to meet the challenges of future careers and opportunities.
2. Obtains and can articulate foundational knowledge in areas relevant to the field of nutrition and dietetics.
3. Communicates complex ideas in a clear and understandable manner through both written and oral presentations.
4. Demonstrates quantitative literacy in math and statistics relevant to nutritional sciences and dietetics.
5. Demonstrates the ability to think critically and creatively, to synthesize, analyze, and integrate ideas for decision making and problem solving.
6. Develops the skills for life-long learning and is capable of locating, interpreting, and critically evaluating professional literature and current research.
7. Develops a global perspective and an appreciation for the interdependencies among individuals and their workplaces, communities, environments, and world; and an understanding of the interrelationships between science and society.
8. Develops a respect for truth, a tolerance for diverse views, and a strong sense of personal and professional ethics.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE NUTRITIONAL SCIENCES FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 112, 114, or 211 | $3-5$ CHEM 104 | 5 |
| CHEM 103 or $109^{1}$ | $4-5$ ZOOLOGY/BIOLOGY 101 |  |
|  | \& ZOOLOGY/ | 5 |
| CIOLOGY 102 |  |  |

Total Credits 30-33

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 343 | 3 CHEM 344 or 345 | 2 |
| ANAT\&PHY 335 | 5 NUTR SCI 332 | 3 |
| ZOOLOGY/BIOLOGY/ <br> BOTANY 152 or BOTANY <br> $130^{3}$ | 5 COMM B | 3 |
| MATH 211,221, STAT <br> 301, or STAT 371 | 3-5 Elective ${ }^{2}$ | 3 |

16-18
11
Total Credits 27-29

## Junior

## Fall

Credits Spring
Credits
3 PHYSICS 104, 202, or
208
taking BIOCHEM 507, take BIOCHEM 508 in spring)
PHYSICS 103, 201, or 4-5 NUTR SCI 431

| Electives $^{2}$ | 9 MICROBIO 101 or $303^{3}$ | 3 |
| :--- | ---: | ---: |
|  | MICROBIO 102 or $304^{3}$ | 2 |
|  | Elective $^{2}$ | 3 |
| $16-17$ | 15 |  |

Total Credits 31-32
Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| GENETICS $466^{3}$ | 3 Capstone Experience | $1-3$ |
| NUTR SCI/ | 3 CHEM 327, 329, or 311 | 4 |
| BIOCHEM 510 | 3 Electives $^{2}$ |  |
| NUTR SCI Elective $^{5}$ | 6 | 9 |
| Electives $^{2}$ | 15 | $14-16$ |

## Total Credits 29-31

CHEM 103/CHEM 104 or CHEM 109 is required.
2 UW and CALS general education requirements are listed on the Requirements tab. Other recommended electives: Math (http:// guide.wisc.edu/courses/math) through MATH 222 (second semester calculus), CHEM 561 Physical Chemistry, and foreign language.
BIOCORE 381/BIOCORE 382, BIOCORE 383/BIOCORE 384, BIOCORE 485/BIOCORE 486, BIOCORE 587 also accepted.
4
ANTHRO 104 fulfills both the Ethnic Studies and International Studies requirements.
5 Select 3 credits from NUTR SCI/A A E/AGRONOMY/INTERAG 350, NUTR SCI 540, NUTR SCI 631, NUTR SCI/PHM PRAC 672 NUTR SCI 681, NUTR SCI 682, NUTR SCI 691, NUTR SCI 692, NUTR SCI 699, FOOD SCI/MICROBIO 325, FOOD SCI 410, FOOD SCl 412 or FOOD SCI 514.

- 120 credits required for graduation.


## ADVISING AND CAREERS

Prospective and declared students should contact the Student Services Coordinator, Katie Butzen at kbutzen@wisc.edu for questions.

Students in this program often pursue graduate study in Medicine, nutritional sciences, and other biological sciences. Graduates also find employment in agribusiness, the food industry, government agencies, health fields, and human services. Others may pursue advanced degrees in nutrition, the health and social sciences, and international studies.

## PEOPLE

## PROFESSORS

Dave Eide (Chair), Ph.D. 1987
Richard Eisenstein, Ph.D. 1985
Guy Groblewski, Ph.D. 1991
Huichuan Lai, Ph.D., R.D.N. 1994
Denise Ney (Director, Didactic Program in Dietetics) , Ph.D., R.D.N. 1986
James Ntambi, Ph.D. 1985

Roger Sunde, Ph.D. 1980
Sherry Tanumihardjo, Ph.D. 1993

## ASSOCIATE PROFESSOR

Beth Olson, Ph.D.

## ASSISTANT PROFESSORS

Adam Kuchnia, Ph.D., R.D.N. 2017

Brian Parks, Ph.D. 2008
Eric Yen, Ph.D. 2000

## ASSOCIATE FACULTY ASSOCIATE

Amber Haroldson, Ph.D., R.D.N., M.S.
Tara LaRowe (Coordinator, Didactic Program Dietetics), Ph.D., R.D.N.
Makayla Schuchardt, M.S., R.D.N., C.N.S.C.
Julie Thurlow, DR.PH., R.D.N.

## SENIOR LECTURER

Pete Anderson, M.S.

## STUDENT SERVICES COORDINATOR

Erika Anna, R.D.N

## GRADUATE COORDINATOR

Katie Butzen, MS.Ed.

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in dietetics and nutrition, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- Dietetics and Nutrition Club (DNC) (https://win.wisc.edu/ organization/dnc), a student organization open to anyone interested in meeting others pursuing dietetics and nutrition. Involvement in the DNC is a great way to find out about events and opportunities to network within the field of nutrition and dietetics. See the DNC Facebook page here (https://www.facebook.com/groups/ DNC.UWMadison/?ref=ts\&fref=ts).
- AWA (http://awamadison.org), the Association of Women in Agriculture, a professional student organization for young women with a passion for agriculture.
- WISELI (http://wiseli.engr.wisc.edu), Women in Science and Engineering Leadership Institute-a research center aiming to increase the representation, advancement, and satisfaction of women faculty and members of groups currently underrepresented on the faculty and in leadership at UW-Madison.
- Research/Lab experience: Students are encouraged to get involved in research, whether in the Department of Nutritional Sciences, or through other departments. Research can be performed for either course credit or pay, depending on the opportunity. Research opportunities can primarily be found by inquiring with advisors, instructors, and faculty members. Learn more about faculty research here (https://nutrisci.wisc.edu/people/faculty-staff).


## NUTRITIONAL SCIENCES, B.S. DIETETICS

The popular dietetics degree program combines clinical and managerial courses with the nutrition core to prepare students to become registered dietitian nutritionists (RDN). RDNs work in hospitals, outpatient clinics, schools, colleges, wellness programs and nursing homes as well as in public health agencies, the food industry, and research labs. Students meet the following criteria as a pathway for becoming an RDN:

1. Fulfill all academic course requirements of the Didactic Program in Dietetics (DPD) according to the Accreditation Council for Education in Nutrition and Dietetics (ACEND) 2017 Standards of Education
2. Receive a Nutritional Sciences, B.S. Dietetics
3. Complete an ACEND-accredited Dietetic Internship Program
4. Pass a national exam administered by the Commission on Dietetic Registration (CDR). Effective January 1, 2024, the CDR will require a minimum of a master's degree to be eligible to take the registration examination to become an RDN. Students who complete the nutritional sciences major in the dietetics degree program receive the Bachelor of Science-Dietetics degree.

For complete program information, see the department website (https:// nutrisci.wisc.edu).

## HOW TO GET IN

## ADMISSION TO DIETETICS DEGREE PROGRAM

Students will have PDI (Pre-Dietetics) classification until admission to the dietetics degree program (ADI classification) as defined by completion of prerequisite courses with a cumulative GPA of $\geq 3.000$, as well as, an overall GPA of $\geq 3.000$. Students must apply for and be admitted to the program no later than the end of the semester in which the student accumulates 86 credits, which is senior standing. Department approval is required for admission. Students who are not admitted to the program by the time they accumulate 86 credits will not be allowed to continue in the PDI classification. ${ }^{1}$

To be admitted to the B.S. dietetics program, the following requirements must be met effective fall 2015:

1. A minimum overall cumulative GPA of 3.000 . Cumulative GPA will be based on UW-Madison courses only.
2. Students must have completed one semester at UW-Madison before applying.
3. A minimum mean GPA of 3.000 in the following required ${ }^{2}$ prerequisite courses:

| Code Title | Credits |
| :--- | ---: |
| Select one of the following: | $5-9$ |


| CHEM 103 | General Chemistry I |
| :--- | :--- |
| \& CHEM 104 | and General Chemistry II |
| CHEM 109 | Advanced General Chemistry |

Select one of the following:

| ZOOLOGY/ <br> BIOLOGY 101 <br> \& ZOOLOGY/ | Animal Biology <br> and Animal Biology Laboratory <br> BIOLOGY 102 |  |
| :--- | :--- | ---: |
| ZOOLOGY/ <br> BIOLOGY/ <br> BOTANY 151 | Introductory Biology |  |
| ANAT\&PHY 335 | Physiology | 5 |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| Select one of the following: | $3-4$ |  |
| PSYCH 202 | Introduction to Psychology |  |
| MICROBIO 101 | General Microbiology |  |
| PSYCH 210 | Basic Statistics for Psychology |  |
| SOC/ <br> C\&E SOC 360 | Statistics for Sociologists I |  |
| STAT 301 | Introduction to Statistical <br> Methods |  |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |  |
| GEN BUS 300 | Professional Communication |  |

This policy is applicable to undergraduate students entering or transferring into PDI classification fall 2018 and beyond. Students who have already completed a college degree (B.S. or B.A.) may choose to pursue the dietetics program as either a second degree candidate, or as a Didactic Program in Dietetics (DPD) completer. Because they have already completed a bachelor's degree, seconddegree candidates and DPD completers are not required to follow this progression policy. Progression for these students will be closely monitored by the program coordinator.
Any transfer course from another university that will be used to meet the above required courses cannot be included in the GPA calculation. If the same course is taken more than once, only the grade from the last time the course was taken will be used in the GPA calculation.

Note: Admission to the DPD program is competitive, as enrollment is limited by accreditation standards; students meeting the minimum criteria are not guaranteed admission.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## MAJOR REQUIREMENTS

Code Title
Mathematics and Statistics

Select one of the following (or may be satisfied by
placement exam):

| MATH 112 | Algebra |  |
| :--- | :--- | :--- |
| MATH 114 | Algebra and Trigonometry ${ }^{1}$ | $3-4$ |
| Select one of the following: |  |  |
| PSYCH 210 | Basic Statistics for Psychology |  |
| SOC/ | Statistics for Sociologists I |  |
| C\&E SOC 360 | Introduction to Statistical Methods |  |
| STAT 301 | Introductory Applied Statistics for <br> the Life Sciences |  |

## Chemistry

Select one of the following: 5-9

| CHEM 103 | General Chemistry I |  |
| :---: | :--- | :---: |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 341 | Elementary Organic Chemistry |  |
| or CHEM 343 | Introductory Organic Chemistry | 3 |
| Select one of the following: |  |  |


| BMOLCHEM 314 | Introduction to Human <br> Biochemistry |
| :--- | :--- |
| BMOLCHEM 503 | Human Biochemistry |
| BIOCHEM 501 | Introduction to Biochemistry |

Biology
Select one of the following: 5

ZOOLOGY/ Animal Biology
BIOLOGY 101 and Animal Biology Laboratory
\& ZOOLOGY/
BIOLOGY 102
ZOOLOGY/ Introductory Biology
BIOLOGY/
BOTANY 151

| Select one of the following: ${ }^{2}$ | 5 |
| :--- | :--- |
| MICROBIO 101 | General Microbiology |
| \& MICROBIO 102 | and General Microbiology <br> Laboratory |
| MICROBIO 303 | Biology of Microorganisms <br> \& MICROBIO 304 <br> and Biology of Microorganisms <br> Laboratory |

## Foundation

| ANAT\&PHY 335 | Physiology | 5 |
| :--- | :--- | ---: |
| PSYCH 202 | Introduction to Psychology | 3 |
| GEN BUS 300 | Professional Communication | $3-4$ |
| GEN BUS 310 | Fundamentals of Accounting and | 3 |
| GEN BUS 311 | Finance for Non-Business Majors |  |
|  | Fundamentals of Management and | 3 |

Select one of the following: 2-3

| CURRIC/ | Methods of Teaching Family and |
| :--- | :--- |
| CSCS 427 | Consumer Education |
| CURRIC/ | Program Planning in Family and |
| CSCS 428 | Consumer Education |
| ED PSYCH 301 | How People Learn |

Core

| FOOD SCI 301 | Introduction to the Science and <br> Technology of Food | 3 |
| :--- | :--- | ---: |
| FOOD SCI 437 | Food Service Operations | 3 |
| FOOD SCI 438 | Food Service Operations Lab |  |
| NUTR SCI 200 | The Professions of Dietetics and <br> Nutrition | 1 |
| NUTR SCI 332 | Human Nutritional Needs | 1 |
| NUTR SCI 431 | Nutrition in the Life Span | 3 |
| BIOCHEM/NUTR SCI | Biochemical Principles of Human <br> and Animal Nutrition | 3 |
| 510 | Clinical Nutrition I | 3 |
| NUTR SCI 631 | Clinical Nutrition II | 3 |
| NUTR SCI 632 | Undergraduate Capstone Seminar <br> Capstone | 3 |
| NUTR SCI 500 | Laboratory | 1 |
| NUTR SCI 520 | Applications in Clinical Nutrition | 3 |
| Total Credits |  | $73-82$ |

1 Note that placement into MATH 114 does not guarantee that credit has been earned for MATH 112.
2 Consult advisor about combining MICROBIO 303 with MICROBIO 102.
Note: recommended electives for dietetics students can be found on the Advising and Careers tab.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
| UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |  |
| Abroad/Study Away programs. |  |

## LEARNING OUTCOMES

1. Obtains and can articulate specialized knowledge in the field of nutritional sciences and dietetics along with an education broad enough to meet the challenges of future careers and opportunities.
2. Obtains and can articulate foundational knowledge in areas relevant to the field of nutrition and dietetics.
3. Communicates complex ideas in a clear and understandable manner through both written and oral presentations.
4. Demonstrates quantitative literacy in math and statistics relevant to nutritional sciences and dietetics.
5. Demonstrates the ability to think critically and creatively, to synthesize, analyze, and integrate ideas for decision making and problem solving.
6. Develops the skills for life-long learning and is capable of locating, interpreting, and critically evaluating professional literature and current research.
7. Develops a global perspective and an appreciation for the interdependencies among individuals and their workplaces, communities, environments, and world; and an understanding of the interrelationships between science and society.
8. Develops a respect for truth, a tolerance for diverse views, and a strong sense of personal and professional ethics.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

## SAMPLE NUTRITIONAL SCIENCES FOUR-YEAR PLANDIETETICS DEGREE

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 103 ${ }^{1 *}$ | 4 CHEM 104* | 5 |
| COMM A or COMM B | * | 3 PSYCH 202* |

## Total Credits 29-31

## Sophomore

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| NUTR SCI $200{ }^{2}$ | 1 NUTR SCI $332{ }^{*}$ | 3 |
| MICROBIO 101 or 303 | 3 ANAT\&PHY 335 | 5 |
| MICROBIO 102 or 304 | 2 Statistics ${ }^{*}$ | 3-4 |
| CHEM 341 ${ }^{2}$ | 3 GEN BUS 300 | 3 |
| Electives* | 3 |  |
| COMM B* | 3 |  |
|  | 15 | 14-15 |

Total Credits 29-30

## Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| FOOD SCI $301^{*}$ | 3 NUTR SCI 431 ${ }^{3}$ | 3 |
| GEN BUS $310^{5}$ | 3 NUTR SCI/ | 3 |
| BIOCHEM 510 |  |  |
| BIOCHEM 501 or <br> BMOLCHEM $314^{5}$ | 3 Education Techniques ${ }^{4}$ | 3 |
| Electives | $6-7$ GEN BUS 311 | 3 |


|  | Electives | $3-4$ |
| :--- | :---: | ---: |
| Total Credits 30-32 | $15-16$ | $15-16$ |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| NUTR SCI 631 |  |  |
| FOOD SCI 437 |  |  |
| FOOD SCI 438 |  |  |
| NUTR SCI 500 | 3 NUTR SCI 520 | 3 |
| Electives | 3 Electives | $12-13$ |
|  | 1 |  |

Total Credits 29-31

## MATH 112 Algebra is a prerequisite

Offered only first semester
Offered only second semester
ED PSYCH 301, CSCS/CURRIC 427, or CSCS/CURRIC 428(one course required)
5 BMOLCHEM 314 conflicts with GEN BUS 310; could take GEN BUS 310 in year 4

- See Requirements tab for recommended supporting courses
- Students interested in pursuing the dietetics program must first complete specific prerequisite courses (denoted by * above) and must achieve the necessary grade point average criteria. Consult http:// www.nutrisci.wisc.edu for specific information on admission requirements and application procedure.


## ADVISING AND CAREERS

## ADVISING

Prospective and declared students should contact the student services coordinator with questions.

## CAREERS

Registered dietitian nutritionists (RDN) work in hospitals, outpatient clinics, schools, colleges, wellness programs and nursing homes as well as in public health agencies, the food industry, and research labs. Students who fulfill the requirements of the Didactic Program in Dietetics and receive a Nutritional Sciences B.S. in Dietetics are qualified to complete a post-graduate Dietetic Internship. Upon completing the Dietetic Internship, a graduate is eligible to take the examination administered by the Commission on Dietetic Registration leading to certification as a RDN.

RECOMMENDED ELECTIVES FOR DIETETICS STUDENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACCT I S 300 | Accounting Principles | 3 |
| COM ARTS 368 | Theory and Practice of Persuasion | 3 |
| COUN PSY 650 | Theory and Practice in Interviewing | 3 |
| C\&E SOC/SOC 222 | Food, Culture, and Society | 3 |
| FOOD SCI/ | Food Laws and Regulations | 1 |
| AN SCI 321 |  | 2 |
| FOOD SCI/ | Food Microbiology Laboratory |  |
| MICROBIO 324 |  |  |


| FOOD SCI/ <br> MICROBIO 325 | Food Microbiology | 3 |
| :---: | :---: | :---: |
| FOOD SCI 410 | Food Chemistry | 3 |
| FOOD SCI 412 | Food Analysis | 4 |
| GEN\&WS 103 | Women and Their Bodies in Health and Disease | 3 |
| KINES 314 | Physiology of Exercise | 4 |
| MARKETNG 300 | Marketing Management | 3 |
| MED HIST/ ENVIR ST 213 | Global Environmental Health: An Interdisciplinary Introduction | 3 |
| NURSING/S\&A PHM/ SOC WORK 105 | Health Care Systems: Interdisciplinary Approach | 2 |
| NURSING/PEDIAT/ PHM PRAC/ SOC WORK 746 | Interdisciplinary Care of Children with Special Health Care Needs | 3 |
| NUTR SCI/ AGRONOMY/ ENTOM 203 | Introduction to Global Health | 3 |
| NUTR SCI/A A E/ AGRONOMY/INTERAG 350 | World Hunger and Malnutrition | 3 |
| NUTR SCI/ KINES 525 | Nutrition in Physical Activity and Health | 3 |
| NUTR SCI 540 | Community Nutrition Programs and Policy Issues | 1 |
| NUTR SCI/ POP HLTH 621 | Introduction to Nutritional Epidemiology | 1 |
| NUTR SCI 635 | Advanced Clinical Nutrition | 1 |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |
| PATH 404 | Pathophysiologic Principles of Human Diseases | 3 |
| PHM SCI 401 | Survey of Pharmacology | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| SOC 531 | Sociology of Medicine | 3 |

## PEOPLE

## PROFESSORS

Dave Eide (Chair), Ph.D. 1987
Richard Eisenstein, Ph.D. 1985
Guy Groblewski, Ph.D. 1991
Huichuan Lai, Ph.D., R.D.N. 1994
Denise Ney (Director, Didactic Program in Dietetics) , Ph.D., R.D.N. 1986
James Ntambi, Ph.D. 1985
Roger Sunde, Ph.D. 1980
Sherry Tanumihardjo, Ph.D. 1993

## ASSOCIATE PROFESSOR

Beth Olson, Ph.D.

## ASSISTANT PROFESSORS

Adam Kuchnia, Ph.D., R.D.N. 2017

Brian Parks, Ph.D. 2008
Eric Yen, Ph.D. 2000

ASSOCIATE FACULTY ASSOCIATE<br>Amber Haroldson, Ph.D., R.D.N., M.S.<br>Tara LaRowe (Coordinator, Didactic Program Dietetics), Ph.D., R.D.N.

Makayla Schuchardt, M.S., R.D.N., C.N.S.C.
Julie Thurlow, DR.PH., R.D.N.

## SENIOR LECTURER

Pete Anderson, M.S.
STUDENT SERVICES COORDINATOR
Erika Anna, R.D.N.
GRADUATE COORDINATOR
Katie Butzen, MS.Ed.

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in dietetics and nutrition, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- Dietetics and Nutrition Club (DNC) (https://win.wisc.edu/ organization/dnc), a student organization open to anyone interested in meeting others pursuing dietetics and nutrition. Involvement in the DNC is a great way to find out about events and opportunities to network within the field of nutrition and dietetics. See the DNC Facebook page here (https://www.facebook.com/groups/ DNC.UWMadison/?ref=ts\&fref=ts).
- Academy of Nutrition and Dietetics (AND) (http:// www.eatrightpro.org), the world's largest organization of food and nutrition professionals. AND provides public information on advocacy, leadership, career development, dietetics resources, position and practice papers; student membership rates and privileges can be found here (http://www.eatrightpro.org/resources/membership/ membership-types-and-criteria/student-member).
- Wisconsin Academy of Nutrition and Dietetics (WAND) (http:// www.eatrightwisc.org/default.asp), Wisconsin's chapter of AND.
- Collegiate FFA (http://collegiateffamadison.weebly.com), an official collegiate chapter of the National FFA organization.
- AWA (http://awamadison.org), the Association of Women in Agriculture, a professional student organization for young women with a passion for agriculture.
- WISELI (http://wiseli.engr.wisc.edu), Women in Science and Engineering Leadership Institute-a research center aiming to increase the representation, advancement, and satisfaction of women faculty and members of groups currently underrepresented on the faculty and in leadership at UW-Madison.
- Research/Lab experience: Students are encouraged to get involved in research, whether in the Department of Nutritional Sciences, or through other departments. Research can be performed for either course credit or pay, depending on the opportunity. Research
opportunities can primarily be found by inquiring with advisors, instructors, and faculty members. Learn more about faculty research here (https://nutrisci.wisc.edu/people/faculty-staff).


## CERTIFICATION/LICENSURE

## ELEVATED EDUCATION REQUIREMENTS FOR THE FUTURE REGISTERED DIETITIAN NUTRITIONIST (RDN)

The registration examination for RDNs is designed to evaluate a candidate's ability to perform at the entry-level, and currently, candidates must hold the minimum of a baccalaureate degree to take the exam. In 2013, Commission on Dietetics Registration (CDR) moved to change the entry-level registration eligibility requirements for RDNs; instead of requiring a Baccalaureate degree, the educational preparation for the future entry-level RDN is now the minimum of a master's degree. CDR's mandate goes into effect January 1, 2024.

## CURRENT STUDENTS

Students completing dietetics coursework and a dietetic internship by January 1, 2024 will still be eligible to take the RDN exam with a baccalaureate degree.

## PROSPECTIVE STUDENTS

Freshmen declaring pre-dietetics (PDI) in 2020 and beyond will be held to the new 2024 mandate, which will require students to hold the minimum of a master's degree in order to be eligible to take the RDN exam.

## ACCREDITATION

## Accreditation

Accreditation Council for Education in Nutrition and Dietetics (https:// www.eatrightpro.org/acend)

Accreditation status: Accredited. Next accreditation review: 2018.

## PLANT PATHOLOGY

Plant pathology is the study of plants and their pathogens, the process of disease, and how plant health and disease are influenced by factors such as the weather, nonpathogenic microorganisms, and plant nutrition. It encompasses fundamental biology as well as applied agricultural sciences.

Plant pathology involves the study of plants and pathogens at the genetic, biochemical, physiological, cellular, population, and community levels, and how the knowledge derived is integrated and put into agricultural practice. Prerequisite to effective research, teaching, and extension in plant pathology is a breadth of interdisciplinary interest and knowledge, in a department and in its individual members, reaching from ecology to microbiology, from meteorology to applied mathematics, and from molecular biology to communication skills.

Plant pathology is a field that thrives in, and makes its greatest contribution to, comprehensive institutions like the University of Wisconsin-Madison where the proximity and complementarity of basic
sciences and the other applied agricultural sciences are exceptionally strong.

Undergraduates in plant pathology can choose between two tracks. The plant-microbe biology track has courses in basic math and sciences, including biology, chemistry, and physics, along with upper-level courses in plant pathology, biochemistry, and microbiology. This track is geared toward students who have an interest in receiving a broad education in the basic sciences or plan to pursue a graduate or professional degree. The plant health and industry track includes some courses in basic math and sciences, as well as additional courses in agriculture and economics/ management and upper-level courses in plant pathology, entomology and other agricultural sciences. This track is designed for students who intend to work in industry after receiving their undergraduate degree. More information about careers in plant pathology is available from the department.

For those interested in graduate studies, the Department of Plant Pathology offers a broad program leading to M.S. and Ph.D. degrees, which is described in the Graduate Guide (http://guide.wisc.edu/ graduate).

## DEGREES/MAJORS/CERTIFICATES

- Plant Pathology, B.S. (p. 200)


## PEOPLE

## PROFESSORS

Ahlquist, Paul
Allen, Caitilyn
Bent, Andrew
Handelsman, Jo
MacGuidwin, Ann
McManus, Patricia (chair)
Rouse, Douglas

## ASSOCIATE PROFESSORS

Barak-Cunningham, Jeri
Gevens, Amanda

## ASSISTANT PROFESSORS

Kabbage, Mehdi
Koch, Paul
Lankau, Richard
Rakotondrafara, Aurelie
Silva, Erin
Smith, Damon

## AFFILIATED FACULTY

Ane, Jean-Michel (Bacteriology)
Groves, Russell (Entomology)
Havey, Michael (Horticulture)
Keller, Nancy (Medical Microbiology \& Immunology)
Pringle, Ann (Botany)
Whitman, Thea (Soil Science)
Yu, Jae-Hyuk (Bacteriology)

## FACULTY ASSOCIATE

Hudelson, Brian

## PLANT PATHOLOGY, B.S.

Plant pathology is the study of plants and their pathogens, the process of disease, and how plant health and disease are influenced by factors such as the weather, nonpathogenic microorganisms, and plant nutrition. It encompasses fundamental biology as well as applied agricultural sciences.

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This major is earned through the bachelor of science degree program.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

## Code

Title
Credits
Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33)

International Studies (p. 33) 3
Physical Science Fundamentals 4-5
$\left.\begin{array}{ll}\text { CHEM 103 } & \text { General Chemistry I } \\ \text { or CHEM } 108 & \text { Chemistry in Our World } \\ \text { or CHEM } 109 & \text { Advanced General Chemistry }\end{array}\right] 5$

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Core Mathematics |  | $5-6$ |
| Select one of the following (or may be satisfied by <br> placement exam): |  |  |
| MATH 112 | Algebra |  |
| \& MATH 113 | and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| MATH 171 | Calculus with Algebra and |  |
|  | Trigonometry I |  |


| Select one of the following: 4-5 |  |  |
| :---: | :---: | :---: |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| Plant Pathology Core |  |  |
| PL PATH 300 | Introduction to Plant Pathology | 4 |
| PL PATH/BOTANY $332$ | Fungi | 4 |
| Another PI Path course above $300{ }^{1}$ |  |  |
| Capstone |  |  |
| PL PATH 590 | Capstone in Plant Pathology | 3 |
| Track |  |  |
| Select one of the following: 29-39 |  |  |
| Plant-Microbe Biology Track |  |  |
| Plant Health and Industry Track |  |  |
| Total Credits 67-83 |  |  |
| Not including PL PATH 375 Special Topics or independent study credits-PL PATH 299 Independent Study, PL PATH 399 Coordinative Internship/Cooperative Education, PL PATH 590 Capstone in Plant Pathology, PL PATH 681 Senior Honors Thesis, PL PATH 682 Senior Honors Thesis, or PL PATH 699 Special Problems. |  |  |

## TRACKS

## PLANT-MICROBE BIOLOGY TRACK

| Code <br> Additional Mathematics and Statistics | Credits |  |
| :--- | :--- | ---: |
| Select one of the following: | 5 |  |
| MATH 211 | Calculus |  |
| MATH 217 | Calculus with Algebra and <br> Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| Select one of the following: | 3-4 |  |
| MATH 222 | Calculus and Analytic Geometry 2 |  |

Additional Chemistry
Select one of the following options: 4-8

| CHEM 343 | Introductory Organic Chemistry |
| :--- | :--- |
| \& CHEM 344 | and Introductory Organic Chemistry |
| \& CHEM 345 | Laboratory <br> and Intermediate Organic Chemistry |
|  | CHEM 341 |
| \& CHEM 342 | Elementary Organic Chemistry <br> and Elementary Organic Chemistry <br> Laboratory |


| Biology | $5-8$ |
| :--- | :--- |
| Select one of the following options: |  |
| Option 1: |  |
| MICROBIO 303 | Biology of Microorganisms <br> \& MICROBIO 304 Biology of Microorganisms <br> Laboratory |
| GENETICS 466 | Principles of Genetics |

Option 2:

| Select two of the following: |  |  |
| :---: | :---: | :---: |
| BIOCORE 485 | Organismal Biology |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| BIOCORE 587 | Biological Interactions |  |
| Additional Physics |  |  |
| Select one of the following: |  | 4-5 |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| Plant Physiology |  |  |
| BOTANY 500 | Plant Physiology | 3-4 |
| Plant-Microbe Electives |  |  |
| Select 5 credits from the following: |  | 5 |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BOTANY 300 | Plant Anatomy |  |
| BOTANY 400 <br> or BOTANY 401 | Plant Systematics <br> Vascular Flora of Wisconsin |  |
| BOTANY/ <br> F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology |  |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology |  |
| Any PL PATH course above 300 |  |  |
| Total Credits |  | 29-39 |

1 MATH 171 is a prerequisite for MATH 217.
2 MATH 221 Calculus and Analytic Geometry 1/MATH 217 Calculus with Algebra and Trigonometry II is a prerequisite for MATH 222 Calculus and Analytic Geometry 2

## PLANT HEALTH AND INDUSTRY TRACK

| Code | Title | Credits |
| :---: | :---: | :---: |
| Biology |  |  |
| GENETICS 466 | Principles of Genetics | 3 |
| Core |  |  |
| PL PATH 559 <br> or BOTANY 500 | Diseases of Economic Plants Plant Physiology | 3-4 |
| Plant Health and Industry Electives |  |  |
| Select 24 credits from at least two different departments from the following: |  | 24 |
| AGRONOMY 100 | Principles and Practices in Crop Production |  |
| AGRONOMY 300 | Cropping Systems |  |
| AGRONOMY 302 | Forage Management and Utilization |  |
| AGRONOMY/ <br> HORT 328 | Integrated Weed Management |  |
| BOTANY/ <br> ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology |  |
| BOTANY 300 | Plant Anatomy |  |
| BOTANY/ <br> F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology |  |
| BOTANY 500 | Plant Physiology |  |


| BIOCHEM 501 | Introduction to Biochemistry |
| :---: | :---: |
| $\begin{aligned} & \text { C\&E SOC/ } \\ & \text { SOC } 140 \end{aligned}$ | Introduction to Community and Environmental Sociology |
| $\begin{aligned} & \text { C\&E SOC/ } \\ & \text { SOC } 222 \end{aligned}$ | Food, Culture, and Society |
| C\&E SOC/ <br> HIST SCI 230 | Agriculture and Social Change in Western History |
| C\&E SOC/ <br> AMER IND/ <br> SOC 578 | Poverty and Place |
| $\begin{aligned} & \text { C\&E SOC/ } \\ & \text { SOC } 650 \end{aligned}$ | Sociology of Agriculture |
| ENTOM/ <br> ENVIR ST 201 | Insects and Human Culture-a Survey Course in Entomology |
| ENTOM/ ZOOLOGY 302 | Introduction to Entomology |
| ENTOM 342 | Insect Ecology |
| F\&W ECOL 100 | Introduction to Forestry |
| F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: Biological and Philosophical Issues |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species |
| F\&W ECOL/ BOTANY 455 | The Vegetation of Wisconsin |
| F\&W ECOL/ BOTANY/ ZOOLOGY 460 | General Ecology |
| F\&W ECOL 550 | Forest Ecology |
| HORT 120 | Survey of Horticulture |
| HORT/ <br> PLPATH 261 | Sustainable Turfgrass Use and Management |
| HORT/ <br> LAND ARC 263 | Landscape Plants I |
| HORT 320 | Environment of Horticultural Plants |
| HORT 345 | Fruit Crop Production |
| MICROBIO 101 | General Microbiology |
| MICROBIO 102 | General Microbiology Laboratory |
| MICROBIO 303 | Biology of Microorganisms |
| MICROBIO 304 | Biology of Microorganisms Laboratory |
| NUTR SCI 132 | Nutrition Today |
| NUTR SCI/AN SCI/ DY SCI 311 | Comparative Animal Nutrition |
| NUTR SCI 332 | Human Nutritional Needs |
| NUTR SCI/A A E/ AGRONOMY/ INTER-AG 350 | World Hunger and Malnutrition |
| NUTR SCI/ BIOCHEM 510 | Biochemical Principles of Human and Animal Nutrition |
| NUTR SCI 540 | Community Nutrition Programs and Policy Issues |

PL PATH any course above 300 not already taken for another category

| SOIL SCI/ | Earth's Water. Natural Science and |
| :--- | :--- |
| ATM OCN 132 | Human Use |

ATM OCN 132 Human Use

| SOIL SCI/ ENVIR ST/ GEOG 230 | Soil: Ecosystem and Resource |  |
| :---: | :---: | :---: |
| SOIL SCI 301 | General Soil Science |  |
| SOIL SCI 322 | Physical Principles of Soil and Water Management |  |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality |  |
| SOIL SCI 325 | Soils and Landscapes |  |
| SOIL SCI/ AGRONOMY/ HORT 326 | Plant Nutrition Management |  |
| Business |  |  |
| Select 6 credits from the following: |  | 6 |
| ACCT IS 100 | Introductory Financial Accounting |  |
| ACCT I S 211 | Introductory Managerial Accounting |  |
| ACCT I S 300 | Accounting Principles |  |
| ACCT I S 301 | Financial Reporting I |  |
| ACCT IS 302 | Financial Reporting II |  |
| ACCT IS/ <br> LAW 329 | Taxation: Concepts for Business and Personal Planning |  |
| A AE 215 | Introduction to Agricultural and Applied Economics |  |
| A A E 320 | Farming Systems Management |  |
| A A E 322 | Commodity Markets |  |
| A A E 323 | Cooperatives |  |
| A A E 419 | Agricultural Finance |  |
| A A E/ECON 421 | Economic Decision Analysis |  |
| AAE/ECON 474 | Economic Problems of Developing Areas |  |
| ECON 101 | Principles of Microeconomics |  |
| ECON 102 | Principles of Macroeconomics |  |
| LSC 270 | Communication in Life Science Industries |  |
| M H R 300 | Managing Organizations |  |
| M H R 305 | Human Resource Management |  |
| Total Credits |  | 37 |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Define and explain major concepts in the biological sciences including Plant Pathology.
2. Appropriately use biological instrumentation and laboratory techniques.
3. Explain and apply the scientific method including designing and conducting experiments and testing hypotheses.
4. Recognize the relationship between structure and function at all levels: molecular, cellular, organismal, and ecological.
5. Demonstrate a style appropriate for communicating scientific results in written and oral form.
6. Integrate math, physical sciences, and technology to answer biological questions using the scientific method.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE PLANT PATHOLOGY FOUR-YEAR PLAN-PLANT-MICROBE BIOLOGY TRACK

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 112, 113, or 114 | 3 MATH 113, 114, or 221 | $3-5$ |
| CHEM 103 or 109 | $4-5$ CHEM 104 | 5 |
| First Year Seminar | 1 Gen Ed $^{1}$ | $0-7$ |
| Gen Ed $^{\prime}$ | $0-11$ |  |
|  | $8-20$ | $8-17$ |

Total Credits 16-37

## Sophomore

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 221 | 5 ZOOLOGY/BIOLOGY/ BOTANY 152 or BOTANY 130 | 5 |
| CHEM 343 | 3 CHEM 344 | 2 |
| Select one of the following: | 5 CHEM 345 | 3 |
| ZOOLOGY/BIOLOGY/ <br> BOTANY 151 | Gen Ed ${ }^{1}$ | 2-5 |
| ZOOLOGY/ <br> BIOLOGY 101 <br> \& ZOOLOGY/ <br> BIOLOGY 102 |  |  |


| Gen Ed $^{1}$ | $0-5$ |  |
| ---: | ---: | ---: |
|  | $13-18$ | $12-15$ |

Total Credits 25-33

## Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| PL PATH 300 | 4 PHYSICS 104, 202, or | 4 |
| 208 |  |  |
| PHYSICS 103, 201, or | 4 PL PATH/BOTANY 332 | 4 |
| 207 |  |  |
| MATH 222 or STAT 371 | 4 GENETICS 466 $^{1}$ | 3 |
| Gen Ed $^{1}$ | $0-6$ Gen Ed $^{1}$ | $2-5$ |
|  | $12-18$ | $13-16$ |

Total Credits 25-34

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MICROBIO 303 | 3 BOTANY 500 | $3-4$ |
| MICROBIO 304 | 2 Capstone Experience | 3 |
| Core or Breadth Electives | $3-8$ Core or Breadth Electives | $3-8$ |
| Gen Ed $^{1}$ | $0-10$ Gen Ed $^{1}$ | $0-15$ |
|  | $8-23$ | $9-30$ |

## Total Credits 17-53

1 Gen-Ed requirements include communications, ethnic studies, humanities, social science, or international studies. See Requirements tab for more details.
Note: Possible places where students may cut down on courses: COMM-A placement test, COMM-B taken as ZOOLOGY/BIOLOGY/ BOTANY 152, QR-A placement test, AP/IB credits (biology, social sciences, humanities, language, chemistry, physics, math, statistics)

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISING IN PLANT PATHOLOGY

Students in plant pathology are assigned two advisors, the staff advisor (Sara Rodock, rodock@wisc.edu, appointment link (http:// calendar.wisc.edu/scheduling-assistant/public/profiles/eBLVAOve.html)) and one of our faculty advisors. Current faculty advisors include:

Caitilyn Allen
Jeri Barak (lead faculty advisor)
Amanda Gevens
Mehdi Kabbage
Paul Koch
Richard Lankau
Patty McManus
Undergraduates in plant pathology are required to meet with their advisor before they can enroll for the upcoming term. A hold will be placed on student records until they meet with their advisor.

For more information about the Plant Pathology major or the department in general, please contact either the lead undergraduate advisor, Associate Professor Jeri Barak, or the student services coordinator, Sara

Rodock. Students with questions regarding lab positions (both paid and unpaid) in plant pathology should contact Associate Professor Jeri Barak.

## CAREERS AND PROFESSIONAL DEVELOPMENT

For more information on careers available to plant pathology students please visit our Internship \& Job Resources (http:// www.plantpath.wisc.edu/student-internships-jobs) page. For more information on other academic, co-curricular, financial aid, and career opportunities and services available to plant pathology students, please visit the CALS Career Services (https://cals.wisc.edu/academics/ undergraduate-students/career-services) page. Students in the major are welcome to make an individual appointment with Sara Rodock, rodock@wisc.edu (appointment link for current UW-Madison students (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ eBLVAOve.html)) to discuss career related topics such as career exploration, search strategies, graduate school, and review of application materials (resume, CV, letters, etc.).

## PEOPLE

## PROFESSORS

## Ahlquist, Paul

Allen, Caitilyn
Bent, Andrew
Handelsman, Jo
MacGuidwin, Ann
McManus, Patricia (chair)
Rouse, Douglas

## ASSOCIATE PROFESSORS

Barak-Cunningham, Jeri
Gevens, Amanda
ASSISTANT PROFESSORS
Kabbage, Mehdi
Koch, Paul
Lankau, Richard
Rakotondrafara, Aurelie
Silva, Erin
Smith, Damon

## AFFILIATED FACULTY

Ane, Jean-Michel (Bacteriology)
Groves, Russell (Entomology)
Havey, Michael (Horticulture)
Keller, Nancy (Medical Microbiology \& Immunology)
Pringle, Ann (Botany)
Whitman, Thea (Soil Science)
Yu, Jae-Hyuk (Bacteriology)
FACULTY ASSOCIATE
Hudelson, Brian

## WISCONSIN EXPERIENCE

## WISCONSIN EXPERIENCE

Undergraduates majoring in plant pathology at UW-Madison will find an inclusive, welcoming community where professors know their students and are able to provide guidance based on students' specific academic and career goals. There are numerous opportunities to conduct research with internationally prominent faculty and to take part in the Wisconsin Idea, whereby faculty and students extend the knowledge developed at the university to stakeholders in Wisconsin and beyond for the betterment of society.

Plant pathology offers paid research internships during summer term, as well as paid or credit-earning research opportunities year-round. Undergraduates get a firsthand view of how research is conducted and what it means to be a professional scientist.

By joining the Plant Pathology Undergraduate Club, majors get to know their fellow students outside the classroom. The department provides resources for students to meet experts who lead discussions on a range of topics including cutting-edge research and technology, career options, and how to apply and compete for jobs.

## SOIL SCIENCE

The Department of Soil Science provides undergraduate and graduate education in agricultural, environmental, and natural resource aspects of soils. Areas of emphasis include soil ecology; soil erosion and tillage management; soil fertility and plant nutrition; soil physicochemical phenomena; fate of soil contaminants; waste management; water and contaminant transport; pedology; and land-use analysis. Soils are a critical natural resource in environmental protection, food and fiber production, turf and grounds management, rural and urban planning, and waste disposal. All of these facets of soils and soil science are integrated into the department's course offerings and research programs. Soil science majors prepare for professional, technical, consulting and administrative positions in such areas as the environmental sciences, ecology and restoration, crop and timber production, soil survey, and informatics, conservation, environmental pollution control, turf and grounds management, and land-use planning. Contact the department for further information on career opportunities.

Students completing an undergraduate major in soil science earn a bachelor of science degree. A problem-solving "capstone course" that integrates knowledge gleaned from a diversity of courses is required.

The department also serves as the administrative home for the environmental sciences major in the College of Agricultural and Life Sciences.

## DEGREES/MAJORS/CERTIFICATES

- Environmental Sciences, B.S. (CALS) (p. 206)
- Soil Science, B.S. (p. 214)


## PEOPLE

## FACULTY

## Assistant Professor Francisco Arriaga

Applied Soil Physics, Soil and Water Management and Conservation: Conservation agriculture systems; development of conservation tillage practices that enhance soil quality, soil hydraulic properties, and plant water use through the adoption of cover crops and non- inversion tillage for traditional cropping systems.

## Associate Professor Nicholas Balster

Soil Ecology, Plant Physiological Ecology, and Education: Energy and material cycling in natural and anthropogenic soils including forests, grasslands, and urban ecosystems; stable isotope ecology; environmental education; nutrition management of nursery soils; tree physiology, production and response; ecosystem response to global change; urban ecosystem processes; invasive plant ecology; biodiversity.

## Professor Phillip Barak

Soil Chemistry and Plant Nutrition: Nutrient cycling; nutrient recovery from wastewater; molecular visualization of soil minerals and molecules; soil acidification.

## Professor William Bleam

Surface and Colloid Chemistry: Physical chemistry of soil colloids and sorption processes, chemistry of humic substances, factors controlling biological availability of contaminants to microorganisms, magnetic resonance and synchrotron studies of adsorption and precipitation.

## Professor Alfred Hartemink

Pedology, Digital Soil Mapping: Application of fundamental soil science to real-world problems; digital soil mapping; history and philosophy of soil science; pedology, soil survey, and soil information systems.

## Professor William Hickey

Soil Microbiology and Biochemistry: Soil microbiology, biodegradation, environmental toxicants, molecular physiology, functional genomics, microbial nanostructure, biotechnology.

## Professor Carrie Laboski

Soil Fertility and Nutrient Management: Sustaining agricultural production and environmental quality; elucidate the biogeochemistry and subsequent best management practices for $N$, $P$, and $K$ fertilizers and animal manures; soil fertility related to lime, secondary, and micronutrients; evaluation of soil and plant diagnostic tests; development of tools to assist producers, ag. professionals, and regulatory agencies to sustain economically sound production of grain and forage crops.

## Professor Sharon Long

Applied Environmental and Public Health Microbiology: Microbial source tracking indicators in watershed management; improving
detection and quantification, environmental ecology of indicator organisms and infectious diseases, microbial community structure and function in contaminated systems, microbial safety of wastewater sludge and biosolids, biotreatability assessment.

## Professor Joel Pedersen

Environmental Chemistry/Biochemistry: Behavior of organic contaminants, macromolecules, and engineered nanoparticles in natural and engineered environments.

## Associate Professor Matthew Ruark

Soil Fertility and Nutrient Management: Soil fertility and management of grain biofuel, and vegetable crops; cover crop management; agricultural production and water quality; sustainability of dairy cropping systems; soil organic matter management.

## Professor Douglas Soldat

Turfgrass and Urban Soils: Turfgrass, urban soils, nutrient management, water resources, soil testing, landscape irrigation; soil contamination.

## Professor Stephen Ventura

Geographic Information Systems (joint w/Nelson Institute for Environmental Studies): Geographic information systems (GIS), biofuels and production on marginal lands, public participation GIS, urban agriculture, landscape process modeling, soil survey and soil information systems, land and resource tenure, GIS and land use planning.

## Assistant Professor Thea Whitman

Soil Ecology, Microbiology, and Biogeochemistry: Soil microbial ecology; organic matter decomposition and carbon stabilization; global environmental change; stable isotopes; linking functional significance of microbial communities with ecosystem processes; fire effects on soil carbon and microbes; management and policy.

## RESOURCES AND SCHOLARSHIPS

Financial support-in the form of approximately 15 scholarships, parttime employment, paid internships, and work-study programs-is available to qualified undergraduate students. The department also provides opportunities and limited financial support in the form of research assistantships to qualified students seeking M.S. and/or Ph.D. degrees (see the Graduate Guide).

## ENVIRONMENTAL SCIENCES, B.S. (CALS)

The environmental sciences major satisfies the growing demand among entry-level students for a rigorous, science-based program that promotes critical thinking and emphasizes environmental problem solving in service to society. The program is designed to prepare graduates who will be highly competitive for entry-level positions in nonprofit and private sectors, and for master's programs and doctoral research programs in environmental fields. Possible career paths include environmental monitoring, consulting, education, research, and planning, as well
as natural resource management, ecology restoration, remediation, water and air quality assessment, sustainability practices, and more. Undergraduates in environmental sciences prepare for a variety of career and graduate school opportunities that require a strong background in the natural sciences. Foundational course work in the major includes calculus, biology, chemistry, and physics. Core and elective course work is fulfilled through diverse offerings from both the College of Agricultural and Life Sciences, and the College of Letters \& Science.

The environmental sciences major can be earned in either the College of Agricultural and Life Sciences (CALS) or the College of Letters \& Science (L\&S) under the bachelor of science (B.S.) or bachelor of arts (B.A.) degree program. An undergraduate B.S. degree is offered through both colleges. A B.A. option is offered through L\&S only. Students are encouraged to review the degree requirements for both L\&S and CALS and choose the college from which they would prefer to earn their degree; students may choose only one degree "home."

- In CALS, the major is housed administratively in the Department of Soil Science.
- In L\&S, the major is housed administratively in the Department of Atmospheric and Oceanic Sciences.

The major can be taken as a stand-alone or as a double major with a variety of other majors on campus including environmental studies, life sciences communication, agronomy, soil science, landscape architecture, foreign language/culture, and a number of other disciplines.

## HOW TO GET IN

Students wishing to declare the environmental sciences major should meet with an academic advisor. Contact information for advisors can be found here (http://envirosci.wisc.edu/advising).

CALS undergraduate students interested in pursuing the environmental sciences major in the College of Agricultural and Life Sciences should contact Kathryn Jones, kjones26@wisc.edu or 608-807-7391.

L\&S undergraduate students interested in pursuing the environmental sciences major in the College of Letters \& Science should contact Eric Schueffner, elschueffner@wisc.edu or 608-890-3231.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

| Code Title | Credits |
| :---: | :---: |
| Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation. |  |
| Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree. |  |
| First Year Seminar (p. 33) | 1 |
| International Studies (p. 33) | 3 |
| Physical Science Fundamentals | 4-5 |
| CHEM 103 General Chemistry I <br> or CHEM 108 Chemistry in Our World <br> or CHEM 109 Advanced General Chemistry |  |
| Biological Science | 5 |
| Additional Science (Biological, Physical, or Natural) | 3 |
| Science Breadth (Biological, Physical, Natural, or Social) | 3 |
| CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (p. 33) |  |

## REQUIREMENTS FOR THE MAJOR

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement.

A minimum of 15 credits must be completed in the major that are not used elsewhere.

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Mathematics \& Statistics | $8-13$ |
| Chemistry | $8-12$ |
| Biology | $8-10$ |
| Physics | $8-10$ |
| Major Foundation | $3-5$ |
| Major Core | 12 |
| Major Electives | 12 |
| Capstone | $2-6$ |
| Total Credits | $61-80$ |

## MATHEMATICS AND STATISTICS

This major requires calculus. Prerequisites may need to be taken before enrollment in calculus. Refer to the Course Guide for information about calculus prerequisites.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 5-10 |
| MATH 221 | Calculus and Analytic Geometry 1 (Recommended) |  |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 211 | Calculus |  |
| Select one of the following: |  | 3 |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |
| STAT/MATH 309 | Introduction to Probability and Mathematical Statistics I |  |
| STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| Total Credits |  | 8-13 |

## CHEMISTRY

| Code | Title | Credits |
| :--- | :--- | ---: |
| CHEM 103 | General Chemistry I | $5-9$ |
| $\&$ CHEM 104 | and General Chemistry II |  |
| or CHEM 109 | Advanced General Chemistry | 3 |


| CHEM 341 | Elementary Organic Chemistry |  |
| ---: | :--- | :--- |
| CHEM 343 | Introductory Organic Chemistry |  |
| CHEM 561 | Physical Chemistry | $8-12$ |
| Total Credits |  | 8 |

## BIOLOGY

Code Title
Select one of the following:

| BIOLOGY/ | Introductory Biology |
| :--- | :--- |
| BOTANY/ | and Introductory Biology |
| ZOOLOGY 151 |  |
| \& BIOLOGY/ |  |
| BOTANY/ |  |
| ZOOLOGY 152 |  |
| BOTANY/ | General Botany |
| BIOLOGY 130 | and Animal Biology |
| \& ZOOLOGY/ | and Animal Biology Laboratory |
| BIOLOGY 101 |  |
| \& ZOOLOGY/ |  |
| BIOLOGY 102 |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| \& BIOCORE 382 | and Evolution, Ecology, and |
| \& BIOCORE 383 | Genetics Laboratory |
| \& BIOCORE 384 | and Cellular Biology |
|  | and Cellular Biology Laboratory |

## Total Credits

## PHYSICS

| Code | Title |  |
| :---: | :---: | :---: |
| Select on of the following: |  | 8-10 |
| PHYSICS 207 <br> \& PHYSICS 208 | General Physics and General Physics (Recommended) |  |
| PHYSICS 103 <br> \& PHYSICS 104 | General Physics and General Physics |  |
| PHYSICS 201 <br> \& PHYSICS 202 | General Physics and General Physics |  |
| Total Credits |  | 8-10 |
| MAJOR FOUNDATION |  |  |
| Code | Title | Credits |
| Select one of the fo | wing: | 3-5 |
| ENVIR ST/ILS 126 Principles of Environmental Science |  |  |
| ENVIR ST/ GEOG 127 | Physical Systems of the Environment |  |
| GEOG/ <br> ENVIR ST 120 | Introduction to the Earth System |  |
| GEOSCI/ <br> ENVIR ST 106 | Environmental Geology |  |
| SOIL SCI/ <br> ENVIR ST/ <br> GEOG 230 | Soil: Ecosystem and Resource |  |

## MAJOR CORE

Select at least 3 credits from each of the following subsets:

## Ecology <br> Code

AGRONOMY 300
AGRONOMY/
BOTANY/
SOIL SCI 370
BOTANY/
F\&W ECOL 455

## Title <br> Credits

Cropping Systems 3
Grassland Ecology
3

4

| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology (Recommended) | 4 |
| :---: | :---: | :---: |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| ENTOM/BOTANY/ <br> ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| ENVIR ST/ ZOOLOGY 510 | Ecology of Fishes | 3 |
| ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab | 2 |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL 551 | Forest Ecology Lab | 1 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| HORT 334 | Greenhouse Cultivation | 2 |
| HORT 335 | Greenhouse Cultivation Lab | 1 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |

## Physical Environment

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I | 3 |
| ATM OCN/GEOG 323 | Science of Climate Change | 3 |
| ATM OCN/ENVIR ST/ GEOG/GEOSCI 335 | Climatic Environments of the Past | 3 |
| ATM OCN/ <br> ENVIR ST 520 | Bioclimatology | 3 |
| ATM OCN/ <br> ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| CIV ENGR 310 | Fluid Mechanics | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| CIV ENGR 424 | Environmental Engineering Laboratory | 2 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| GEOG/GEOSCI 320 | Geomorphology | 3 |
| GEOG 321 | Climatology | 3 |


| GEOG/ENVIR ST 325 | Analysis of the Physical |
| :--- | :--- | ---: |
|  | Environment |$\quad 4$

Environmental Policy \& Social Perspectives
Code Title Credits

A A E/ENVIR ST 244 The Environment and the Global 3
Economy
A AE 246 Climate Change Economics and 3 Policy
A A E/ECON/ Environmental Economics 3-4
ENVIR ST 343
C\&E SOC/F\&W ECOL/ Environment, Natural Resources, 3
SOC 248 and Society
C\&E SOC/ENVIR ST/ People, Wildlife and Landscapes 3
GEOG 434

| C\&E SOC/ENVIR ST/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| :---: | :---: | :---: |
| C\&E SOC/SOC 541 | Environmental Stewardship and Social Justice | 3 |
| ENVIR ST 349 | Climate Change Governance | 3 |
| ENVIR ST/ <br> M\&ENVTOX/ <br> PLPATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| ENVIR ST/GEOG 439 | US Environmental Policy and Regulation | 3-4 |
| ENVIR ST/ <br> PHILOS 441 | Environmental Ethics | 3-4 |
| ENVIR ST/HIST SCI/ MED HIST 513 | Environment and Health in Global Perspective | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG/URB R PL 305 | Introduction to the City | -4 |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History | 4 |
| GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| GEOSCI/ <br> ENVIR ST 410 | Minerals as a Public Problem | 3 |
| GEOSCI/ <br> ENVIR ST 411 | Energy Resources | 3 |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |
| POLI SCI 510 | Politics of Government Regulation | 3-4 |
| URB R PL/ECON/ ENVIR ST/ POLI SCI 449 | Government and Natural Resources | 3-4 |

## MAJOR ELECTIVES

Select one of two tracks:

## Distributed Electives

> Students choosing the Distributed Electives path must complete a total of $\mathbf{1 2}$ credits of Environmental Sciences Electives from the categories below, including at least one course from each category.

| Ecology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology | 4 |
| ENTOM/BOTANY/ ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| ENVIR ST/ ZOOLOGY 510 | Ecology of Fishes | 3 |


| ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab | 2 |
| :---: | :---: | :---: |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL 551 | Forest Ecology Lab | 1 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 |
| HORT 334 | Greenhouse Cultivation | 2 |
| HORT 335 | Greenhouse Cultivation Lab | 1 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |

## Physical Environment

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I | 3 |
| ATM OCN/GEOG 323 | Science of Climate Change | 3 |
| ATM OCN/ENVIR ST/ GEOG/GEOSCI 335 | Climatic Environments of the Past | 3 |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 |
| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| CIV ENGR 424 | Environmental Engineering Laboratory | 2 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| GEOG/GEOSCI 320 | Geomorphology | 3 |
| GEOG 321 | Climatology | 3 |
| GEOG/ENVIR ST 325 | Analysis of the Physical Environment | 4 |
| GEOG 329 | Landforms and Landscapes of North America | 3 |
| GEOG/ATM OCN/ <br> ENVIR ST 332 | Global Warming: Science and Impacts | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/GEOSCI 420 | Glacial and Pleistocene Geology | 3 |


| GEOG/GEOSCI 524 | Advanced Landform Geography | 3 |
| :--- | :--- | ---: |
| GEOSCI 304 | Geobiology | 3 |
| GEOSCI/G LE 627 | Hydrogeology | $3-4$ |
| POP HLTH/ | Introduction to Environmental | 3 |
| ENVIR ST 471 | Health | 4 |
| SOIL SCI 301 | General Soil Science | 3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| SOIL SCI/ | Soils and Environmental Quality |  |
| ENVIR ST 324 |  | 3 |
| SOIL SCI/ | Environmental Biogeochemistry |  |
| F\&W ECOL 451 |  | 3 |
| SOIL SCI/ | Environmental Biophysics |  |
| AGRONOMY/ |  | 3 |
| ATM OCN 532 |  |  |
| SOIL SCI/CIV ENGR/ | Toxicants in the Environment: |  |
| M\&ENVTOX 631 | Sources, Distribution, Fate, \& Effects |  |

## Geospatial Sciences

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENVIR ST/CIV ENGR/ | Remote Sensing Digital Image | 3 |
| LAND ARC 556 | Processing |  |
| GEOG 360 | Quantitative Methods in Geographical Analysis | 4 |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG/ENVIR ST/ F\&W ECOL/ G LE/GEOSCI/ LAND ARC 372 | Intermediate Environmental Remote Sensing | 3 |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| GEOG 378 | Introduction to Geocomputing | 4 |
| GEOG 560 | Advanced Quantitative Methods | 3 |
| GEOG 577 | Environmental Modeling with GIS | 3 |
| GEOG 578 | GIS Applications | 4 |
| GEOG 579 | GIS and Spatial Analysis | 4 |
| GEOSCI/CIV ENGR/ <br> ENVIR ST/G LE 444 | Practical Applications of GPS Surveying | 2 |
| SOIL SCI/ENVIR ST/ <br> LAND ARC 695 | Applications of Geographic Information Systems in Natural Resources | 3 |

## Area of Focus

Students choosing the Focused Electives path must complete a total of 12 credits of Environmental Sciences Electives from one of the following categories. ${ }^{1}$

| Ecology |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY/ | Grassland Ecology | 3 |
| BOTANY/ |  | 4 |
| SOIL SCI 370 |  |  |
| BOTANY/ The Vegetation of Wisconsin |  |  |
| F\&W ECOL 455  <br> BOTANY/F\&W ECOL/ General Ecology 4 <br> ZOOLOGY 460  |  |  |


| ENTOM/BOTANY/ ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| :---: | :---: | :---: |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| ENVIR ST/ <br> ZOOLOGY 510 | Ecology of Fishes | 3 |
| ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab | 2 |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL 551 | Forest Ecology Lab | 1 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 |
| HORT 334 | Greenhouse Cultivation | 2 |
| HORT 335 | Greenhouse Cultivation Lab | 1 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENVIR ST } 315 \end{aligned}$ | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |

## Physical Environment

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I | 3 |
| ATM OCN/GEOG 323 | Science of Climate Change | 3 |
| ATM OCN/ENVIR ST/ GEOG/GEOSCI 335 | Climatic Environments of the Past | 3 |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 |
| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| CIV ENGR 424 | Environmental Engineering Laboratory | 2 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| GEOG/GEOSCI 320 | Geomorphology | 3 |
| GEOG 321 | Climatology | 3 |


| GEOG/ENVIR ST 325 | Analysis of the Physical Environment | 4 |
| :---: | :---: | :---: |
| GEOG 329 | Landforms and Landscapes of North America | 3 |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/GEOSCI 420 | Glacial and Pleistocene Geology | 3 |
| GEOG/GEOSCI 524 | Advanced Landform Geography | 3 |
| GEOSCI 304 | Geobiology | 3 |
| GEOSCI/G L E 627 | Hydrogeology | 3-4 |
| POP HLTH/ ENVIR ST 471 | Introduction to Environmental Health | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| $\begin{aligned} & \text { SOIL SCI/ } \\ & \text { F\&W ECOL } 451 \end{aligned}$ | Environmental Biogeochemistry | 3 |
| SOIL SCI/ <br> AGRONOMY/ <br> ATM OCN 532 | Environmental Biophysics | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: Sources, Distribution, Fate, \& Effects | 3 |
| Geospatial Sciences |  |  |
| Code | Title | Credits |
| ENVIR ST/CIV ENGR/ LAND ARC 556 | Remote Sensing Digital Image Processing | 3 |
| GEOG 360 | Quantitative Methods in Geographical Analysis | 4 |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG/ENVIR ST/ F\&W ECOL/ G L E/GEOSCI/ LAND ARC 372 | Intermediate Environmental Remote Sensing | 3 |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| GEOG 378 | Introduction to Geocomputing | 4 |
| GEOG 560 | Advanced Quantitative Methods | 3 |
| GEOG 577 | Environmental Modeling with GIS | 3 |
| GEOG 578 | GIS Applications | 4 |
| GEOG 579 | GIS and Spatial Analysis | 4 |
| GEOSCI/CIV ENGR/ ENVIR ST/G LE 444 | Practical Applications of GPS Surveying | 2 |
| SOIL SCI/ENVIR ST/ LAND ARC 695 | Applications of Geographic Information Systems in Natural Resources | 3 |
| Environmental Policy \& Social Perspectives |  |  |
| Code | Title | Credits |
| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| A A E 246 | Climate Change Economics and Policy | 3 |

A A E/ECON/ Environmental Economics 3-4
ENVIR ST 343
C\&E SOC/F\&W ECOL/ Environment, Natural Resources, 3
SOC 248 and Society
C\&E SOC/ENVIR ST/ People, Wildlife and Landscapes 3
GEOG 434
C\&E SOC/ENVIR ST/ Sociology of International 3
SOC 540 Development, Environment, and Sustainability
C\&E SOC/SOC 541 Environmental Stewardship and 3
Social Justice
ENVIR ST 349 Climate Change Governance 3

ENVIR ST/ Environmental Law, Toxic 2
M\&ENVTOX/ Substances, and Conservation
PLPATH 368
ENVIR ST/GEOG 439 US Environmental Policy and 3-4
Regulation
ENVIR ST/ Environmental Ethics 3-4
PHILOS 441
ENVIR ST/HIST SCI/ Environment and Health in Global 3
$\begin{array}{lll}\text { MED HIST } 513 & \text { Perspective } & \\ \text { GEOG/URB R PL } & 305 & \text { Introduction to the City }\end{array}$
GEOG/ENVIR ST 339 Environmental Conservation 4
GEOG/ENVIR ST/ American Environmental History 4
HISTORY 460
GEOG/ENVIR ST 537 Culture and Environment 4
GEOSCI/ Minerals as a Public Problem 3
ENVIR ST 410
GEOSCI/ Energy Resources 3
ENVIR ST 411
HISTORY/ENVIR ST/ The Making of the American 4

| GEOG 469 | Landscape |  |
| :--- | :--- | :--- |
| POLI SCI 510 | Politics of Government Regulation | $3-4$ |

URB R PL/ECON/ Government and Natural Resources 3-4
ENVIR ST/
POLI SCI 449
1 Consult environmental sciences advisor regarding alternate ways to complete the major electives.

## CAPSTONE ${ }^{1}$

| Code | Title | Credits |
| :--- | :--- | ---: |
| AGRONOMY 500 | Senior Capstone Experience | 2 |
| BOTANY/ENVIR ST/ | Conservation Biology | 3 |
| F\&W ECOL/ |  | 3 |
| ZOOLOGY 651 | Hydroclimatology for Water |  |
| CIV ENGR 515 | Resources Management | 3 |
| ENVIR ST/ | Assessment of Environmental |  |
| SOIL SCI 575 | Impact | 3 |
| F\&W ECOL 577 | Complexity and Conservation of <br> White-tailed Deer | 3 |
| F\&W ECOL 590 | Integrated Resource Management | 3 |
| F\&W ECOL 599 | Wildlife Research Capstone | $3-4$ |
| F\&W ECOL/A A E/ | Decision Methods for Natural |  |
| ENVIR ST 652 | Resource Managers | 3 |


| LAND ARC 551 | Senior Project in Landscape <br> Architecture | 4 |
| :--- | :--- | :---: |
| LAND ARC 668 | Restoration Ecology | 3 |
| PL PATH 315 | Plant Microbiomes | 4 |
| SOIL SCI 499 | Soil Management | 3 |

1 Students may speak with their environmental science advisor about alternatives (e.g., courses, directed study, senior thesis) to complete the capstone. To be approved, the alternative must be taken for a minimum of 3 credits, clearly focused on environmental science, and approved by the Environmental Sciences Administrative Committee. Students must consult with their environmental sciences advisor and fill out all necessary paperwork before registering.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |  |
| probation. |  |

## LEARNING OUTCOMES

1. Demonstrate understanding of Environmental Science fundamentals in the context of biology, chemistry, mathematics, statistics, and physics.
2. Demonstrate a quantitative and qualitative understanding of the ecological relationships (material and energetic) between organisms, both as individuals and in groups, and their biotic and abiotic environment. This may include processes influencing the distribution and abundance of organisms.
3. Demonstrate a quantitative and qualitative understanding of the physical, largely abiotic, conditions (e.g. climate, water, soil, air, noise, greenspace, etc.) of the environment. The physical environment can include natural or managed settings such as urban environments.
4. Demonstrate a quantitative and qualitative understanding of geospatial processes and information as it relates to the environment including how to collect, interpret, and analyze geospatial information regarding the features of the Earth's surface. These technologies may include geographic information systems (GIS), the global positioning system (GPS), digital maps, and satellite based remote sensing.
5. Demonstrate a basic understanding of relationships that focus on the organization and implementation of laws, regulations, and other policy
mechanisms concerning environmental issues and sustainability and their effect on society. This includes how human behaviors influences, and are also influenced by, the natural environment.
6. Apply skills in critical thinking, problem identification and resolution of a complex environmental issues that require interdisciplinary solutions and team-based work.
7. Articulate the role of environmental science in one or more focused areas of a specific environmental discipline (e.g. geology, soils, atmosphere, water, plants, animals).
8. Demonstrate expertise in organizing and presenting (written and oral) scientific information to both lay and professional audiences.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN <br> SAMPLE ENVIRONMENTAL SCIENCES FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 103 or 109 | $4-5$ CHEM 104 | 5 |
| MATH 114 or 171 | 5 MATH 221 or 217 | 5 |
| First Year Seminar | 1 COMM A Course | 3 |
| Humanities / Literature / | 3 Ethnic Studies Course | 3 |
| Arts Course |  |  |


| $13-14$ | 16 |
| :--- | :--- |

Total Credits 29-30

## Sophomore

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| BIOLOGY/BOTANY/ <br> ZOOLOGY 151 or BOTANY 130 | ```5 ZOOLOGY/BIOLOGY 101 &ZOOLOGY/ BIOLOGY 102 (or ZOOLOGY 152)``` | 5 |
| CHEM 341, 343, or 561 | 3 STAT 371 | 3 |
| International Studies Course | 3 Environmental Sciences Foundation Course | 3 |
| Electives / Social Sciences Course | 3-4 Humanities / Literature / Arts Course | 3-4 |
|  | 14-15 | 14-15 |

Total Credits 28-30

## Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| PHYSICS 207, 201, or | $4-5$ PHYSICS 208, 202, or | $4-5$ |
| 103 | 104 |  |
| Major Core Courses | 3-6 Major Core Courses | $3-6$ |
| Electives / Other 8+ Electives / Other  <br> Courses Courses $8+$ <br>  $7-19$ $7-19$ |  |  |

Total Credits 14-38

## Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| Environmental Sciences | 6-9 Environmental Sciences | 3-6 |
| Major Elective Courses | Major Elective Courses |  |
| Finish Major Core | 0-6 Electives / Other | 9+ |
| Courses | Courses |  |
| Capstone | 2-6 |  |
| Electives / Other | 6+ |  |
| Courses |  |  |
|  | 8-27 | 3-15 |

Total Credits 11-42
1 Completion of BIOLOGY/BOTANY/ZOOLOGY 152 fulfills the Communication Part B university requirement.

## ADVISING AND CAREERS

## ADVISING

Students wishing to declare the environmental sciences major should meet with an academic advisor. Contact information for advisors can be found here (http://envirosci.wisc.edu/advising).

CALS undergraduate students interested in pursuing the environmental sciences major in the College of Agricultural and Life Sciences should contact Kathryn Jones, kjones26@wisc.edu or 608-807-7391.

L\&S undergraduate students interested in pursuing the environmental sciences major in the College of Letters \& Science should contact Eric Schueffner, elschueffner@wisc.edu or 608-890-3231.

## CAREERS

A major in environmental sciences serves as excellent preparation for careers of great diversity, including environmental modeling, agricultural scientist, botanist, ecologist, forest ranger, oceanographer, agricultural technician, engineering technician, forester, air and water quality manager, environmental analyst, park ranger, air pollution analyst, environmental consultant, environmental educator, geologist, project manager, environmental engineer, geophysicist, biologist, hazardous waste manager, hydrologist, environmental lawyer, chemical technician, soil conservation technician, chemist, management consultant, teacher, meteorologist, urban and regional planner, civil engineer, environmental planner, microbiologist/wastewater plant operator, natural resource specialist, wildlife manager, conservationist, or zoologist. For more info about careers, please visit our website (http://envirosci.wisc.edu/careersinternships).

## PEOPLE

## EXECUTIVE COMMITTEE

Nick Balster, Associate Professor, Department of Soil Science Jonathan Martin, Professor, Department of Atmospheric and Oceanic Sciences

## WISCONSIN EXPERIENCE

As an interdisciplinary cross-college major, students majoring in environmental sciences are involved in a wide array of opportunities across campus. Students are highly encouraged to complement their coursework with out-of-classroom experiences such as research (https:// envirosci.wisc.edu/undergraduate-research), volunteering (https:// morgridge.wisc.edu), internships (https://envirosci.wisc.edu/careersinternships), and study abroad (https://www.studyabroad.wisc.edu).

Many students are also involved in the Environmental Sciences Organization (ESO) at UW-Madison (https://win.wisc.edu/organization/ ESO), a student organization designed primarily for students in the environmental sciences major (both CALS and L\&S) but open to students with a strong interest in the field.

## SOIL SCIENCE, B.S.

The Department of Soil Science provides undergraduate and graduate education in agricultural, environmental, and natural resource aspects of soils. Areas of emphasis include soil ecology; soil erosion and tillage management; soil fertility and plant nutrition; soil physicochemical phenomena; fate of soil contaminants; waste management; water and contaminant transport; pedology; and land use analysis. Soils are a critical natural resource in environmental protection, food and fiber production, turf and grounds management, rural and urban planning, and waste disposal. All of these facets of soils and soil science are integrated into the department's course offerings and research programs. Soil science majors prepare for professional, technical, consulting, and administrative positions in such areas as the environmental sciences, ecology and restoration, crop and timber production, soil survey, and informatics, conservation, environmental pollution control, turf and grounds management, and land-use planning. Contact the department for further information on career opportunities.

Students completing an undergraduate major in soil science earn a Bachelor of Science degree. A problem-solving "capstone course" that integrates knowledge gleaned from a diversity of courses is required.

## HOW TO GET IN

To declare this major, students must be admitted to UW-Madison and the College of Agricultural and Life Sciences (CALS). For information about becoming a CALS first-year or transfer student, see Entering the College (p. 32).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## STAFF ADVISORS

Kathryn Jones, Student Services Coordinator (CALS)
Eric Schueffner, Physical Sciences Undergraduate Advisor (L\&S)

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Specific requirements for all majors in the college and other information on academic matters can be obtained from the Office of Academic Affairs (http://www.cals.wisc.edu/academics), College of Agricultural and Life Sciences, 116 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706; 608-262-3003. Academic departments and advisors also have information on requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies and Science), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

## COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code Title

Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.
Residency: Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.
First Year Seminar (p. 33)

International Studies (p. 33) 3
Physical Science Fundamentals 4-5
$\left.\begin{array}{lll}\text { CHEM 103 } & \text { General Chemistry I } \\ \text { or CHEM } 108 & \text { Chemistry in Our World } \\ \text { or CHEM 109 } & \text { Advanced General Chemistry }\end{array}\right] 5$

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics and Statistics |  |  |
| Select one of the following courses: |  | 3-5 |
| MATH 112 | Algebra |  |
| MATH 114 | Algebra and Trigonometry |  |
| MATH 171 | Calculus with Algebra and Trigonometry ${ }^{1}$ |  |
| Select one of the following courses: |  | 3-4 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences (recommended) |  |
| STAT/F\&W ECOL/ HORT 571 | Statistical Methods for Bioscience I |  |
| Chemistry |  |  |
| Select one of the following options: |  | 5-9 |
| Option 1: |  |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| Option 2: |  |  |
| CHEM 109 | Advanced General Chemistry |  |
| Biology |  |  |
| Select one of the following options: |  | 10 |
| Option 1 (recommended): |  |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany ${ }^{2}$ |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |  |
| Option 2: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology |  |
| Option 3: |  |  |


| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| :---: | :---: | :---: |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| Core |  |  |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI 325 | Soils and Landscapes | 3 |
| Select one of the following courses: |  | 3 |
| SOIL SCI 321 | Soils and Environmental Chemistry |  |
| SOIL SCI 621 | Soil Chemistry |  |
| SOIL SCI/ AGRONOMY/ HORT 326 | Plant Nutrition Management |  |
| SOIL SCI/ <br> BOTANY/ <br> HORT 626 | Mineral Nutrition of Plants |  |
| Select one of the following courses: |  | 3 |
| SOIL SCI 322 | Physical Principles of Soil and Water Management |  |
| SOIL SCI 622 | Soil Physics |  |
| Select one of the following courses: |  | 3 |
| $\begin{aligned} & \text { SOIL SCI/ } \\ & \text { PL PATH } 323 \end{aligned}$ | Soil Biology |  |
| SOIL SCI/ <br> MICROBIO 425 | Environmental Microbiology |  |
| SOIL SCI/ <br> MICROBIO 523 | Soil Microbiology and Biochemistry |  |
| Specialization |  |  |
| Students must complete 1 of 3 specializations: 1. <br> Environmental Soil Science 2. Soil and Food Systems 3. Turf and Grounds (see below) |  | 28-51 |
| Capstone ${ }^{3}$ |  |  |
| Select one of the following courses: |  | 3-4 |
| SOIL SCI 499 | Soil Management ${ }^{4}$ |  |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact |  |
| F\&W ECOL/A A E/ ENVIR ST 652 | Decision Methods for Natural Resource Managers |  |

## Total Credits

Note that MATH 171 \& MATH 217 must be taken as a sequence.
BOTANY/BIOLOGY 130 is required by the Turf and Grounds Track.
3 Consult advisor to request permission to substitute another course for the Capstone requirement. Course must meet CALS Capstone Characteristics described in the Undergraduate Catalog and be approved by advisor and 116 Ag Hall.
4 SOIL SCI 499 capstone required for Turf and Grounds Track.

## SPECIALIZATIONS WITHIN THE MAJOR <br> ENVIRONMENTAL SOIL SCIENCE

| Code Title | Credits |
| :--- | ---: |
| Mathematics |  |
| Select one of the following courses: | 5 |

Select one of the following courses:5

| MATH 221 | Calculus and Analytic Geometry 1 |
| :--- | :--- |
| MATH 217 | Calculus with Algebra and <br> Trigonometry II |
| Physics |  |
| Select one of the following courses: | $4-5$ |


| PHYSICS 103 | General Physics (recommended) |
| :--- | :--- |
| PHYSICS 104 | General Physics |
| PHYSICS 207 | General Physics |
| PHYSICS 208 | General Physics |

## Chemistry

Select one of the following options: 4-8
Option 1:

| CHEM 311 | Chemistry Across the Periodic Table |
| :---: | :--- |
| CHEM 327 | Fundamentals of Analytical Science |
| or CHEM 329 | Fundamentals of Analytical Science |

Option 2:

| CHEM 341 | Elementary Organic Chemistry <br> \& CHEM 342 |
| :--- | :--- |
|  | and Elementary Organic Chemistry <br> Laboratory |

Option 3:

| CHEM 343 | Introductory Organic Chemistry |
| :--- | :--- |
| \& CHEM 344 | and Introductory Organic Chemistry |
| \& CHEM 345 | Laboratory |
|  | and Intermediate Organic Chemistry |

Physical Environment
Select one course from the following:
ATM OCN 100 Weather and Climate

ATM OCN 101 Weather and Climate
ATM OCN/ Earth's Water. Natural Science and
SOIL SCI 132 Human Use
GEOG/ Introduction to the Earth System
ENVIR ST 120
GEOG/ Physical Systems of the
ENVIR ST 127 Environment
GEOSCI/ Environmental Geology
ENVIR ST 106
GEOSCI 202 Introduction to Geologic Structures
SOIL SCI 131 Earth's Soil: Natural Science and Human Use
SOIL SCI 321 Soils and Environmental Chemistry
SOIL SCI/ Plant Nutrition Management
AGRONOMY/
HORT 326
Select at least one course from the following:
GEOG/CIV ENGR Geomorphology
320
GEOG 321 Climatology
ATM OCN/ Science of Climate Change
GEOG 323
GEOG/
ENVIR ST 325 Environment
SOIL SCI/ Soils and Environmental Quality
ENVIR ST 324

| SOIL SCI/ <br> F\&W ECOL/ <br> HORT 524 | Urban Soil and Environment |  | MICROBIO 101 \& MICROBIO 102 | General Microbiology and General Microbiology Laboratory |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SOIL SCI 621 | Soil Chemistry |  | Option 2: |  |  |
| SOIL SCI 622 | Soil Physics |  | MICROBIO 303 | Biology of Microorganisms |  |
| SOIL SCI/ BOTANY/ HORT 626 | Mineral Nutrition of Plants |  | \& MICROBIO 304 | and Biology of Microorganisms Laboratory |  |
| AGRONOMY/ATM OCN/SOIL SCI 532 | Environmental Biophysics |  | BOTANY 330 \& BOTANY/ | Algae and Fungi |  |
| F\&W ECOL/ | Principles of Landscape Ecology |  | PLPATH 332 |  |  |
| LAND ARC/ |  |  | Environmental Policy, Management, and Analysis |  | 9-12 |
| ZOOLOGY 565 |  |  | Select one of the following courses: |  |  |
| GEOG 578 | GIS Applications |  | SOIL SCI/ENVIR ST 101 | Forum on the Environment |  |
| Living Environment |  | 9-14 |  |  |  |
| Select one course from | $m$ the following: |  | ENVIR ST 112 | Environmental Studies: The Social Perspective |  |
| AGRONOMY 100 | Principles and Practices in Crop |  |  |  |  |
|  | Production |  | ENVIR ST 113 | Environmental Studies: The Humanistic Perspective |  |
| AGRONOMY 300 | Cropping Systems |  |  |  |  |
| GEOG/ | People, Land and Food: Comparative Study of Agriculture Systems |  | ENVIR ST/ILS 126 Principles of Environmental Science |  |  |
| ENVIR ST 309 |  |  | ENVIR ST/GEOG $127$ | Physical Systems of the Environment |  |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources |  | A A E/F\&W ECOL 652 | Decision Methods for Natural Resource Managers |  |
| HORT 345 | Fruit Crop Production |  | SOIL SCI/ENVIR ST 575 | Assessment of Environmental Impact |  |
| HORT 370 | World Vegetable Crops |  |  |  |  |
| AGROECOL 400 | Study Abroad in Agroecology |  | GEOG/ <br> SOIL SCI 526 | Human Transformations of Earth Surface Processes |  |
| SOIL SCI/ | Grassland Ecology |  |  |  |  |
| AGRONOMY/ |  |  | ZOOLOGY 535 | Ecosystem Analysis |  |
| BOTANY 370 |  |  | Select one of the following courses: |  |  |
| SOIL SCI/ <br> MICROBIO 425 | Environmental Microbiology |  | ECON 101 | Principles of Microeconomics |  |
|  |  |  | ECON 111 | Principles of EconomicsAccelerated Treatment |  |
| SOIL SCI/ | Soil Microbiology and Biochemistry |  |  |  | Accelerated Treatment |
| MICROBIO 523 |  |  | A A E 215 | Introduction to Agricultural and Applied Economics |  |
| Select one course from | $m$ the following: |  |  |  |  |
| BOTANY/F\&W ECOL/ZOOLOGY | General Ecology |  | A A E/ ENVIR ST 244 | The Environment and the Global Economy |  |
| 460 |  |  | A A E 319 | The International Agricultural Economy |  |
| F\&W ECOL 550 | Forest Ecology and Forest Ecology Lab |  |  |  |  |
| \& F\&W ECOL 551 |  |  | ENVIR ST/ <br> M\&ENVTOX/PL <br> PATH 368 | Environmental Law, Toxic Substances, and Conservation |  |
| GENETICS 466 | Principles of Genetics |  |  |  |  |
| BOTANY 500 | Plant Physiology |  |  |  |  |
| SOIL SCI/ | Soil Microbiology and Biochemistry |  | Select one of the following courses: |  |  |
| MICROBIO 523 |  |  | ENVIR ST/ <br> F\&W ECOL/G LE/ GEOG/GEOSCI/ <br> LAND ARC 371 | Introduction to Environmental Remote Sensing |  |
| GENETICS 545 | Genetics Laboratory |  |  |  |  |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data |  |  |  |  |
| SOIL SCI/ <br> BOTANY/ <br> HORT 626 | Mineral Nutrition of Plants |  | ENVIR ST/ <br> F\&W ECOL/G LE/ GEOG/GEOSCI/ LAND ARC 372 | Intermediate Environmental Remote Sensing |  |
| SOIL SCI/ <br> CIV ENGR/ <br> M\&ENVTOX 631 | Toxicants in the Environment: Sources, Distribution, Fate, \& Effects |  | ENVIR ST/LAND ARC/SOIL SCI 695 | Applications of Geographic Information Systems in Natural Resources |  |
| Select one of the follow | wing options: |  | Total Credits |  | 37-52 |


| SOIL AND FOOD SYSTEMS |  |  | ENVIR ST/ Intermediate Environmental Remote <br> F\&W ECOL/G L E/ Sensing <br> GEOG/GEOSCI/  <br> LAND ARC 372  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Title | Credits |  |  |  |
| Physical Environment |  | 8-10 |  |  |  |
| Select one of the following courses: |  |  | ENVIR ST/LAND Applications of Geographic ARC/SOIL SCI 695 Information Systems in Natural Resources |  |  |
| ATM OCN 100 | Weather and Climate |  |  |  |  |
| SOIL SCI/ <br> ATM OCN 132 | Earth's Water. Natural Science and Human Use |  |  |  |  |
|  |  |  | Economics and Food Management |  | 6-8 |
| ATM OCN 101 | Weather and Climate |  | Select one of the following courses: |  |  |
| $\begin{aligned} & \text { ATM OCN/ } \\ & \text { GEOG } 323 \end{aligned}$ | Science of Climate Change |  | ACCT IS 100 | Introductory Financial Accounting |  |
|  |  |  | ACCT I S 211 | Introductory Managerial Accounting |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { ENVIR ST } 120 \end{aligned}$ | Introduction to the Earth System |  | ACCT I S 300 | Accounting Principles |  |
| GEOG/ <br> ENVIR ST 127 | Physical Systems of the Environment |  | ACCT I S 301 | Financial Reporting I |  |
|  |  |  | ACCT I S/ <br> LAW 329 | Taxation: Concepts for Business and Personal Planning |  |
| GEOSCI 100 | Introductory Geology: How the Earth Works |  | A A E 215 | Introduction to Agricultural and Applied Economics |  |
| GEOSCI/ <br> ENVIR ST 106 | Environmental Geology |  | A A E 320 | Farming Systems Management |  |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality |  | A A E 322 | Commodity Markets |  |
|  |  |  | A A E 323 | Cooperatives |  |
| SOIL SCI 321 | Soils and Environmental Chemistry |  | A A E 419 | Agricultural Finance |  |
| SOIL SCI/ | Plant Nutrition Management |  | A A E/ECON 421 | Economic Decision Analysis |  |
| AGRONOMY/ <br> HORT 326 |  |  | AAE/ECON 474 | Economic Problems of Developing Areas |  |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry |  | $\begin{aligned} & \text { M H R } 305 \\ & \text { M H R } 610 \end{aligned}$ | Human Resource Management |  |
|  |  |  |  | Compensation: Theory and |  |
| SOIL SCI/ Urban Soil and EnvironmentF\&W ECOL/HORT 524 |  |  |  | Administration |  |
|  |  |  | M H R 611 | Personnel Staffing and Evaluation |  |
|  |  |  | M H R 612 | Labor-Management Relations |  |
| Select one of the following courses: |  |  | Select one of the following courses: |  |  |
| F\&W ECOL/ <br> ZOOLOGY 565 | Principles of Landscape Ecology |  | ECON 101 | Principles of Microeconomics |  |
| GEOG/CIV ENGR 320 | Geomorphology |  | ECON 111 | Principles of EconomicsAccelerated Treatment |  |
|  |  | Climatology |  | ACCTIS 100 | Introductory Financial Accounting |  |
| GEOG 321 |  |  |  | ACCT I S 211 | Introductory Managerial Accounting |  |
| GEOG/ <br> ENVIR ST 325 | Analysis of the Physical Environment |  | ACCT I S 300 | Accounting Principles |  |
| GEOG 578 |  |  | ACCT I S 301 | Financial Reporting I |  |
| GEOG 579 | GIS and Spatial Analysis |  | ACCT IS/ <br> LAW 329 | Taxation: Concepts for Business and Personal Planning |  |
| SOIL SCI 131 | Earth's Soil: Natural Science and Human Use |  | A A E 320 | Farming Systems Management |  |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry |  | A A E 322 | Commodity Markets |  |
|  |  |  | A A E 323 | Cooperatives |  |
| SOIL SCI/ <br> MICROBIO 523 | Soil Microbiology and Biochemistry |  | A A E 419 | Agricultural Finance |  |
|  |  |  | A A E/ECON 421 | Economic Decision Analysis |  |
| SOIL SCI 621 | Soil Chemistry |  | AAE/ECON 474 | Economic Problems of Developing Areas |  |
| SOIL SCI 622 | Soil Physics |  |  |  |  |
| SOIL SCI/ <br> BOTANY/ | Mineral Nutrition of Plants |  | SOIL SCI/ <br> MICROBIO 425 | Environmental Microbiology |  |
| HORT 626 |  |  | SOIL SCI/ | Soil Microbiology and Biochemistry |  |
| ZOOLOGY 535 | Ecosystem Analysis |  | MICROBIO 523 |  |  |
| Select one of the following courses: |  |  | M H R 305 | Human Resource Management |  |
| ENVIR ST/ <br> F\&W ECOL/G LE/ | Introduction to Environmental Remote Sensing |  | M H R 610 | Compensation: Theory and Administration |  |
| GEOG/GEOSCI/ |  |  | M H R 611 | Personnel Staffing and Evaluation |  |


| M H R 612 | Labor-Management Relations |  |
| :---: | :---: | :---: |
| Specialized Sciences (complete all) ${ }^{1}$ |  |  |
| AGRONOMY 100 or HORT 120 | Principles and Practices in Crop Production <br> Survey of Horticulture | 3-4 |
| AGRONOMY 300 <br> or AGRONOMY 30 <br> or HORT 345 | Cropping Systems <br> 2Forage Management and Utilization <br> Fruit Crop Production | 3 |
| AGRONOMY/HORT/ SOIL SCI 326 | Plant Nutrition Management | 3 |
| PL PATH 300 <br> or ENTOM 351 <br> or PL PATH/ <br> ENVIR ST/ <br> M\&ENVTOX 368 | Introduction to Plant Pathology <br> Principles of Economic Entomology <br> Environmental Law, Toxic Substances, and Conservation | 2-4 |
| A AE 215 | Introduction to Agricultural and Applied Economics | 3 |
| or A A E/ <br> ENVIR ST 244 | The Environment and the Global Economy |  |
| or A A E 319 | The International Agricultural Economy |  |
| or AAE/ AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition |  |


| Total Credits | 28-35 |
| :--- | :--- |

1 Some courses may fulfill GEN ED requirements.

## TURF AND GROUNDS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Physical Environment |  |  |
| Select one of the follo | owing courses: | 3 |
| ATM OCN 100 | Weather and Climate |  |
| ATM OCN 101 | Weather and Climate |  |
| SOIL SCI/ <br> ATM OCN 132 | Earth's Water. Natural Science and Human Use |  |
| GEOG/ <br> ENVIR ST 120 | Introduction to the Earth System |  |
| GEOG/ <br> ENVIR ST 127 | Physical Systems of the Environment |  |
| GEOSCI 100 | Introductory Geology: How the Earth Works |  |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 106 \end{aligned}$ | Environmental Geology |  |
| Core Turf and Grounds Sciences (complete all) |  |  |
| ACCT I S 300 | Accounting Principles | 3 |
| BOTANY/ <br> BIOLOGY 130 | General Botany ${ }^{1}$ | 5 |
| HORT/PL PATH 261 | Sustainable Turfgrass Use and Management | 2 |
| M H R 305 | Human Resource Management | 3 |
| PL PATH 300 | Introduction to Plant Pathology | 4 |
| HORT/SOIL SCI 332 | Turfgrass Nutrient and Water Management | 3 |
| Specialized Sciences 7 |  |  |


| Select 7 credits from the following courses: |  |
| :---: | :---: |
| BOTANY/F\&W ECOL 402 | Dendrology |
| HORT/ <br> LAND ARC 263 | Landscape Plants I |
| BSE 201 | Land Surveying Fundamentals |
| BSE 243 | Operating and Management Principles of Off-Road Vehicles |
| ENTOM 351 | Principles of Economic Entomology |
| HORT 120 | Survey of Horticulture |
| HORT/ <br> PLPATH 262 | Turfgrass Management Laboratory |
| HORT 461 | Advanced Turfgrass Management and Physiology |

1 Counts toward Soil Science Major Biology requirements, above.

## HONORS IN THE MAJOR

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take SOIL SCI 681 Senior Honors Thesis and SOIL SCI 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist (http:// www.cals.wisc.edu/academics/undergraduate-programs/get-involved/ honors-program/honors-in-the-major) for more information.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. To instill in our undergraduate majors the knowledge base required for them to intelligently discuss, debate and communicate those aspects of soil science pertinent to their degree, specialization and career goals.
2. To provide our undergraduates with the skills and experience needed to identify and solve problems and issues of the types they may encounter in their professions.
3. To ensure that our undergraduates possess an awareness of and an appreciation for the potential impacts of soil, water, crop and waste management practices, and land use on the quality of the environment.

## FOUR-YEAR PLAN

## FOUR-YEAR PLAN

SAMPLE SOIL SCIENCE FOUR-YEAR PLAN-SOIL \& FOOD SYSTEMS SPECIALIZATION; TURF AND GROUND SPECIALIZATION

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| CHEM 103 or 109 | 4-5 CHEM 104 | 5 |
| MATH 114 or 171 | 5 ETHNIC STUDIES | 3 |
| FIRST YEAR SEMINAR | 1 ELECTIVES | 7-8 |
| COMM-A/ELECTIVES | 3-4 |  |
|  | 13-15 | 15-16 |
| Total Credits 28-31 |  |  |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| BOTANY/BIOLOGY 130 or ZOOLOGY $151^{1}$ | $\begin{aligned} & 5 \text { ZOOLOGY/BIOLOGY } 101 \\ & \text { \& ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | 5 |
| SOIL SCI 301 | 4 COMM-B/ELECTIVES | 3 |
| INTERNATIONAL STUDIES | 3 SPECIALIZATION cOURSE | 4-5 |
| ELECTIVES | 3 ELECTIVES | 3 |
|  | 15 | 15-16 |
| Total Credits 30-31 |  |  |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| SOIL SCI 321 | 3 SOIL SCI 322 | 3 |
| SOIL SCI 325 | 3 SOIL SCI/PL PATH 323 | 3 |
| STATISTICS | 3 SPECIALIZATION COURSES/ELECTIVES | 9-10 |
| SPECIALIZATION COURSE/ELECTIVES |  |  |
|  | 12 | 15-16 |

Total Credits 27-28

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| SOIL SCI 499 (Capstone) | 3 SPECIALIZATION | $15-16$ |
|  | COURSES/ELECTIVES |  |
| SPECIALIZATION | 12 |  |
| COURSES/ELECTIVES |  | $15-16$ |

## Total Credits 30-31

1 BOTANY/BIOLOGY 130 and ZOOLOGY/BIOLOGY 101/ZOOLOGY/ BIOLOGY 102 are required for Turf and Grounds Track.

## SAMPLE SOIL SCIENCE FOUR-YEAR PLANENVIRONMENTAL SOIL SCIENCE SPECIALIZATION

Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 103 or 109 | $4-5$ CHEM 104 | 5 |
| MATH 114 or 171 | 5 ETHNIC STUDIES | 3 |
| FIRST YEAR SEMINAR | 1 ELECTIVES | $7-8$ |
| COMM-A/ELECTIVES | $3-4$ | $15-16$ |

Total Credits 28-31

Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| BOTANY/BIOLOGY 130 | 5 ZOOLOGY/BIOLOGY 101 | 5 |
| or ZOOLOGY 151 | \& ZOOLOGY/ |  |
|  | BIOLOGY 102 |  |
| SOIL SCI 301 | 4 Specialization Course | $4-5$ |
| INTERNATIONAL | 3 ELECTIVES | 3 |
| STUDIES |  |  |
| ELECTIVES | 3 COMM-B/ELECTIVES | 3 |
|  | 15 | $15-16$ |

Total Credits 30-31
Junior
Fall Credits Spring Credits
SOIL SCI 3213 SOIL SCI 322
SOIL SCI $325 \quad 3$ SOIL SCI/PL PATH 323
SPECIALIZATION 3 SPECIALIZSTION 9-10

| COURSES/ELECTIVES | COURSES/ELECTIVES |
| :--- | :--- |
| STATISTICS | 3 |


| 12 | $15-16$ |
| :--- | :--- |

Total Credits 27-28

Senior
Fall Credits Spring Credits

SOIL SCI 499 (Capstone) 3 SPECIALIZATION 15-16 COURSES/ELECTIVES
SPECIALIZATION 12

COURSES/ELECTIVES
15
15-16
Total Credits 30-31

## ADVISING AND CAREERS

## ADVISING AND CAREERS

Students are assigned a faculty advisor once they declare the major. Prospective students should contact the undergraduate coordinator, Julie Garvin (jgarvin2@wisc.edu, 608-262-2239), with questions.

Most of our graduates find employment in a diversity of private and commercial enterprises and governmental agencies. Recent examples of employment include laboratory technician, turf and grounds manager, agrichemical sales representative, environmental scientist, land use planner, land zoning administrator, project manager, soil surveyor, and
hydrogeologist. Approximately 12 percent of our undergraduates pursue advanced degrees.

## PEOPLE

## FACULTY

## Assistant Professor Francisco Arriaga

Applied Soil Physics, Soil and Water Management and Conservation: Conservation agriculture systems; development of conservation tillage practices that enhance soil quality, soil hydraulic properties, and plant water use through the adoption of cover crops and non- inversion tillage for traditional cropping systems.

## Associate Professor Nicholas Balster

Soil Ecology, Plant Physiological Ecology, and Education: Energy and material cycling in natural and anthropogenic soils including forests, grasslands, and urban ecosystems; stable isotope ecology; environmental education; nutrition management of nursery soils; tree physiology, production and response; ecosystem response to global change; urban ecosystem processes; invasive plant ecology; biodiversity.

## Professor Phillip Barak

Soil Chemistry and Plant Nutrition: Nutrient cycling; nutrient recovery from wastewater; molecular visualization of soil minerals and molecules; soil acidification.

## Professor William Bleam

Surface and Colloid Chemistry: Physical chemistry of soil colloids and sorption processes, chemistry of humic substances, factors controlling biological availability of contaminants to microorganisms, magnetic resonance and synchrotron studies of adsorption and precipitation.

## Professor Alfred Hartemink

Pedology, Digital Soil Mapping: Application of fundamental soil science to real-world problems; digital soil mapping; history and philosophy of soil science; pedology, soil survey, and soil information systems.

## Professor William Hickey

Soil Microbiology and Biochemistry: Soil microbiology, biodegradation, environmental toxicants, molecular physiology, functional genomics, microbial nanostructure, biotechnology.

## Professor Carrie Laboski

Soil Fertility and Nutrient Management: Sustaining agricultural production and environmental quality; elucidate the biogeochemistry and subsequent best management practices for N, P, and K fertilizers and animal manures; soil fertility related to lime, secondary, and micronutrients; evaluation of soil and plant diagnostic tests; development of tools to assist producers, ag. professionals, and regulatory agencies to sustain economically sound production of grain and forage crops.

## Professor Sharon Long

Applied Environmental and Public Health Microbiology: Microbial source tracking indicators in watershed management; improving detection and quantification, environmental ecology of indicator organisms and infectious diseases, microbial community structure and function in contaminated systems, microbial safety of wastewater sludge and biosolids, biotreatability assessment.

## Professor Joel Pedersen

Environmental Chemistry/Biochemistry: Behavior of organic contaminants, macromolecules, and engineered nanoparticles in natural and engineered environments.

## Associate Professor Matthew Ruark

Soil Fertility and Nutrient Management: Soil fertility and management of grain biofuel, and vegetable crops; cover crop management; agricultural production and water quality; sustainability of dairy cropping systems; soil organic matter management.

## Associate Professor Douglas Soldat

Turfgrass and Urban Soils: Turfgrass, urban soils, nutrient management, water resources, soil testing, landscape irrigation; soil contamination.

## Professor Stephen Ventura

Geographic Information Systems (Joint w/Nelson Institute for Environmental Studies): Geographic information systems (GIS), biofuels and production on marginal lands, public participation GIS, urban agriculture, landscape process modeling, soil survey and soil information systems, land and resource tenure, GIS and land use planning.

## Assistant Professor Thea Whitman

Soil Ecology, Microbiology, and Biogeochemistry: Soil microbial ecology; organic matter decomposition and carbon stabilization; global environmental change; stable isotopes; linking functional significance of microbial communities with ecosystem processes; fire effects on soil carbon and microbes; management and policy.

## WISCONSIN EXPERIENCE

Students majoring in soil science are involved in a wide array of opportunities across campus. Students are highly encouraged to complement their coursework with out-of-classroom experiences such as research (https://envirosci.wisc.edu/undergraduate-research), volunteering (https://morgridge.wisc.edu), internships (https:// envirosci.wisc.edu/careers-internships), and study abroad (https:// www.studyabroad.wisc.edu).

Many students are also involved in the UW-Madison Soils Club (http:// www.soils.wisc.edu/soils_club), a student organization designed primarily for students in the soil science major but open to students with a strong interest in the field.

## RESOURCES AND SCHOLARSHIPS

## RESOURCES AND SCHOLARSHIPS

Financial support-in the form of approximately 15 scholarships, parttime employment, paid internships, and work-study programs-is available to qualified undergraduate students. The department also provides opportunities and limited financial support in the form of research assistantships to qualified students seeking M.S. andor Ph. D. degrees-see the Graduate Guide (http://guide.wisc.edu/graduate).

## COLLEGE OF ENGINEERING

Engineers design products and develop solutions to society's national and global challenges. The variety of engineering projects requires engineers to have an understanding of people and their values. Engineers blend their knowledge and practical experience with their communication and teamwork skills to work as members of diverse, multidisciplinary teams. Engineers frequently make decisions affecting the development of society and the direction it will take.

The University of Wisconsin-Madison College of Engineering is one of the best places in the world for an engineering education. The outstanding curriculum and the world-class faculty focus on providing students with the technological tools, resources, and knowledge to develop solutions to problems in fields ranging from medicine to energy to manufacturing-and many more.

In the classroom and in the lab, students study and grow their skills, yet they also enrich their academic experience outside of the classroom through opportunities such as international study, field research, internships, laboratory experience, and entrepreneurial opportunities.

Learning isn't confined to the classroom. It can happen anywhere-in the Engineering Hall study lounge, in the state-of-the-art makerspace, or in casual conversation on Engineering Mall. As Badger engineers, students are surrounded by some of the smartest, most innovative people in the world. The faculty do more than teach. They immerse students in interdisciplinary activities and offer real design challenges-and students can actually design and build products that solve those challenges.

In a college internationally renowned for its research, there also are many opportunities for undergraduate students to work directly with faculty members to propose and conduct research, and to publish and patent their results.

The Wisconsin Experience is not limited to academics. Across the university, there are a host of ways to get involved in the campus community. From the UW Marching Band to student government, students can find a home at UW.

A College of Engineering education will not only offer students the time of their lives, it will also prepare them to change life as we know it.

## DEGREES/MAJORS/CERTIFICATES

- Biology in Engineering for Engineering Majors, Certificate (p. 233)
- Biomedical Engineering, B.S. (p. 235)
- Chemical Engineering, B.S. (p. 242)
- Civil Engineering, B.S. (p. 249)
- Computer Engineering, B.S. (p. 263)
- Electrical Engineering, B.S. (p. 267)
- Engineering for Energy Sustainability, Certificate (p. 273)
- Engineering Mechanics, B.S. (p. 276)
- Engineering Physics, B.S. (p. 283)
- Engineering Thermal Energy Systems, Certificate (p. 311)
- Geological Engineering, B.S. (p. 256)
- Industrial Engineering, B.S. (p. 301)
- International Engineering, Certificate (p. 299)
- Manufacturing Engineering, Certificate (p. 312)
- Materials Science and Engineering, B.S. (p. 306)
- Mechanical Engineering, B.S. (p. 314)
- Naval Science, BNS (p. 300)
- Nuclear Engineering Materials, Certificate (p. 288)
- Nuclear Engineering, B.S. (p. 288)
- Technical Communication, Certificate (p. 296)
- Technical Japanese Studies for Undergraduates, Certificate (p. 299)


## PEOPLE

"If you think of the challenges that we face-energy, transportation, clean air and water, building the next generation of computing and communications technologies as we use up our raw materials - those are problems engineers must address. I'd like our students and faculty to take the leadership role in solving those problems in their classrooms and research."
-Dean Ian Robertson

## COLLEGE OF ENGINEERING LEADERSHIP (HTTPS:// WWW.ENGR.WISC.EDU/ABOUT/LEADERSHIP)

Dean: Ian M. Robertson
Executive Associate Dean: James P. Blanchard Associate Dean for Research and Graduate Affairs: Darryl Thelen Associate Dean and Chief Financial Officer. Barbara M. McPherson Associate Dean for Undergraduate Affairs: Manuela Romero Associate Dean for Advancement: Cathleen Walters

## ENTERING THE COLLEGE

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-
services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## POLICIES AND REGULATIONS

## REGULATIONS

Official regulations regarding enrollment, scholarship, and graduation for undergraduates in the College of Engineering.

A printer-friendly PDF can be found on the College of Engineering Regulations page (https://ugregulations.engr.wisc.edu).

## ADMISSIONS

## 1. Direct Admission

New students are admitted directly to the degree program (major) of their choice or to the College of Engineering as Engineering Undecided. Progression requirements must then be satisfied as described in Regulations 3-7.

## 2. Degree Programs (Majors)

Biomedical Engineering (BME)
Chemical Engineering (CHE)
Civil Engineering (CEE)
Computer Engineering (CMPE)
Electrical Engineering (EE)
Engineering Mechanics (EM)
Engineering Physics (EP)
Geological Engineering (GLE)
Industrial Engineering (IE)
Materials Science and Engineering (MSE)
Mechanical Engineering (ME)
Nuclear Engineering (NE)

## PROGRESSION

## 3. First Year Progression Requirements

To automatically progress in a College of Engineering (CoE) degree program (major) after direct admission or to switch between engineering degree programs, students must complete the following requirements after their first two semesters of residency at UW-Madison:
A. 24 credits completed at UW-Madison. Special topics, independent study, seminar, pass/fail, and credit/no credit courses will not be included in the 24 credits except for required English as a Second Language courses.
B. General Education Communications Part A (Comm A) requirement. If Comm $A$ is not completed as a graded course at UW-Madison (i.e., completed through placement test, AP/IB, or transfer credit), then a liberal studies course of at least 3 credits with a breadth designation of Humanities, Literature, or Social Sciences must be taken on a graded basis at UW-Madison.
C. Introduction to Engineering: course specified by degree program or INTEREGR 170 Design Practicum for Engineering Undecided students.
D. Math course sequence through MATH 222 Calculus and Analytic Geometry 2 or MATH 276 Topics in Calculus II
E. Four core courses, required for engineering degree programs (majors), completed at UW-Madison, as defined below:

1. Math: A minimum of two math courses numbered MATH 217 Calculus with Algebra and Trigonometry II or above; or one math course 300 level or above. If the math requirement for the degree program (major) is complete or the student has completed the calculus sequence through MATH 234 Calculus--Functions of Several Variables, then additional math courses numbered MATH 217 Calculus with Algebra and Trigonometry II or above or additional courses from the science requirement in Regulation 3.E.2. can be taken to complete the four core course requirement. Excludes MATH 228 WES Calculus Supplement, MATH/HIST SCI 473 History of Mathematics, special topics, independent study, seminar, pass/fail, and credit/no credit courses.
2. Science: A minimum of two science courses required for engineering degree programs (majors) as defined in the table below. If the math and science requirements for the degree program are complete, then departmental engineering courses 200 level and above can be taken to complete the four core course requirement. Excludes EPD, InterEGR, special topics,
independent study, seminar, pass/fail, and credit/no credit courses.

- For Chemical Engineering majors, the following science requirements apply:
i One course must be CHEM 104 General Chemistry II or higher
ii One course must be PHYSICS 201 General Physics/E M A 201 Statics or higher

If above two requirements are completed, select from additional science courses below.

- For majors in Biomedical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Mechanics, Engineering Physics, Geological Engineering, Industrial Engineering, Materials Science and Engineering, Mechanical Engineering, and Nuclear Engineering, the following science requirements apply:
i One course must be either CHEM 104 General Chemistry II or higher OR PHYSICS 201 General Physics/E M A 201 Statics or higher
ii One other science course, from the following:
- Chemistry, all classes
- E M A 201 Statics, E M A 202 Dynamics, M E 240 Dynamics
- PHYSICS 201 General Physics and above
- Statistics, calculus-based
- E P 271 Engineering Problem Solving I
- COMP SCI 200 Programming I and COMP SCI 300 Programming II or above, excluding COMP SCI 304 WES-CS Group Meeting
- Excludes special topics, independent study, seminar, pass/fail, and credit/no credit courses
F. Core and Overall GPA requirements must be satisfied as defined by CoE departments for each engineering degree program (major) (http://progression.engr.wisc.edu). All graded UW-Madison courses referenced in E.1. and E.2. above and any departmental engineering courses level 200 or above will be counted in the Core GPA (excludes EPD, InterEGR, special topics, independent study, and seminar courses). All graded UW-Madison courses are counted in the Overall GPA. For one and only one of these core courses that a student has repeated, the more recent of the two grades will be used in the calculation of Core and Overall GPAs. Students may not be on academic probation for GPA reasons for automatic completion of first year progression requirements.

Students who do not meet the first year progression requirements to automatically progress in a degree program (major) can be considered for non-automatic progression (Regulation 4) or extension (Regulation 5).

## 4. Consideration for Non-Automatic Progression

Students who do not meet progression GPAs but meet all other progression requirements will be considered for progression in
degree program (major). The consideration process includes review of written statement, rigor of completed courses, and grade trends.

## 5. Extension for First Year Progression Requirements

A. Students who will not meet progression requirements due to University of Wisconsin placement and/or assessment tests (math and ESL) will be granted a one semester extension up to their fourth semester if they are making satisfactory progress in a degree program (major).
B. Students who do not meet the requirements in Regulation 3 may apply for a one semester extension but not beyond their fourth semester. Students granted extensions will be considered for non-automatic progression in degree program (major). The consideration process includes review of written statement, rigor of completed courses, and grade trends. Extensions will be evaluated only in cases where it is mathematically possible during the one semester extension to meet progression GPAs for intended program.

## 6. Diversity of Student Body

When the number of non-automatic considerations and/or applications for admission to a degree program (major) exceed the capacity of that program, progression and admission will be limited to capacity. In order to implement the University's goals of achieving a heterogeneous and diverse student body, selection of students under consideration or admission to a program operating at capacity will be based on demographic background, written statement, rigor of completed courses, and grade trends.

## 7. Progression Requirement Completion and Extension Application

Students are required to submit to the dean's office an application for progression for a degree program (major) or an application for an extension by the deadline. Deadlines will be posted on the College of Engineering website at Progression Requirements (http://progression.engr.wisc.edu) and emailed to students in the College of Engineering.

## REGISTRATION

## 8. Definitions

A. Full-time student: One carrying a minimum credit load of 12 credits. All students are expected to be full-time unless they have the permission of the dean to be part-time. A student carrying less than the minimum credit load without the dean's permission will be placed on probation at the end of the semester.
B. Part-time student: One who has the dean's permission to carry less than the minimum credit load (Regulation 9.F.).
C. Semester: A term of 15 weeks minimum duration.
D. Session: A term of less than 15 weeks duration (e.g., summer session or intersession).
E. Modular Course: A course that is offered during a semester, but which lasts fewer than 15 weeks.

## 9. Credit Load Constraints

A. Maximum credit load: 20 enrolled credits per semester.
B. Minimum credit load: 12 enrolled credits per semester or enrolled for one cooperative education program credit as an engineering co-op student during a co-op work period.
C. For sessions there is no minimum credit load; the maximum credit load equals the number of weeks in the session.
D. A student not on academic probation may freely choose to carry any number of credits between a minimum credit load and a maximum credit load.
E. A student may carry more than a maximum credit load only with the recommendation of an advisor and with written approval of the dean.
F. Part-time student: A student who wishes to carry less than a minimum credit load in a specific semester for definitive reasons-e.g., a verifiable disability, or a necessity of employment or other outside obligations exceeding 15 hours per week-must request written permission from the dean to become a part-time student. Part-time permissions must be renewed during the first two weeks of each semester. Part-time students must satisfy all regulations other than the minimum credit load. For any semester for which part-time permission is granted and the one following it, the academic status of the student is the responsibility of the student.
G. A student on academic probation is advised to carry not more than 14 credits per semester unless repeating a course. For every three credits being repeated, the student is advised to carry not more than one additional credit beyond 14 , up to a maximum of 16 credits.

## 10. Student Responsibility for Scheduling

Each student is responsible for arranging a course list that will permit satisfactory progress towards degree requirements and a class schedule that (a) avoids class and final exam scheduling conflicts, (b) avoids an excessively demanding final exam schedule, and (c) verifies registration in chosen classes.

## 11. Access to Courses

Departments may specify courses as not open to students who need to complete progression requirements, or as open only to students in a specific degree program (major).

## 12. Transfer of Degree Applicable Credits

A course taken anywhere other than UW-Madison, or by independent study or resident extension, is transferable to the College of Engineering, in credits only, if it is transferable to the UW-Madison. The course counts toward graduation only if it satisfies a graduation requirement of the curriculum to which it is to be applied and only if it was passed with a grade of C ( 2.0 on a 4.0 scale) or better.

## 13. Transfer of Grades

Grades for courses taken anywhere other than UW-Madison are not transferable, even if the credits for those courses are transferable.

## 14. Adding Courses

Within other limits of these regulations a student may add fullsemester courses only during the first two weeks of classes. (Regulation 19).

## 15. Dropping Courses

Within other limits of these regulations, a student may drop fullsemester courses only during the first nine weeks of classes. Courses dropped after two days before the last day to add courses are noted on the transcript as DR. (Regulations 14, 19 and 22.G.).

## 16. Course Substitutions

A student may substitute courses that deviate from the requirements of a published curriculum of the College of Engineering upon the recommendation of the student's degree-
granting department and with the approval of the college governance committee.

## 17. Pass/Fail and Credit/No Credit Courses

Pass/fail is a student-option alternative way of being graded in a regularly graded course. Credit/no credit describes courses approved for two-level grading and is not a student option.

A student may change the grading option of a full-semester course to or from pass/fail only during the first four weeks of classes. (Regulation 19). These courses must be free electives. Only students in good standing may elect the pass/fail privilege.

The pass/fail agreement is between the student and the Registrar, and is not revealed to the person teaching the course. The person teaching the course submits the appropriate letter grade to the Registrar, who converts C or higher grades to S (Satisfactory), D and F grades to U (Unsatisfactory).

Courses designated as credit/no credit will not be counted in determining the number of pass/fail courses the student may elect.

## 18. Audited Courses

A student may audit a course only if the instructor consents. Auditors are expected to attend with a reasonable regularity and to participate in the class, as determined by the instructor. Audited courses carry no degree credit, do not count in determining the minimum number of credits permitted in each term, and are not included in the calculation of the GPA. The only valid grade for audited courses is a grade of S (Satisfactory) or NR (No Report). A student may change to or from credit to audit only during the first four weeks of classes (Regulation 19).

## 19. Courses Scheduled for Fewer Than 15 Weeks

Deadlines for sessions and modular courses are listed on the Office of the Registrar's website.

## PERFORMANCE AND EVALUATION

## 20. Attendance

Each student is expected to attend all assigned classes during the regular meeting times, and take all of the examinations for those courses at the regularly scheduled times. In the case of course or examination absences excused for a reason acceptable to the course instructor, the student is expected to make up the work within a reasonable time, and may do so without a grade penalty.

## 21. Grading System

Course grades are reported by letter only; plus and minus grades are not authorized. The following grades are included in computing grade point average (GPA) and point-credit ratio (PCR).

Grade: A
Grade Points: Excellent
Per Credit: 4.0
Grade: AB
Grade Points: Intermediate
Per Credit: 3.5
Grade: B

Grade Points: Good
Per Credit: 3.0
Grade: BC
Grade Points: Intermediate

Per Credit: 2.5
Grade: C

Grade Points: Fair
Per Credit: 2.0
Grade: D
Grade Points: Poor
Per Credit: 1.0
Grade: F
Grade Points: Failure
Per Credit: 0.0

## 22. Special-Purpose Grades

The following ways of reporting course grades are also used and, except for NR, do not affect GPA or PCR
A. S (Satisfactory) or U (Unsatisfactory) - used to report pass/fail courses (Regulation 17). S is also used in audited courses (Regulation 18).
B. CR (Credit) or N (No Credit) - used to report credit/no credit courses (Regulation 17).
C. NR (No Report) - signifying that no grade has been reported to the Registrar's Office - a temporary grade that must be replaced by an A-F grade; also used for a permanent grade in audited courses (Regulation 18).
D. NW (No Work) - student enrolls in a course and then never attends. This means that instructor has no evidence that student ever attended.
E. I (Incomplete) - a temporary grade (Regulation 27); EI is used for an extended incomplete (requires a dean's action); IN is used to indicate an incomplete in a credit/ no credit course; PI is used for a permanent incomplete (Regulation 28).
F. P (Progress) - a temporary grade used for courses extending beyond one term. The final grade determines the grade for each term and replaces $P$ grades for the course.
G. DR (Dropped) - indicates the course was dropped after the initial drop deadline noted on the Office of the Registrar's website.
H. W (Withdrew) - indicates the student withdrew from the university after the initial drop deadline noted on the Office of the Registrar's website.

## 23. Course Grade Changes

The final course grade may be changed only by the professor in charge of the course section, and then only to correct a clerical error in the computation or reporting of the original grade.

## 24. Grade Point Average (GPA) and Point-Credit Ratio (PCR)

Grade point average (GPA) is computed by dividing the total number of grade points earned at UW-Madison by the total number of credits attempted (excluding pass/fail or credit/no credit courses) at UW-Madison. The point-credit ratio (PCR) differs from the grade point average in that it involves only those credits that count toward graduation and the related grade points. When a course is repeated, the credits and grade points earned only for the final attempt are included in the point-credit ratio.

## 25. Dean's Honor List

At the end of each semester the names of all full-time students in good standing with a 3.5 or higher semester GPA and cumulative GPA of at least 3.0 will be included on the Dean's Honor List. Students must have received no incompletes and no unreported grades. A notation of "Dean's Honor List" and date will be entered on the student's transcript.

## 26. Repeating Courses

Any course may be repeated at the student's option. In the case of a required course in which the student earned a grade of $D$ and which is a prerequisite to another required course, the student is encouraged (or may be required by departmental regulation) to repeat the course. For courses taken more than once, all grades count in the grade point computations, but only the last grade for the course is applied to the student's point-credit ratio.

## 27. Incomplete

An incomplete may be reported for a student who has carried a subject with a passing grade, but because of illness or other unusual and substantiated cause beyond the student's control has been unable to complete the final examination or some limited amount of term work. A student who stays away from a final examination without proof of being prevented from attending as indicated above will receive a grade of $\mathrm{F}, \mathrm{N}$, or U (whichever is appropriate). Even with such proof, if the term work has convinced the instructor that the student cannot pass, the grade shall be $F, N$, or $U$ (whichever is appropriate).

## 28. Resolution of an Incomplete

At the instructor's option, a course marked incomplete may be completed at any time no later than last day of class of the student's next semester of attendance at UW-Madison, or it will lapse into a fail. An incomplete may not be removed after five years of absence from UW-Madison without special permission of the dean. Such an incomplete remains on the record with a grade of PI and does not lapse into an $\mathrm{F}, \mathrm{N}$, or U .

## 29. Final Exam Rescheduling

A student may be permitted to take an examination at other than the regularly scheduled time only with permission of the instructor. Permission will be granted only for illness or other unusual and substantiated cause beyond the student's control. (Regulation 10).

## 30. Withdrawal

In order to withdraw from the University a student should consult an advisor and must obtain the dean's signature for the official withdrawal. Grades of $W$ will be recorded for courses in progress if the student withdraws after 2 days before the last day to add classes (Regulations 14, 19 and 22.H.).
A. After eight weeks of classes but prior to the last three weeks of scheduled classes, such withdrawal will be
approved by the dean only for non-academic reasons or to transfer out of the College of Engineering.
B. No official withdrawal will be granted in the last three weeks of scheduled classes. Grades of Incomplete, if justified (Regulation 27), or F, N, or U (instead of W) will be recorded for students who leave the University during this time.

## 31. Year Classification

The year classification of a student is determined by the number of credits passed and the number of grade points earned, applicable to the student's degree, as indicated by the following tabulation:

## Freshman

Numerical Classification of Year: 1
Minimum Credits Passed: 0
Minimum Grade Points Earned: 0

## Sophomore

Numerical Classification of Year: 2
Minimum Credits Passed: 24
Minimum Grade Points Earned: 48

## Junior

Numerical Classification of Year: 3
Minimum Credits Passed: 54
Minimum Grade Points Earned: 108

## Senior

Numerical Classification of Year: 4
Minimum Credits Passed: 86
Minimum Grade Points Earned: 172
For the purpose of year classification only, pass/fail and credit/no credit courses and courses transferred from another campus are assumed to have earned 2.0 grade points per credit.

## 32. Good Standing

A student is in good academic standing unless on academic probation or dropped.

## 33. Probation

A student is placed on academic probation when that student has, in the semester just completed,
A. Attained less than a 2.0 GPA ; or
B. Passed fewer than 12 credits without part-time permission from the dean.

Once on probation, the student is continued on probation until either removed from probation or dropped (Regulations 8.A., 9.F., and 37).

## 34. Removal From Probation

All of the following requirements must be satisfied for the removal of a student from academic probation (Regulation 37):
A. A cumulative GPA of at least 2.0;
B. A GPA of at least 2.0 for the semester just completed;
C. At least 12 credits passed in the semester just completed;
D. A total of at least 24 degree credits passed in the two most recent semesters in residence.

## 35. Drop (Regulation 37)

A. A student on academic probation will be dropped at the end of any semester for which that student has attained a GPA of less than 2.0, or passed fewer than 12 credits without part-time permission from the dean, or passed less than 3/4 of the credits attempted as a part-time student.
B. A student not on academic probation will be dropped at the end of any semester for which that student has passed less than half of the credits attempted.

## 36. Readmission

A student who has been dropped for academic reasons may be readmitted by the dean only after the student has been out of the College of Engineering for at least one semester.

## 37. Session Actions

No academic actions (probation, drop, removed from probation) will be taken at the end of sessions (Regulation 8.D.).

## 38. Graduation

It is the student's responsibility to ensure that graduation requirements have been met. All students should regularly consult their DARS (Degree Audit Reporting System) document in conjunction with their advisor to ensure that all the following graduation requirements have been met:
A. Have fulfilled the published graduation requirements of that curriculum, with all substitutions formally approved, and have achieved a minimum 2.0 GPA overall.
B. Have a PCR (Regulation 24) of at least 2.0 for those semesters and sessions containing the last 60 credits taken at UW-Madison or for all credits taken at UWMadison if fewer than 60.
C. A departmental PCR of at least 2.0 for all courses taken in the degree-granting department that count toward graduation.
D. Have completed at least 30 credits in residence in the College of Engineering, including 15 credits of work in the degree-granting department.
E. Have completed the last two semesters in residence in the College of Engineering as a full-time student.
F. Have a GPA of at least 2.0 both for the last semester and also for the combined last two semesters.

## 39. Graduation with Distinction and Highest Distinction

Students who have earned at least 60 credits on the University of Wisconsin-Madison campus and whose total cumulative GPA is in the top 5 percent of the College graduating class will receive the designation "Graduated With Highest Distinction," or if in the next 15 percent, "Graduated with Distinction." The appropriate designation is entered as a permanent record on the student's transcript.

## APPEAL

## 40. Appeal

The Dean of the College of Engineering has the authority to suspend or modify the operation of these regulations if their enforcement is judged to work an injustice to the student.

## POLICIES

## ACCREDITATION

The following engineering undergraduate degree programs described in this catalog are accredited by the Engineering Accreditation Commission of ABET, www.abet.org (http:// www.abet.org):

Biological Systems Engineering (with College of Agricultural and Life Sciences)<br>Biomedical Engineering<br>Chemical Engineering<br>Civil Engineering<br>Computer Engineering<br>Electrical Engineering<br>Engineering Mechanics<br>Geological Engineering<br>Industrial Engineering<br>Materials Science and Engineering<br>Mechanical Engineering<br>Nuclear Engineering

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/ returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## ADDITIONAL MAJOR

Engineering students may earn an additional major in the College of Letters \& Science and have the additional major noted on their transcript at the time of graduation. To qualify, the student must have approval in advance from both the department in the College of Letters \& Science offering the major and the academic dean of the College of Engineering, and must satisfy all requirements for the Letters \& Science major prior to or concurrently with the engineering degree. For further details, contact the College of Engineering Dean's Office, 2620 Engineering Hall.

Adding additional majors from colleges other than Letters \& Science is not accepted. For example, majors such as art (School of Education) and forestry (College of Agricultural and Life Sciences) cannot be completed in conjunction with an engineering degree. Likewise, students cannot pursue more than one undergraduate engineering degree concurrently.

## STUDENT GRIEVANCES

In compliance with Title IX regulations, the College of Engineering has a grievance procedure to handle student complaints. Students should follow these steps until a resolution is achieved:

1. Attempt to resolve the grievance directly with the individual involved.
2. If that approach seems unsatisfactory, and the grievance involves a teaching assistant (TA), consult the professor in charge of the course.
3. If necessary, discuss the grievance with the appropriate department chair.
4. The next level involves the academic dean. Students should contact Manuela Romero in 2620 Engineering Hall or at mromero@wisc.edu.
5. All students have the right to appeal to the dean of the college, Ian Robertson, 608-262-3482, if they feel their case has not been justly handled by another dean.
6. Only a few grievances are really serious and difficult to resolve. In these instances, the dean seeks a solution that, as best as can be determined, is appropriate, just, legal and in the best interests of all concerned.

## AUTHORITY LIMITS ON GRADES

There are areas in which the dean does not have authority to override an instructor, such as determination of a student's grade. However, it has happened that the department chair has intervened, for example, by having a grade determined by committee rather than by the course instructor.

It has also occurred, by agreement between deans, department chairs and faculty, that a misgraded course was dropped from the student's record and credit given for the controversial course by having the student pass the next higher course.

## GRIEVANCE EXAMPLES

The following is a list of student grievances (in no particular order of frequency or importance) that have occurred:

- Discrimination based on sex, religion or political views
- Course or exam grade disputes
- Required class or examination attendance at other than regularly scheduled (timetable) times
- Changes in course content contrary to catalog description or division approval
- Difficulty in obtaining space in a critical course
- Personality conflicts between student and instructor
- Difficulty obtaining an appointment with instructor
- Unwillingness of instructor to estimate a grade before the course drop deadline date
- Teaching above the level of the class, which includes the assumption of an unlisted course prerequisite
- Intelligibility of instructors, especially those for whom English is a second language
- Excessive instructor class absences
- Rescheduled final exams by majority approval or apparent unanimity, to possible disadvantage of the minority
- Sexual harassment (Contact Manuela Romero, 608-262-3484; Jason Jankoski, 608-890-0921; or the Division of Student Life, 75 Bascom Hall, 608-263-5700)


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## ENGINEERING CURRICULA

The graduation requirements for each of the engineering degrees are presented in the form of four-year programs of study. These four-year schedules are available, but rarely followed without deviation. Some students can proceed more rapidly; many must proceed more slowly and take nine or more semesters to complete the degree. Flexibility in course selection is also present though elective categories within curricula.

All engineering curricula are designed to meet all criteria for accreditation by the Engineering Accreditation Commission of ABET, www.abet.org (http://www.abet.org). Among other criteria, ABET requires that students complete:

- One year of a combination of college-level mathematics and basic sciences (some with experimental experience) appropriate to the discipline.
- One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study.
- A general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.
- In addition, students must be prepared for engineering practice through the curriculum, culminating in a major design experience based on the knowledge and skills acquired in earlier coursework and incorporating appropriate engineering standards and multiple realistic constraints.

Engineering curricula continuously evolve. The requirements that apply to a particular student are determined by the date (catalog year) that a student enters a degree-granting program. At that point, the curriculum becomes fixed throughout the period it takes for a student to complete the degree, although new changes that benefit a student can be adopted by a particular student if he or she so chooses.

The curricular descriptions below do not address how these requirements are satisfied; students seldom need to be concerned with these details. However, if deviations from a curriculum are requested, they must not violate any of the accreditation requirements.

## DEVIATION FROM PRESCRIBED CURRICULA

Circumstances deemed acceptable for deviating from the outlined engineering curricula are included in each departmental description. The choice of courses to fulfill elective credit requirements provide students with considerable flexibility in their programs. In addition, some departments permit the substitution of elective courses for required ones and also offer outstanding undergraduate students the opportunity to enroll in graduate courses. These options aid the student in tailoring a course of study to meet personal goals more closely.

## DEFINITION OF ELECTIVES

There are general types of elective courses including technical electives, liberal studies and free electives.

Technical electives are limited to courses in engineering and closely related fields.

Liberal studies electives are those courses that are classified as either humanities, literature, social studies or as foreign language.

Free electives are courses completely free of any restrictions or requirements other than the course prerequisites.

Other specific elective requirements are established and described in department curricula.

To assist the student in gaining a better understanding of individuals and societies, and to reduce problems of transferring from one curriculum to another, engineering curricula require adherence to the Liberal Studies Guidelines (see below). Some require slight variations from those guidelines.

## INDEPENDENT STUDY

Students who have high grade point averages may satisfy some elective credits by independent study of subjects or problems suitable for analytical investigative work. The student must identify a professor who is willing to supervise study of interest to the student. Together they must agree upon the work to be done, the credits earned (usually 1-3), and the course number ( $199,299,399,499,599$, or 699 ) for which the student is to enroll before the beginning of a semester. Weekly meetings with the professor to discuss questions and report progress are customary.

## LIBERAL STUDIES GUIDELINES

The College of Engineering requires one semester's worth of liberal elective courses in humanities, literature and social science for graduation. The college specifies that students should obtain both breadth (i.e., both social science and literature or humanities), and depth (i.e., more than one course in the same department).

The college has established general liberal elective guidelines that have been adopted by all departments, some of which have additional stipulations (see below).

## FOR ALL ENGINEERING STUDENTS

As a graduation requirement, and to fulfill campus general education guidelines, all engineering undergraduate students must take 15 or 16 credits of liberal electives. These credits must fulfill the following subrequirements.

1. A minimum of two courses from the same department or program. At least one of these two courses must be above the elementary level. (i.e., must have I, A, or D level designator), as indicated in Course Guide.
2. A minimum of 6 credits designated as humanities or literature, and an additional minimum of 3 credits designated as social science. Foreign language courses count as humanities credits. ${ }^{1}$
3. At least one course of at least 3 credits designated as ethnic studies (lower case "e" in the Course Guide). These credits may help satisfy subrequirements 1 or 2 as well, but they count only once toward the total required credits.
1 Exception: "Retrocredits," which are credits awarded by foreign language departments for successful completion of a higher level course, do not count toward this subrequirement, nor toward the total credits required ( 15 or 16 ). They are still helpful: If a student completes one foreign language course at the intermediate level and is awarded retrocredits, then subrequirement 1 above is satisfied because the student is judged to have achieved "depth" in liberal studies.

## ADDITIONAL RESTRICTIONS/SUBREQUIREMENTS FOR SPECIFIC DEPARTMENTS

Civil and Environmental Engineering: An economics course (from an approved list) and an environmental studies course (with approved characteristics) are required.

Industrial Engineering: ECON 101 Principles of Microeconomics or ECON 111 Principles of Economics-Accelerated Treatment is required.

## RESOURCES

The solutions to challenges great and small lie not in the hands of one person, but emerge from the diverse ideas, perspectives and backgrounds of many people working together. Whether a prospective or current faculty member, staff member, or student, members of the College of Engineering create a welcoming community where they can be themselves and strive to become whatever they want to be. Here are some of the services and organizations that students can utilize along the way.

## ENGINEERING SCHOLARSHIPS

The College of Engineering awards over two million dollars in scholarships each year to its students.

High school students applying for admission to UW- Madison in engineering are eligible to compete for merit- and need-based scholarships via the Application for the Freshman Academic Achievement Award. This application is available through

Scholarships@UW-Madison (https://scholarships.wisc.edu/ Scholarships) (note: students should not wait for notification that they have been admitted to UW-Madison before they apply for a freshman scholarship).

Each spring, continuing students are eligible to apply for college-wide and departmental scholarships. The application period is approximately March 1-May 1. Beginning March 1, students can apply for these awards by visiting Scholarships@UW-Madison (https://scholarships.wisc.edu/ Scholarships) or entering their MyUW portal and clicking on scholarships.

## ACADEMIC ADVISING

Each College of Engineering program has academic advisors (https:// www.engr.wisc.edu/academics/student-services/academic-advising) dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor in their student center.

## UNDERGRADUATE LEARNING CENTER

The Undergraduate Learning Center (https://www.engr.wisc.edu/ academics/student-services/ulc) (ULC) in the College of Engineering provides tutoring and academic support programs for engineering undergraduates wanting to excel in their courses. The ULC is a place where students study, form study groups, and discuss engineering concepts and problem solving strategies with their peers and with the tutors and facilitators.

## Drop-In-Tutoring Sessions

Sessions are offered for over 50 courses in mathematics, chemistry, physics, statistics, and engineering. The sessions provide help with homework problems and exam preparation. Drop-in tutoring sessions are offered each evening from Sunday to Thursday, resulting in approximately 10,000 student visits last year.

## PrEPS (Practicing Engineering Problem Solving) Labs

Labs were developed to help students succeed in core courses that have traditionally proved challenging for students. The courses targeted are early in the engineering curricula and contain dense material content delivered at a fast pace. The labs reinforce concepts through practicing problem solving skills. Students commit to meeting twice every week for 60-75 minutes per meeting.

## PrEPS Study Tables

Study tables support the same courses as the PrEPS Labs but with a less structured approach. PrEPS Study Tables allow small groups of students who are interested in extra study time to meet regularly to discuss homework and concepts from the course.

## Tutoring by Request

Based on the Tutorial Services Room model developed at MIT, the College of Engineering offers Tutoring by Request (TBR) for students in critical need. Assistance is offered in a variety of courses, ranging from gateway courses, such as chemistry, math, physics courses, and other intermediate-level engineering courses.

## Special Courses and Workshops

Special courses are targeted toward helping students learn topics that span multiple courses such as math concepts common to a variety of introductory engineering courses. Workshops are offered
in topics such as MATLAB and vector review to help students be successful in their engineering courses.

## INTERNATIONAL ENGINEERING STUDIES \& PROGRAMS

In today's global marketplace, there is an increasing need for broadly educated engineering graduates with cross-cultural skills, international understanding and proficiency in more than one language. The College of Engineering is committed to providing and expanding international opportunities that will assist engineering students in obtaining these important skills.

International Engineering Studies and Programs (http:// international.engr.wisc.edu) (IESP) runs semester, year-long and summer study abroad programs at leading engineering schools in many countries around the world. These programs, selected specifically for engineering students, help ensure students continue to make progress toward degree requirements and have a meaningful experience abroad.

The college also offers a Certificate in International Engineering. Courses in language and culture taken abroad and in Madison can count toward this certificate, which demonstrates the student's knowledge of a specific country or region. This credential appears on the student's transcript, strengthens the resume, and testifies to their preparation for an international career.

For more information, contact the International Engineering Studies \& Programs Office at international@engr.wisc.edu or 608-263-2191.

## ENGINEERING CAREER SERVICES WITH COOPERATIVE EDUCATION

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website (https://ecs.wisc.edu) or call 608-262-3471.

## DIVERSITY AFFAIRS OFFICE

The mission of the Diversity Affairs Office (https://www.engr.wisc.edu/ academics/student-services/diversity-programs) is to recruit, retain and graduate underrepresented students of color, women, low-income students, and students who are educationally disadvantaged. The office has program initiatives in four primary areas:

## Pre-college engagement in science and engineering fields, and recruiting qualified students to engineering

The DAO provides qualified students with scholarships through the Leaders in Engineering Excellence and Diversity (LEED) Scholars program. A minimum cumulative GPA of 2.8 is required for annual scholarship continuation.

## Academic and social support

The DAO provides adjunct academic advising, study groups for challenging first-year courses, office study and gathering spaces, and referral services to promote student connections and academic
excellence. Once a month, the DAO hosts a LEED Scholars meeting designed to promote community within the College of Engineering. LEED Scholars events are generally open to any student interested in a diverse learning community.

The DAO also supports the efforts of the following Registered Student Organizations: National Society of Black Engineers (NSBEWBESS), Society of Hispanic Professional Engineers (SHPE), and Society of Women Engineers.

## Diversity and inclusion

In cooperation with other offices and departments, the DAO develops programs and provides services designed to promote a welcoming climate that celebrates diversity for everyone in the College of Engineering. The variety of events and projects include: Women in Engineering events, a biannual college climate survey, Diversity Discussions, Teaching Assistant Training, and student data analysis aimed at broadening participation in engineering.

## COMPUTER-AIDED ENGINEERING CENTER

The Computer-Aided Engineering Center (CAE) (http:// www.cae.wisc.edu) provides computing resources, facilities and services for students, faculty, and staff in the college. The broad range of services and resources include:

- Windows and Linux computer classrooms;
- open labs which have Windows and Linux workstations;
- industry-standard engineering software;
- software and services available on students' personal computers;
- reliable file storage for coursework;
- customer consulting and help-desk services.

The CAE walk-in help desk is located at 1410 Engineering Drive; helpdesk@cae.wisc.edu; (helpdesk@cae.wisc.edu) 608-262-5349. For more information, see the CAE website (http://www.cae.wisc.edu).

## COUNSELING SERVICES

Confidential counseling services are available through University Health Services (https://www.uhs.wisc.edu) at no cost to engineering students. It is easier to concentrate on studies if one can deal effectively with personal, academic, and career concerns. Talking with someone who is objective and empathetic can help students sort through such concerns. Appointments can be made by phone or in person.

University Health Services
333 East Campus Mall
Madison, WI 53715-1384
608-265-5600

## REGISTERED STUDENT ORGANIZATIONS

The College of Engineering offers so much more than just a first-class engineering education. Students have access to a wide variety of groups, opportunities, organizations and services that will help make their time on campus memorable and unique. There are more than 50 engineering affiliated student organizations (https://www.engr.wisc.edu/academics/ beyond-the-classroom/student-organizations) on campus. Students can get involved in organizations that range from competitive-such as teams that build and race vehicles or concrete canoes-to service-oriented, honors societies, and student government. The College of Engineering also offers many discipline-related student chapters of professional
organizations that will connect students with their peers and also help them make professional contacts.

## HONORS

In general, the concept of academic honors programs in higher education focuses resources on especially able students who are interested in challenging themselves at unusually high levels. This concept does not translate to the College of Engineering programs. All engineering classes are challenging, focused, and require high academic ability in math and science. Further, in engineering, resources must be used to make sure all engineering graduates-not just a few-excel in every respect. Nonetheless, honors opportunities are available on a limited basis in the College of Engineering.

## ENGINEERING HONORS IN RESEARCH

Select students in degree-granting departments may pursue the Honors in Research distinction in certain departments. It requires completion of a certain number of semesters of faculty-guided independent study work and completion of a written thesis. Honors in Research programs have been developed for majors in biomedical engineering, chemical engineering, civil engineering, computer engineering, electrical engineering, engineering mechanics, geological engineering, industrial engineering, materials science and engineering, mechanical engineering, and nuclear engineering. Interested students should contact their department for more information.

## ENGINEERING HONORS IN THE LIBERAL ARTS (EHLA)

EHLA allows for a small group of highly motivated students who have special, broad interests in liberal arts to take challenging background courses in physical science, natural science, humanities, foreign language, and social science to supplement their engineering program. The EHLA program will allow students access to honors sections in these College of Letters \& Science courses. Honors courses in physical and natural science are available to invited engineering freshmen whether or not they are selected for EHLA. Conversely, no engineering courses are available as honors courses. Admission to EHLA is based on applications from high school students submitted before May 31 of their last year in high school. Fewer than 30 students are admitted each year. Interested students can find the application on the College of Engineering website (https://www.engr.wisc.edu/academics/ undergraduate-academics/honors) and should contact Dr. Andrew Greenberg at greenberg2@wisc.edu with questions.

The EHLA designation will be awarded to those admitted to the EHLA program who meet the following requirements when they graduate with an engineering degree:

- A cumulative grade point average of at least 3.3 in all honors courses through the semester in which all criteria for EHLA are met;
- Completion of at least 24 credits in Honors courses with grades of $B$ or better;
- Completion of at least 6 credits in Honors courses in the humanities, 6 credits in social sciences, and 6 credits in natural sciences;
- Completion of at least 15 Honors credits in courses with the designation "H" or "!" (honors sections).

Because the classes for which Honors designation is available are taken mainly in the first year, students do not apply to the EHLA program once they begin in the College of Engineering. Students can, however, transfer from the College of Letters \& Science Honors in Liberal Arts program into
the EHLA program provided they transfer into an engineering program in their first two years.

## BIOMEDICAL ENGINEERING

Biomedical engineering (BME) is the application of engineering tools for solving problems in biology and medicine. It is an engineering discipline that is practiced by professionals trained primarily as engineers, but with a specialized focus on the medical and biological applications of classical engineering principles. BMEs apply their multidisciplinary expertise to problems such as designing new medical instruments and devices, understanding and repairing the human body, and applying resourceful and cross-disciplinary approaches to age-old problems in the fields of medicine, biology, and beyond. A biomedical engineer can expect to work in a wide variety of multidisciplinary teams with professionals such as physicians, biologists, researchers, nurses, therapists, mathematicians, administrators, and many others while working in industry, as entrepreneurs, and in the medical profession and academia.

## DEGREES/MAJORS/CERTIFICATES

- Biology in Engineering for Engineering Majors, Certificate (p. 233)
- Biomedical Engineering, B.S. (p. 235)


## PEOPLE

## FACULTY

Williams (chair)
Ashton
Beebe
Block
Brace
Campagnola
Chesler
Gong
Huisken
Kreeger
Li
McClean
Masters
Meyerand
Murphy
Rogers
Saha
Skala
Thelen
Tompkins
Vanderby
Webster

## INSTRUCTIONAL STAFF AND FACULTY ASSOCIATES

Nimunkar
J. Puccinelli
T. Puccinelli

Suminski
Tyler

See also the BME Directory (http://directory.engr.wisc.edu/bme).

## BIOLOGY IN ENGINEERING <br> FOR ENGINEERING MAJORS, CERTIFICATE

The biology in engineering certificate (BEC) is designed for engineering students who want to strengthen their biology backgrounds. It is offered especially to encourage engineering students in traditional disciplines to prepare themselves to understand the special engineering problems in biology and medicine. A student successfully fulfilling the requirements will have the notation "Biology in Engineering Certificate" added to the transcript.

## REQUIREMENTS

The biology in engineering certificate was designed and will be administered by a Biology in Engineering Certificate Committee composed of faculty from multiple engineering disciplines. Students normally should begin the program during their sophomore or junior year, but seniors may also apply.

Click here (https://www.engr.wisc.edu/academics/undergraduate-academics/biology-in-engineering-certificate) for certificate application.

The certificate requires a minimum of 15 credits:

## GENERAL BIOLOGY: 5 CREDITS

Code Title Credits
Choose one combination: 5

| BIOCORE 381 | Evolution, Ecology, and Genetics | 5 |
| :--- | :--- | :--- |
| \& BIOCORE 382 | and Evolution, Ecology, and |  |


|  | Genetics Laboratory |  |
| :--- | :--- | :---: |
| BIOCORE 383 | Cellular Biology | 5 |
| \& BIOCORE 384 | and Cellular Biology Laboratory |  |


| ZOOLOGY/ | Animal Biology | 5 |
| :--- | :--- | :--- |
| BIOLOGY 101 | and Animal Biology Laboratory |  |
| \& ZOOLOGY/ |  |  |
| BIOLOGY 102 |  |  |

ZOOLOGY/BIOLOGY/ Introductory Biology 5
ZOOLOGY/BIOLOGY/ Introductory Biology 5

## BOTANY 152

ZOOLOGY 153 Introductory Biology (and) 3
BIOLOGY/ Animal Biology Laboratory (or)
ZOOLOGY 102
choose 2 more credits from list below

## ADVANCED BIOLOGY: 5-CREDIT MINIMUM Code Title

Credits
Advanced Biology ( 5 cr. minimum): Recommended to choose a lecture/lab combination as outlined below, but any combination of courses is acceptable

| ANAT\&PHY 335 | Physiology | 5 |
| :--- | :--- | :--- |
| ANAT\&PHY 435 | Fundamentals of Human | 5 |
|  | Physiology |  |


| BIOCORE 485 <br> \& BIOCORE 486 | Organismal Biology and Organismal Biology Laboratory | 5 |
| :---: | :---: | :---: |
| BIOCORE 587 | Biological Interactions | 3 |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| BIOCHEM 507 | General Biochemistry I | 3 |
| BIOCHEM 508 | General Biochemistry II | 3-4 |
| BMOLCHEM 314 | Introduction to Human Biochemistry | 3 |
| GENETICS 466 <br> \& GENETICS 545 | Principles of Genetics and Genetics Laboratory | 5 |
| MICROBIO 303 <br> \& MICROBIO 304 | Biology of Microorganisms and Biology of Microorganisms Laboratory | 5 |
| MICROBIO/ <br> FOOD SCI 324 <br> \& MICROBIO/ <br> FOOD SCI 325 | Food Microbiology Laboratory and Food Microbiology | 5 |
| MICROBIO 330 | Host-Parasite Interactions | 3 |
| M M \& I 301 \& M M \& I 302 | Pathogenic Bacteriology and Medical Microbiology Laboratory | 5 |
| M M \& I 341 | Immunology | 3 |
| M M \& I/MICROBIO/ PATH-BIO 528 \& M M \& I/PATHBIO 529 | Immunology and Immunology Laboratory | 5 |
| M M \& I/ <br> BIOCHEM 575 | Biology of Viruses | 2 |
| ZOOLOGY/ <br> ENVIR ST 315 <br> \& ZOOLOGY 316 | Limnology-Conservation of Aquatic Resources and Laboratory for LimnologyConservation of Aquatic Resources | 4-5 |
| ZOOLOGY/ENTOM/ M M \& I/PATH- <br> BIO 350 <br> \& ZOOLOGY/M M \& I/ PATH-BIO 351 | Parasitology and Parasitology Laboratory | 5 |
| ZOOLOGY/ANTHRO/ <br> BOTANY 410 | Evolutionary Biology | 3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates | 5 |
| $\begin{aligned} & \text { ZOOLOGY } 470 \\ & \text { \& ZOOLOGY } 555 \end{aligned}$ | Introduction to Animal Development and Laboratory in Developmental Biology | 6 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 <br> \& ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes and Ecology of Fishes Lab | 5 |
| ZOOLOGY/ PSYCH 523 | Neurobiology | 3 |
| ZOOLOGY 525 | Tropical Herpetology | 1 |
| ZOOLOGY 570 | Cell Biology | 3 |


| ZOOLOGY 611 | Comparative and Evolutionary |
| :--- | :--- |
| \& ZOOLOGY 612 | Physiology <br> and Comparative Physiology <br> Laboratory |

## BIOLOGY IN ENGINEERING: 3-CREDIT MINIMUM

| Code | Title | Credits |
| :---: | :---: | :---: |
| Biology in Engineering | g (3 cr. minimum): Choose one | 3 |
| B M E/M E 415 | Biomechanics of Human Movement | 3 |
| B M E/PHM SCI 430 | Biological Interactions with Materials | 3 |
| B M E/ECE 462 | Medical Instrumentation | 3 |
| B M E/E C E 463 | Computers in Medicine | 3 |
| B M E 505 | Biofluidics | 3 |
| B M E/CBE 510 | Introduction to Tissue Engineering | 3 |
| B M E/CBE 520 | Stem Cell Bioengineering | 3 |
| B M E 545 | Engineering Extracellular Matrices | 3 |
| B M E 550 | Introduction to Biological and Medical Microsystems | 3 |
| B M E/M E 615 | Tissue Mechanics | 3 |
| B M E/ANATOMY/ MED PHYS/ PHMCOL-M/ PHYSICS/ RADIOL 619 | Microscopy of Life | 3 |
| BSE 249 | Engineering Principles for Biological Systems | 3 |
| BSE 349 | Quantitative Techniques for Biological Systems | 3 |
| BSE 364 | Engineering Properties of Food and Biological Materials | 3 |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE/FOOD SCI/ <br> M E 441 | Rheology of Foods and Biomaterials | 3 |
| BSE/FOOD SCI 542 | Food Engineering Operations | 4 |
| BSE/FOOD SCI 642 | Food and Pharmaceutical Separations | 2-3 |
| CBE/B M E 560 | Biochemical Engineering | 3 |
| CBE 781 | Biological Engineering: Molecules, Cells \& Systems | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 322 | Environmental Engineering Processes | 3 |
| CIV ENGR 502 | Environmental Organic Chemistry | 3 |
| CIV ENGR/ SOIL SCI 623 | Microbiology of Waterborne Pathogens and Indicator Organisms | 3 |
| COMP SCI/B M I 576 | Introduction to Bioinformatics | 3 |
| E C E 542 | Introduction to Microelectromechanical Systems | 3 |
| I SY E/B M E 564 | Occupational Ergonomics and Biomechanics | 3 |
| INTEREGR 301 | Engineering and Biology: <br> Technological Symbiosis | 1-4 |

SEMINAR: 1 CREDIT
Code Title Credits
Seminar Course ( 1 cr .): Choose one ..... 1
B M E/BSE/CBE 517 Biology in Engineering Seminar ..... 1
B M E 515 Therapeutic Medical Devices ..... 1
CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Develop an understanding of basic biology and a selected area of advanced biology.
2. Develop an understanding of the challenges in biology, medicine, public health, and environmental health that are currently being addressed by engineering research and development.
3. Demonstrate proficiency in the application of engineering principles to solve problems in the field based on biological principles.

## PEOPLE

## ADVISORS FOR THE BIOLOGY IN ENGINEERING CERTIFICATE PROGRAM

(Contact the advisor from your home department or the Chair)

## CHAIR AND CERTIFICATE ADMINISTRATION BIOMEDICAL ENGINEERING

Dr. John Puccinelli
2132 Engineering Centers Bldg
john.puccinelli@wisc.edu
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## BIOLOGICAL SYSTEMS ENGINEERING

Professor Anita Thompson
115 Agricultural Engineering Bldg
amthompson2@wisc.edu
262-0604

Professor Mark Etzel
B115 Babcock Hall
etzel@engr.wisc.edu
263-2083

## CHEMICAL AND BIOLOGICAL ENGINEERING

Professor John Yin
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CIVIL AND ENVIRONMENTAL ENGINEERING
Professor Katherine McMahon
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tmcmahon@engr.wisc.edu 890-2836

# ELECTRICAL AND COMPUTER ENGINEERING 

Daniel van der Weide
1439 Engineering Hall
danvdw@engr.wisc.edu
265-6561
INDUSTRIAL AND SYSTEMS ENGINEERING
Professor Robert Radwin
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radwin@discovery.wisc.edu
263-6596
MATERIALS SCIENCE AND ENGINEERING
Professor Padma Gopalan
219 Materials Science and Eng Bldg
pgopalan@wisc.edu
265-4258

## MECHANICAL ENGINEERING

Professor Heidi-lynn Ploeg
3047 Mechanical Engineering Bldg
ploeg@engr.wisc.edu
262-2690

## BIOMEDICAL ENGINEERING, B.S.

Biomedical engineering (BME) is the application of engineering tools for solving problems in biology and medicine. It is an engineering discipline that is practiced by professionals trained primarily as engineers, but with a specialized focus on the medical and biological applications of classical engineering principles. BMEs apply their multidisciplinary expertise to problems such as designing new medical instruments and devices, understanding and repairing the human body, and applying resourceful and cross-disciplinary approaches to age-old problems in the fields of medicine, biology, and beyond. A biomedical engineer can expect to work in a wide variety of multidisciplinary teams with professionals such as physicians, biologists, researchers, nurses, therapists, mathematicians, administrators, and many others while working in industry, as entrepreneurs, and in the medical profession and academia.

To prepare students for such careers, the 128-credit, four-year BME undergraduate degree emphasizes engineering design; access to cooperatives/internships at local or national medical device manufacturers, hospitals, or laboratories; continuous advising; flexibility in engineering specialization areas; participation in program evaluation and improvement; study-abroad opportunities; and an option to complete a one-year M.S degree following the undergraduate program.

The cornerstone of the BME program is its unique, seven-semester design curriculum. Students take an advising/design project course the freshman year and every semester during the sophomore through senior years. A faculty member advises small teams of students, serving as advisor/consultant/mentor, to guide them through realworld design projects solicited from clients throughout the university, medical profession, industry, and the community. These clients serve as resources for students in their project, conduct discussions, and expose the students to various aspects of the BME field. Over the course of
each semester, teams design, fabricate, and ultimately present a product that meets the needs of the client. This novel approach gives students an exceptionally balanced education by incorporating clinical and biomedical industry experience, thus expanding their network. Overall, the design experiences highlight the very multidisciplinary nature of BME.

Within the program, BME students choose a course of study that emphasizes one of the following four specializations within the field:

1. Bioinstrumentation and medical devices is the application of electronics, measurement principles, and techniques to develop devices used in diagnosis and treatment of disease. Examples include the electrocardiogram, brain-computer interface, implantable electrodes, sensors, tumor ablation and other medical devices. Neuroengineering, a subfield, involves using engineering technology to study the function of neural systems and the development of implantable technology for neuroprosthetic and rehabilitation applications.
2. Biomedical imaging and optics involves the design and enhancement of systems for noninvasive anatomical, cellular, and molecular imaging. In addition to common imaging techniques such as magnetic resonance imaging (MRI), computed tomography (CT), and positron emission tomography (PET), biomedical imaging includes topics such as biophotonics, optics, and multimode imaging, and is now expanding to serve functional and therapeutic purposes as well. Advanced capabilities result when fundamentals of engineering, physics, and computer science are applied in conjunction with the expertise of clinical collaborators.
3. Biomechanics applies engineering mechanics for understanding biological processes and for solving medical problems at systemic, organ, tissue, cellular, and molecular levels. This includes the mechanics of connective tissues (ligament tendon, cartilage and bone) as well as orthopedic devices (fracture fixation hardware and joint prostheses), vascular remodeling (pulmonary hypertension), muscle mechanics with injury and healing, human motor control, neuromuscular adaptation (with age, injury, and disease), microfluidics for cellular applications, cellular motility and adhesion, and rehabilitation engineering (quantifying, adapting and restoring function for those who lost abilities).
4. Biomaterials/cellular/tissue engineering involves the characterization and use of structural materials, derived from synthetic or natural sources, to design medical products that safely interact with tissues for therapeutic or diagnostic purposes such as artificial blood vessels, heart valves, orthopedic joints, and drug delivery vehicles. Tissue engineers understand structure-function relationships in normal and pathological tissues to engineer living tissues and/or biological substitutes to restore, maintain, or improve function. At the cellular and molecular level this includes the study or manipulation of biological processes such as the cell's differentiation, proliferation, growth, migration, and apoptosis.

Although the various disciplines within BME can be separately defined, solving a biomedical program requires an overall understanding of the field. For example, the design of an artificial hip requires an understanding of the forces and biomechanics of human movement as well as the mechanical and material properties of the prosthetic device. The material choice and topography play a critical role in cellular and tissue integration, which ultimately leads to long-term stability of the implant. In addition, biomedical imaging techniques are required to characterize the morphology of the diseased hip and the success of the
procedure. Finally, instrumentation devices are utilized during the hip replacement surgery.

Students choose the biomedical engineering field to be of service to people; for the excitement of working with living systems; and to apply advanced technology to the complex problems of medical care. Students in the BME program can expect to develop skills in innovative thinking, critical analysis of ethics, project management, and technical writing, all in an environment that cultivates creativity, teamwork, and curiosity. With many possible focuses within the major, BME students have the opportunity to explore and cultivate their interests in specific topics while applying the concepts of engineering to medical applications, hands-on projects, and cutting-edge research.

Students successfully completing the B.S. degree in BME with an overall GPA of 3.0 or a GPA of 3.25 for the last 60 credits of the B.S. program are eligible to apply for the one-year M.S. degree.

## BIOMEDICAL ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

We recognize that our graduates will choose to use the knowledge and skills that they have acquired during their undergraduate years to pursue a wide variety of career and life goals, and we encourage this diversity of paths. Whatever path graduates choose, be it a job, postgraduate education, or volunteer service, be it in engineering or another field, we have for our graduates the following objectives; that they will:

1. exhibit strong skills in problem solving, leadership, teamwork, and communication;
2. use these skills to contribute to their communities;
3. make thoughtful, well-informed career choices; and
4. demonstrate a continuing commitment to and interest in their own and others' education.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers
group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.


## MAJOR REQUIREMENTS

## MATHEMATICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 221 | Calculus and Analytic Geometry 1 | 13 |
| \& MATH 222 | and Calculus and Analytic Geometry |  |
| \& MATH 234 | 2 |  |
|  | and Calculus--Functions of Several <br> Variables |  |
| MATH 320 | Linear Algebra and Differential |  |
|  | Equations | 3 |
| or MATH 319 | Techniques in Ordinary Differential Equations |  |
| STAT 324 | Introductory Applied Statistics for | 3 |
| or STAT/ | Engineers |  |
| Introduction to the Theory of Probability |  |  |

## SCIENCE

| Code | Title | Credits |
| :---: | :---: | :---: |
| COMP SCI 301 <br> or COMP SCI 200 <br> or COMP SCI 300 <br> or COMP SCI 310 | Introduction to Data Programming <br> Programming I <br> Programming II <br> Problem Solving Using Computers | 3 |
| EM A 201 <br> or PHYSICS 201 or PHYSICS 207 | Statics (only statics counts for Engineering credits below) <br> General Physics <br> General Physics | 3 |
| PHYSICS 202 or PHYSICS 208 | General Physics General Physics | 5 |
| CHEM 109 | Advanced General Chemistry (or CHEM 103 \& CHEM 104) | 5 |
| CHEM 343 or CHEM 341 | Introductory Organic Chemistry Elementary Organic Chemistry | 3 |
| CHEM 345 <br> \& CHEM 344 <br> or CHEM 327 <br> or CHEM 329 | Intermediate Organic Chemistry and Introductory Organic Chemistry Laboratory <br> Fundamentals of Analytical Science Fundamentals of Analytical Science | 5 |
| ZOOLOGY/ <br> BIOLOGY 101 <br> \& ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology and Animal Biology Laboratory (or) | 5 |


| ZOOLOGY/ <br> BIOLOGY/ <br> BOTANY 151 | Introductory Biology (or) |
| :--- | :--- | :--- |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| \& BIOCORE 383 | and Cellular Biology |$\quad 5$

## GENERAL EDUCATION

| Code | Title | Credits |
| :--- | ---: | ---: |
| Communications $A$ |  | 3 |


| LSC 100 | Science and Storytelling |
| :--- | :--- |
| or COM ARTS | 1CIntroduction to Speech Composition |
| or ENGL 100 | Introduction to College Composition |
| or ESL 118 | Academic Writing II |

Communications $B$
EPD 397 Technical Communication 3
or ZOOLOGY/ Introductory Biology
BIOLOGY/
BOTANY 152
or BIOCORE 384 Cellular Biology Laboratory
At least 15 credits of liberal studies following the College of 15
Engineering guidelines

## ENGINEERING COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| Introduction to Engineering |  | 3 |
| INTEREGR 170 | Design Practicum | 3 |
| Required engineering mechanics core courses |  | 6 |
| E M A 201 | Statics |  |
| E M A 303 | Mechanics of Materials |  |
| or M E 306 | Mechanics of Materials |  |
| Required B M E core courses |  | 18 |
| B M E 200 | Biomedical Engineering Design |  |
| B M E 201 | Biomedical Engineering Fundamentals and Design |  |
| B M E 300 | Biomedical Engineering Design |  |
| B M E 301 | Biomedical Engineering Design |  |
| B M E 310 | Bioinstrumentation |  |
| B M E 315 | Biomechanics |  |
| B M E 400 | Capstone Design Course in Biomedical Engineering |  |


| B M E 402 | Biomedical Engineering Design |
| :---: | :---: |
| B M E/ <br> PHM SCI 430 | Biological Interactions with Materials |
| Engineering area | al electives (see below) 15 |
| One advanced B selected from an | chnical elective from any area ved list of courses |
| Engineering techn from a degree-gra | ective: Any engineering course(s) ngineering program ${ }^{1}$ |
| - EPD course <br> - InterEGR co Engineering <br> - Only 3 cred B M E 399 I Advanced I <br> - Special top Committee. | not included in this category. <br> es are not included in this category except INTEREGR 301 Biology: Technological Symbiosis. <br> an engineering independent study may count (e.g., endent Study, B M E 489 Honors in Research , CBE 699 endent Studies, etc.). <br> ourses must have prior approval of the B M E Curriculum |
| BIOMEDICAL ENGINEERING AREA TECHNICAL ELECTIVE REQUIREMENTS |  |

Choose 15 credits of area technical electives in one of the following tracks and at least one advanced B M E elective:

Bioinstrumentation and Medical Devices:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Required Area Elective |  |  |
| ECE 230 | Circuit Analysis | 4 |
| Area Electives in Bioinstrumentation |  | 11 |
| Choose from any ECE course, the courses below, and from the advanced BME electives in this area |  |  |
| M E 445 | Mechatronics in Control \& Product Realization | 3 |
| Advanced BME Area Technical Electives in Bioinstrumentation and Medical Devices |  |  |
| B M E/ECE 462 | Medical Instrumentation | 3 |
| B M E/ECE 463 | Computers in Medicine | 3 |
| BME/ MED PHYS 535 | Introduction to Energy-Tissue Interactions | 3 |
| B M E 556 | Systems Biology: Mammalian Signaling Networks | 3 |


| Biomedical Imaging and Optics: |  |
| :--- | :--- | :--- |
| Title | Credits |

## Required Area Elective

ECE $330 \quad$ Signals and Systems 3

Area Electives in Biomedical Imaging 12
Choose from the following and from the advanced BME
electives in this area

| E C E 203 | Signals, Information, and <br> Computation | 3 |
| :--- | :--- | :---: |
| E C E 331 | Introduction to Random Signal <br> Analysis and Statistics | 3 |
| E C E 431 | Digital Signal Processing | 3 |
| E C E/COMP SCI 533 Image Processing | 3 |  |
| B M E/H ONCOL/ | Radiological Physics and Dosimetry | 3 |


| B M E/ | Physics of Radiotherapy | 4 |
| :--- | :--- | :---: |
| MED PHYS 566 |  | 4 |
| B M E/ <br> MED PHYS 567 | The Physics of Diagnostic <br> Radiology | 3 |
| B M E/ <br> MED PHYS 573 | Medical Image Science: <br> Mathematical and Conceptual <br> Foundations | 3 |
| B M E/ | Imagine in Medicine: Applications |  |
| MED PHYS 574 | Fundamentals of Nuclear <br> N E 305 | Engineering |
| N E 408 | lonizing Radiation | 3 |
| NE 427 | Nuclear Instrumentation Laboratory | 2 |

Advanced BME Area Technical Electives in Biomedical Imaging
B M E/ Medical Imaging Systems 3
MED PHYS 530
B M E/
Introduction to Energy-Tissue 3
MED PHYS 535
Interactions
B M E/
Magnetic Resonance Imaging (MRI)
MED PHYS 568
B M E/ANATOMY/
Microscopy of Life
3
MED PHYS/
PHMCOL-M/
PHYSICS/
RADIOL 619
B M E/CHEM/ Biological Optical Microscopy 3

MED PHYS 650


| Biomaterials/Cell/Tissue Engineering: |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Required Area Elective |  |  |
| B M E/CBE 330 | Engineering Principles of Molecules, Cells, and Tissues | 3-4 |
| or B M E/CBE 320 Introductory Transport Phenomena |  |  |
| Area Electives in Biomaterials/Cell/Tissue Engineering |  | 12 |
| Choose from any CBE or M S \& E course, the courses below, and from the advanced B M E electives in this area |  |  |
| M E 417 | Transport Phenomena in Polymer Processing | 3 |
| M E 418 | Engineering Design with Polymers | 3 |
| M E/STAT 424 | Statistical Experimental Design | 3 |
| M E/BSE/ <br> FOOD SCI 441 | Rheology of Foods and Biomaterials | 3 |
| B M E 511 | Tissue Engineering Laboratory | 1 |
| Advanced B ME Area Technical Electives in Biomaterials/ Cell/Tissue Engineering |  |  |
| B M E/CBE 510 | Introduction to Tissue Engineering | 3 |
| B M E/CBE 520 | Stem Cell Bioengineering | 3 |
| B M E 545 | Engineering Extracellular Matrices | 3 |
| B M E 550 | Introduction to Biological and Medical Microsystems | 3 |
| B M E 556 | Systems Biology: Mammalian Signaling Networks | 3 |
| B M E/CBE 560 | Biochemical Engineering | 3 |
| B M E/ME 615 | Tissue Mechanics | 3 |

## TOTAL DEGREE CREDITS: AT LEAST 128 <br> UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| Work | Abroad/Study Away programs. <br> Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (a) an ability to apply knowledge of mathematics (including differential equations and statistics), science, and engineering to solve problems at the interface of engineering and biology.
2. (b) an ability to design and conduct experiments (including making measurements) on, as well as to analyze and interpret data from living systems; addressing the problems associated with the interaction between living and non-living materials and systems.
3. (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. (d) an ability to function on multidisciplinary and diverse teams and provide leadership.
5. (e) an ability to identify, formulate, and solve biomedical engineering problems.
6. (f) an understanding of professional and ethical responsibility.
7. (g) an ability to communicate effectively: by oral, written and graphic modes.
8. (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. (i) a recognition of the need for, and an ability to engage in life-long learning.
10. (j) a knowledge of contemporary issues.
11. (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
12. (I) and an understanding of biology, human physiology, and chemistry as related to biomedical engineering needs.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

| First Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 INTEREGR 170 |  |$\quad 3$


|  | 13 | 16 |
| :---: | :---: | :---: |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| B M E $200{ }^{5}$ | 1 B M E 201 | 2 |
| MATH 234 | 4 MATH 320 or 319 | 3 |
| PHYSICS 202 or 208 ${ }^{\text {Med }}$ | 5 CHEM 345 or $327{ }^{4, \text { Med }}$ | 3 |
| Select one of the following options: | 5 Select one of the following options (recommended for premeds) or select from EPD 397 third year. | 5 |



## FOOTNOTES

Med-These courses are identified as requirements for most medical schools and are included within the 128 degree credits. Students not wishing to attend medical school may choose other listed options. Choosing other options (such as CHEM 103/CHEM 104 vs. CHEM 109 or E P D 397vs. ZOOLOGY/BIOLOGY/BOTANY 152) will affect the total number of credits.
Medical schools have varying requirements. Liberal electives, free electives, and zoology electives can often be used to satisfy these.
Check requirements early. For example, to prepare for the MCAT it is recommended that students take psychology and sociology. In addition, UW-Madison and others require an intermediate humanities or social science with an intensive writing component (Comm B). All these can be fulfilled within the liberal studies requirements and thus early planning starting freshman year is important. A good resource is: http://prehealth.wisc.edu/.
1 INTEREGR 170 Design Practicum is required only for students directly admitted to B M E as freshmen and counts toward the 48 engineering credits.
CHEM 103 General Chemistry I \& CHEM 104 General Chemistry II may be substituted for CHEM 109 Advanced General Chemistry. For this choice, the excess 4 credits are counted as free electives. Most medical schools require one year of basic chemistry. UWMadison's medical school (and others) accepts CHEM 109 as a fullyear equivalent.
If PHYSICS 201 General Physics is chosen instead of E M A 201 Statics, another engineering course from a degree-granting engineering program must be substituted for E M A 201 Statics. The excess 5 credits from PHYSICS 201 General Physics are counted as free elective credits. PHYSICS 207 General Physics-PHYSICS 208 General Physics may be used to substitute for PHYSICS 201 -PHYSICS 202.
4 CHEM 341 Elementary Organic Chemistry may be substituted by those students who are not interested in satisfying premed requirements and who expect to take only one semester of organic chemistry (CHEM 341 is not permitted as a prerequisite for CHEM 344 Introductory Organic Chemistry Laboratory/CHEM 345 Intermediate Organic Chemistry).
Either CHEM 344/CHEM 345 or CHEM 327 Fundamentals of Analytical Science (or CHEM 329 Fundamentals of Analytical Science) is required.
Premeds or students interested in biomaterials/ cellular/tissue engineering should choose to take CHEM 343, CHEM 344 and CHEM 345.
5 Students who are admitted late to the program and/or students who take part in another experience (such as co-op and/or study abroad) missing B M E 200 Biomedical Engineering Design, B M E 300, B M E 301, or B M E 402 may substitute for up to two of these course for the semester they are not in the program or at UW-Madison. Approved substitutions include: B M E 1 Cooperative Education Program 1 cr, engineering research credit, or any 200-level or above additional engineering technical elective lab experience.
For more information on the unique design sequence see: http:// bmedesign.engr.wisc.edu/about/.
Students very serious about medical school and learning about biology may select to apply for BIOCORE, a rigorous biology honors program:

- BIOCORE 381 Evolution, Ecology, and Genetics
- BIOCORE 382 Evolution, Ecology, and Genetics Laboratory
- BIOCORE 383 Cellular Biology
- BIOCORE 384 Cellular Biology Laboratory
- BIOCORE 485 Organismal Biology
- BIOCORE 486 Organismal Biology Laboratory

The BIOCORE courses have limited enrollment and students must be accepted into this program (applying as freshman). It is generally advisable to complete the entire sequence once it is started. Only BIOCORE 382 Evolution, Ecology, and Genetics Laboratory is not required and is not necessary to fulfill premed requirements; however, it is recommended as it has been helpful in understanding the BICORE lab process. If all the other BIOCORE courses are taken (a total of 16 cr ), this will replace the ZOOLOGY/BIOLOGY 101 Animal Biology and ZOOLOGY/BIOLOGY 102 Animal Biology Laboratory, the Advanced Life Science Elective, ANAT\&PHY 335 Physiology, and E P D 397 Technical Communication.

Bioinstrumentation, B M E 315 Biomechanics, B M E/PHM SCI 430 Biological Interactions with Materials, but they can be taken in any order. It is recommended that students take one in the track of interest first, or as early as possible.
ZOOLOGY/BIOLOGY/BOTANY 152 Introductory Biology, which satisfies Communication Part B, may be substituted for E P D 397 Technical Communication. For the Biocore program, BIOCORE 384 Cellular Biology Laboratory substitutes for E P D 397 Technical Communication.
Students interested in going to medical school should use this space/credits for BIOCHEM 501 Introduction to Biochemistry which is required for the MCAT.
It is recommended that students take statistics and/or computer
science in the freshman year for those needing additional core course options, or earlier for those not needing to fulfill pre-med requirements.

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## FACULTY

Williams (chair)
Ashton
Beebe
Block
Brace
Campagnola
Chesler
Gong
Huisken
Kreeger
Li
McClean
Masters
Meyerand
Murphy
Rogers
Saha
Skala
Thelen
Tompkins
Vanderby
Webster

## INSTRUCTIONAL STAFF AND FACULTY ASSOCIATES

Nimunkar
J. Puccinelli
T. Puccinelli

Suminski
Tyler
See also the BME Directory (http://directory.engr.wisc.edu/bme).

## ACCREDITATION

## Accreditation

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## CHEMICAL AND BIOLOGICAL ENGINEERING

Chemical engineers exploit advances in chemistry and biology to create new products, design chemical processes, develop energy resources, and protect the environment. Students receive a thorough grounding in chemistry, biology, mathematics and physics. With this broad scientific training, chemical engineers work effectively on a diverse set of problems involving chemical, physical, and biological phenomena. For example, chemical engineers develop environmentally benign and safe processes to make the chemical products that people depend on. They work in research and development laboratories, creating polymeric materials with improved performance and durability. They work in manufacturing, making vaccines and antibiotics. They invent new ways to keep our food and water supplies safe. Opportunities for chemical engineers span
numerous industries: pharmaceuticals, polymers, energy, food, consumer products, biotechnology, and electronic and optical materials. Graduates understand the needs of society, and use their training in science and technology to meet those needs.

The chemical engineering program develops the student's capability for invention and analysis of chemical processes and products. Students in the program take several classes in chemistry, along with courses in physics, mathematics, and biology. The curriculum provides a rigorous education in the fundamental chemical engineering sciences of thermodynamics, transport phenomena, and kinetics, as well as more applied areas such as materials science, biochemical engineering, or chemical process design. Because engineers must be skilled communicators, the curriculum places considerable emphasis on technical report writing, team projects, and formal and informal oral presentation. In addition, students broaden their understanding of people and society by taking several courses in the humanities and social sciences.

The B.S. program in chemical engineering leads to a wide variety of careers. Graduates are prepared for professional lives in industry, government, engineering design, or consulting companies. Graduates with a more practical, hands-on approach are employed in manufacturing support, process development, product development, design, construction, or technical sales. They rapidly advance to responsible technical supervisory and management positions. Graduates with a research interest work to improve understanding of scientific engineering principles, and to apply these principles to solve emerging problems. Entrepreneurial graduates work in smaller enterprises, or create their own businesses, developing the major industries of tomorrow. An undergraduate degree in chemical engineering provides a strong basis for advanced study in graduate school, or for further training in medicine, law, or policy.

## DEGREES/MAJORS/CERTIFICATES

- Chemical Engineering, B.S. (p. 242)


## PEOPLE

## PROFESSORS

Abbott
Dumesic
Graham
Huber
Klingenberg
Kuech
Lynn
Maravelias
Mavrikakis (chair)
Murphy
Palacek
Pfleger
Rawlings
Root
Shusta
Yin

## ASSOCIATE PROFESSORS

Reed

Swaney

## ASSISTANT PROFESSORS

Van Lehn
Zavala Tejada

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS

For information about scholarships, see Scholarships@UW-Madison (https://scholarships.wisc.edu/Scholarships).

## FACILITIES

Facilities available for instruction and research include:
Biochemical Process Lab Electrochemistry Lab
Plastics Lab
Process Dynamics and Control Lab
Research Labs
Transport Phenomena Lab
Unit Operations Lab
Biochemical Process Lab
Electrochemistry Lab
Plastics Lab Process
Dynamics and Control Lab
Research Labs
Transport Phenomena Lab
Unit Operations Lab

## CHEMICAL ENGINEERING, B.S.

Chemical engineers exploit advances in chemistry and biology to create new products, design chemical processes, develop energy resources, and protect the environment. Students receive a thorough grounding in chemistry, biology, mathematics and physics. With this broad scientific training, chemical engineers work effectively on a diverse set of problems involving chemical, physical, and biological phenomena. For example, chemical engineers develop environmentally benign and safe processes to make the chemical products that people depend on. They work in research and development laboratories, creating polymeric materials with improved performance and durability. They work in manufacturing, making vaccines and antibiotics. They invent new ways to keep our food and water supplies safe. Opportunities for chemical engineers span numerous industries: pharmaceuticals, polymers, energy, food, consumer products, biotechnology, and electronic and optical materials. Graduates understand the needs of society, and use their training in science and technology to meet those needs.

The chemical engineering program develops the student's capability for invention and analysis of chemical processes and products.
Students in the program take several classes in chemistry, along with courses in physics, mathematics, and biology. The curriculum provides a rigorous education in the fundamental chemical engineering sciences of thermodynamics, transport phenomena, and kinetics, as well as more applied areas such as materials science, biochemical engineering, or chemical process design. Because engineers must be skilled communicators, the curriculum places considerable emphasis on technical report writing, team projects, and formal and informal oral presentation. In addition, students broaden their understanding of people
and society by taking several courses in the humanities and social sciences.

The B.S. program in chemical engineering leads to a wide variety of careers. Graduates are prepared for professional lives in industry, government, engineering design, or consulting companies. Graduates with a more practical, hands-on approach are employed in manufacturing support, process development, product development, design, construction, or technical sales. They rapidly advance to responsible technical supervisory and management positions. Graduates with a research interest work to improve understanding of scientific engineering principles, and to apply these principles to solve emerging problems. Entrepreneurial graduates work in smaller enterprises, or create their own businesses, developing the major industries of tomorrow. An undergraduate degree in chemical engineering provides a strong basis for advanced study in graduate school, or for further training in medicine, law, or policy.

## CHEMICAL ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

The department recognizes that our graduates will choose to use the knowledge and skills they have acquired during their undergraduate years to pursue a wide variety of career and life goals and we encourage this diversity of paths.

Whatever path graduates choose, be it a job, graduate school, or volunteer service, be it in engineering or another field, we have for our graduates the following objectives:

1. That they will exhibit strong skills in problem-solving, leadership, teamwork, and communication;
2. That they will use these skills to contribute to their communities;
3. That they will make thoughtful, well-informed career choices; and
4. That they will demonstrate a continuing commitment to and interest in education (their own and others').

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their
intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.


## MATHEMATICS REQUIREMENT

Transfer students must have equivalent math courses to meet the calculus requirement with a minimum of 12 credits to cover the threecourse basic math sequence. Any deficiency in total math credits must be made up with electives in science or engineering.

| Code | Title C | Credits |
| :---: | :---: | :---: |
| MATH 221 <br> or MATH 217 <br> or MATH 275 | Calculus and Analytic Geometry 1 <br> Calculus with Algebra and Trigonometry II Topics in Calculus I | 5 |
| MATH 222 or MATH 276 | Calculus and Analytic Geometry 2 Topics in Calculus II | 4 |
| MATH 234 | Calculus--Functions of Several Variables | 4 |
| MATH 320 or MATH 319 | Linear Algebra and Differential Equations <br> Techniques in Ordinary Differential Equations | 3 |
| STAT 324 | Introductory Applied Statistics for Engineers | 3 |

## Total Credits

## PHYSICS REQUIREMENT

Transfer students who receive fewer than 6 credits for the required courses must make up the credit shortage with another physics course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHYSICS 201 | General Physics | 5 |
| or PHYSICS 207 | General Physics | 5 |
| PHYSICS 202 | General Physics |  |
| or PHYSICS 208 | General Physics |  |

Total Credits

## CHEMISTRY REQUIREMENT

Credit shortages cause by transfer of freshman chemistry courses at fewer than 9 credits must be made up with chemistry, biochemistry, or chemical engineering courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| General Chemistry (choose one) | 5 |  |
| CHEM 109 | Advanced General Chemistry <br> ((preferred)) |  |
| CHEM 103 | General Chemistry I |  |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 329 | Fundamentals of Analytical Science | 4 |
| CHEM 343 | Introductory Organic Chemistry <br> \& CHEM 345 <br> \& CHEM 344 | and Introductory Organic Chemistry <br> Laboratory |
| CHEM 562 | Physical Chemistry | 8 |
| Total Credits |  | 3 |

## LIFE SCIENCE

Students who meet the Introductory Biology requirement with an AP exam are encouraged to take two advanced biology electives. ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| Introductory Biology requirement (choose one) |  | 3 |
| ZOOLOGY 153 | Introductory Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY/ } \\ & \text { BOTANY } 151 \end{aligned}$ | Introductory Biology |  |
| Advanced Biology requirement (choose one) |  | 3 |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BIOCHEM 507 | General Biochemistry I |  |
| ZOOLOGY 570 | Cell Biology |  |
| GENETICS 466 | Principles of Genetics |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| Total Credits |  | 6 |
| 1 BIOCORE 381 Evolution, Ecology, and Genetics and BIOCORE 383 Cellular Biology may be used to satisfy the Life Sciences Requirements. |  |  |

## CORE ENGINEERING REQUIREMENT

| Code | Title | Credits |
| :--- | :--- | ---: |
| CBE 250 | Process Synthesis | 3 |
| Introduction to Engineering | 1 |  |
| CBE 255 | Introduction to Chemical Process | 3 |
|  | Modeling | 3 |
| CBE 310 | Chemical Process Thermodynamics | 3 |
| CBE 311 | Thermodynamics of Mixtures | 3 |


| CBE/B M E 320 | Introductory Transport Phenomena | 4 |
| :---: | :---: | :---: |
| CBE 324 | Transport Phenomena Lab | 3 |
| CBE 326 | Momentum and Heat Transfer Operations | 3 |
| CBE 424 | Operations and Process Laboratory | 5 |
| CBE 426 | Mass Transfer Operations | 3 |
| CBE 430 | Chemical Kinetics and Reactor Design | 3 |
| Select one of the following: |  | 3 |
| CBE 440 | Chemical Engineering Materials |  |
| CBE 540 | Polymer Science and Technology |  |
| CBE/E C E/ <br> M S \& E 544 | Processing of Electronic Materials |  |
| CBE 547 | Introduction to Colloid and Interface Science |  |
| CBE 450 | Process Design | 3 |
| CBE 470 | Process Dynamics and Control | 3 |
| CBE Electives ${ }^{2}$ |  | 6 |
| Total Credits |  | 49 |

2 Chemical engineering electives may be chosen from any of the chemical engineering courses that are not required, with the exception of CBE/CHEM/E M A/M E 425 Undergraduate Rheology Seminar. A maximum of 2 credits of co-op work (CBE 1 Cooperative Education Program) may be applied to meet the CBE elective requirement. BSE/FOOD SCI 542 Food Engineering Operations and BSE/FOOD SCI 642 Food and Pharmaceutical Separations can be taken as CBE elective courses. Qualified undergraduates may take graduate-level (600 or 700) courses to fulfill this requirement. Engineering elective courses are to be selected from the College of Engineering (preferably outside chemical engineering). At least 1 of the 3 credits must be obtained from a list of approved courses in the CBE Curriculum Guide that carry engineering topics credits. A maximum of 6 credits of CBE 599 Special Problems and/or CBE 699 Advanced Independent Studies may be used to satisfy the 9-credit sequence of CBE and engineering elective courses.

## PROFESSIONAL BREADTH

Select 6 credits
Code Title

Professional Breadth Credits ${ }^{3}$ | Credits |
| ---: |
| Courses $300+$ from the following College of Engineering |
| departments and programs may be used: |
| Biomedical Engineering |
| Civil and Environmental Engineering |
| Electrical and Computer Engineering |
| Engineering Mechanics and Astronautics |
| Engineering Professional Development (200 level and |
| higher) |
| Geological Engineering |
| Industrial Engineering |
| Interdisciplinary Courses (200 level and higher) |
| Materials Science and Engineering 4 |
| Mechanical Engineering |
| Nuclear Engineering |

## Engineering Physics

Courses 300+ from the following departments in the College
of Letters and Sciences may be used:
Chemistry
Computer Sciences
Math
Physics
The following courses may also be used:

| ACCT IS 300 | Accounting Principles |
| :--- | :--- |
| MICROBIO 303 | Biology of Microorganisms |
| BIOCHEM 501 | Introduction to Biochemistry |
| BIOCHEM 507 | General Biochemistry I |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| BIOCORE 383 | Cellular Biology |
| BSE/ | Food and Pharmaceutical |
| FOOD SCI 642 | Separations |
| ECON/A A E/ | Environmental Economics |
| ENVIR ST 343 |  |
| ENVIR ST/ | Environmental Ethics |
| PHILOS 441 |  |
| FINANCE/ | Introduction to Finance |
| ECON 300 |  |
| GENETICS 466 | Principles of Genetics |
| HIST SCI 337 | History of Technology |
| STAT/M E 424 | Statistical Experimental Design |
| ZOOLOGY 570 | Cell Biology |
| Total Credits |  |

Students may petition the department to allow other courses related to engineering professional practice. To request that a course not listed above be used, the student should fill out the Professional Breadth Requirement Course Request form available online and submit it to the advisor. The department will then determine if the course can be counted toward the Professional Breadth Requirement. Petitions must be submitted before the beginning of the semester in which the course is to be taken.

3 The objective of this requirement is to provide students with skills to interact with professionals from other disciplines. Suitable courses for this requirement include courses in engineering (excluding CBE) and science, as well as a variety of other disciplines.
4 Full degree credit is not allowed if a student takes both CBE 440 Chemical Engineering Materials and M S \& E 350 Introduction to Materials Science. In this case M S \& E 350 will be awarded only 1 degree credit.

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENGL 100 | Introduction to College Composition 5 | 3 |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or LSC 100 | Science and Storytelling |  |
| or ESL 118 | Academic Writing II |  |
| E P D 397 | Technical Communication | 3 |
| 5 For Part A of the cr) students mus | General Education Communication R select one course with an "a" design | ent (2 <br> " g " of |

the "geBLC" information in the Course Guide. Some students will be exempt from this requirement based on their placement test scores or advanced placement in English.
CBE 424 Operations and Process Laboratory satisfies Part B of the General Education Communication Skills Requirement.

## LIBERAL STUDIES ELECTIVES

Students must complete 16 credits of liberal studies according to the College of Engineering requirements ${ }^{6}$.

6

1. Liberal studies elective courses must be classified as either Humanities, Social Studies, or Literature courses (identified by the letters $\mathrm{H}, \mathrm{S}, \mathrm{L}$, or Z in " B " of the "geBLC" information in the Course Guide). At least 6 credits must have a breadth designation of Humanities ( $H, L$, or $Z$ ), and at least 3 credits must have a designation of Social Studies (S or Z). Foreign language courses count as H credits.
2. A 3-credit ethnic studies course must be selected from the College of Letters \& Science. Acceptable courses are identified by the letter "e" in the Course Guide. If appropriate, the ethnic studies course may be among those used to satisfy the concentration requirement. 3. Retroactive credits may be awarded for foreign-language work done in high school. The following conditions apply:

- A university-level foreign language course must be taken before the student has earned 30 college credits in residence.
- Retroactive Language Credit Request Form must be completed and submitted to the language instructor during the first two weeks of class.
- The student must earn a B or better in this course.
- Such credits do not count toward the 16 liberal-studies credits required. They may, however, be used to satisfy the concentration and depth requirements stated in item 2 above and count as degree credits.

4. English composition courses, English as a second language courses, and basic communications arts courses are not accepted as liberal studies electives.

## FREE ELECTIVES

Students can choose any combination of courses totaling 2 credits $^{7}$.
Students who satisfy the Communications Part A requirement by examination will have an additional 2 credits of free electives. Transfer students who receive fewer transfer credits for a required course than are given for the same course on the UW-Madison campus must increase their free elective credits to meet the minimum 133 total credit requirement for the chemical engineering degree.

## COURSE SUBSTITUTION REGULATIONS

1. Any student may, with advisor approval, replace up to 12 credits of required courses in the curriculum, except CBE 424 Operations and Process Laboratory, by an equal number of credits of other courses within the limitations listed under (3) below.
2. Any student who wishes to amend the curriculum by more than 12 credits or wishes to appeal the advisor's decision in (1) or to request exception to (3) below must submit a written request to the chair of the department, who will bring it to the department faculty for consideration.
3. Restrictions on course substitutions are as follows:
a. Physics course may be replaced by science or engineering courses.
b. Chemistry/life science courses must be replaced by courses with significant chemistry/life science content.
c. Engineering courses must be replaced by engineering courses.
d. Lab courses must be replaced by courses with an equal number of hours of lab courses.
e. English as a second language courses, and MATH 112, MATH 113 and MATH 114 may not be used for course substitutions.

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college }\end{array}
$$ <br>
or department advisor for information on specific credit <br>

requirements.\end{array}\right\}\)| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| :--- | :--- |
| Quality of | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  | | Undergraduate students must maintain the minimum |
| :--- |
| grade point average specified by the school, college, or |
| academic program to remain in good academic standing. |

## LEARNING OUTCOMES

1. (a) an ability to apply knowledge of mathematics, science, and engineering.
2. (b) an ability to design and conduct experiments, as well as to analyze and interpret data.
3. (c) an ability to design a system, component, or process to meet desired needs within realistic constraints.
4. (d) an ability to function on multi-disciplinary teams.
5. (e) an ability to identify, formulate, and solve engineering problems.
6. (f) an understanding of professional and ethical responsibility.
7. (g) an ability to communicate effectively.
8. (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. (i) a recognition of the need for, and an ability to engage in life-long learning.
10. (j) a knowledge of contemporary issues.
11. (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
12. (I) ability with engineering application of the basic sciences to the design, analysis, and control of chemical, physical, and biological processes, including the hazards associated with these processes.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

| First Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| CHEM 109 | 5 CHEM 329 | 4 |
| MATH 221 | 5 MATH 222 | 4 |
| Introduction to Engineering | 1 PHYSICS 201 | 5 |
| Communication <br> A | s 3 Liberal Studies Elective | 3 |
| Elective |  |  |
|  | 17 | 16 |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| CBE $250{ }^{1}$ | 3 CBE 255 | 3 |
| CHEM $343^{2}$ | 3 MATH 320 or 319 | 3 |
| MATH 234 | 4 CBE 310 | 3 |
| PHYSICS 202 | 5 CHEM 345 <br> \& CHEM 344 | 5 |
| ZOOLOGY 153 | 3 STAT 324 | 3 |
|  | 18 | 17 |


| Third Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall | Credits Spring | Credits |  |
| CBE 311 | 3 CBE 326 | 3 |  |
| $\begin{aligned} & \text { CBE/ } \\ & \text { B M E } 320^{1} \end{aligned}$ | 4 CBE 324 | 3 |  |
| Professional Breadth Elective | 3 CHEM 562 | 3 |  |
| Advanced Biology Elective | 3 Professional Breadth Elective | 3 |  |
| E P D 397 | 3 Liberal Studies Elective | 3 |  |
|  | 16 | 15 |  |
| Fourth Year |  |  |  |
| Fall | Credits Spring | Credits Summer | Credits |
| CBE 426 | 3 CBE 450 | 3 CBE 424 | 5 |
| CBE 430 | 3 CBE 470 | 3 |  |
| CBE Elective | 3 CBE Elective | 3 |  |
| Materials Elective | 3 Liberal Studies Elective | 3 |  |
| Elective |  |  |  |
|  | 15 | 14 | 5 |

Total Credits 133
1 CBE 250 Process Synthesis and CBE/B M E 320 Introductory Transport Phenomena both require a grade of $C$ or better.

2 CHEM 343 Introductory Organic Chemistry requires a grade of C or better.

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

## Abbott

Dumesic
Graham
Huber
Klingenberg
Kuech
Lynn
Maravelias
Mavrikakis (chair)
Murphy
Palacek
Pfleger
Rawlings
Root
Shusta
Yin
ASSOCIATE PROFESSORS
Reed
Swaney

## ASSISTANT PROFESSORS

Van Lehn
Zavala Tejada

ACCREDITATION<br>ACCREDITATION<br>ABET (http://www.abet.org)<br>Accreditation status: Accredited. Next accreditation review: 2018-2019.

## CIVIL AND ENVIRONMENTAL ENGINEERING

The Department of Civil and Environmental Engineering offers an ABETaccredited B.S. degree in civil engineering and M.S. and Ph.D. degrees in civil and environmental engineering. The B.S. degree in civil engineering may be accompanied by an option in environmental engineering, fluid systems engineering, or in construction engineering and management.

Civil engineers have been and still are the builders of our world, involved in the planning of our cities, communities, and larger regional areas. They are responsible for the conception, design, and construction of public works such as highways, streets, bridges, drinking water distribution systems, wastewater collection systems, drinking water and wastewater treatment plants, stormwater management systems, dams, reservoirs, power production, navigation and recreation, as well as the buildings, theaters, stadiums, factories and airports in which we live, work, and play.

The environment has long been the province and concern of civil engineers. Thus, civil engineers are continuously responding to society's ecological and environmental problems by joining with other engineers, as well as with physical, biological, chemical, and social scientists, to protect our natural resources and to create a sustainable physical and social environment for all people. Civil engineers are aware of the complexities of these problems and that they cannot merely focus on building and construction; they must understand the impact of engineering designs on society and the environment, and be prepared to play a vital role on interdisciplinary environmental teams.

The Department of Civil and Environmental Engineering offers a curriculum that provides a balanced program of technical and nontechnical courses to meet the needs of students interested in studying civil and environmental engineering. The curriculum includes basic courses in mathematics, chemistry, physics, biology, earth sciences, engineering sciences, as well as the fundamentals of civil engineering in the areas of structural engineering, geotechnical engineering, construction engineering and management, transportation engineering, land information and surveying, water resources engineering and environmental engineering. Students may then choose elective courses in multiple areas or specialize in one or more areas of interest. Also, the department cooperates with interdisciplinary programs at both the undergraduate and graduate levels, including business, environmental studies, water resources management, oceanography and limnology, land resources, environmental monitoring, geological engineering, and environmental chemistry and technology.

In view of the increasing demands of modern technology, the traditional undergraduate curriculum can only offer the fundamentals of civil and environmental engineering to the student. Qualified undergraduates are encouraged to pursue the civil and environmental engineering master's degree program as a means of incorporating additional courses on engineering analysis, design, and synthesis into their academic
studies. The undergraduate degree is also sufficiently broad to prepare students for advanced degrees in other fields such as law, medicine, public health, and business.

## DEGREES/MAJORS/CERTIFICATES

- Civil Engineering, B.S. (p. 249)
- Geological Engineering, B.S. (p. 256)


## PEOPLE

## PROFESSORS

Noyce (chair)
Adams
Bahia
Cramer
Hanna
Harrington
Likos
Mcmahon
Noguera
Park
Parra-Montesinos
Ran
Russell
Schauer
Wu

## ASSOCIATE PROFESSORS

Ahn
Fratta
Hurley
Loheide
Pincheira

## ASSISTANT PROFESSORS

Block
Ginder-Vogel
Hedegaard
Hicks
Prabhakar
Remucal
Sone
Wright

## RESOURCES AND SCHOLARSHIPS

## FACILITIES

Facilities available include modern and fully equipped laboratories for instruction and research in the following areas:

Environmental Engineering
Fluid Mechanics
Geoengineering
Hydraulics
Data Acquisition and Analysis
Structures and Materials Testing
Transportation Engineering

Environmental Chemistry and Technology

## CIVIL ENGINEERING, B.S.

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Civil engineers have been and still are the builders of our world, involved in the planning of our cities, communities, and larger regional areas. They are responsible for the conception, design, and construction of public works such as highways, streets, bridges, drinking water distribution systems, wastewater collection systems, drinking water and wastewater treatment plants, stormwater management systems, dams, reservoirs, power production, navigation and recreation, as well as the buildings, theaters, stadiums, factories and airports in which we live, work, and play.

The environment has long been the province and concern of civil engineers. Thus, civil engineers are continuously responding to society's ecological and environmental problems by joining with other engineers, as well as with physical, biological, chemical, and social scientists, to protect our natural resources and to create a sustainable physical and social environment for all people. Civil engineers are aware of the complexities of these problems and that they cannot merely focus on building and construction; they must understand the impact of engineering designs on society and the environment, and be prepared to play a vital role on interdisciplinary environmental teams.

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In view of the increasing demands of modern technology, the traditional undergraduate curriculum can only offer the fundamentals of civil and environmental engineering to the student. Qualified undergraduates are encouraged to pursue the civil and environmental engineering master's degree program as a means of incorporating additional courses on engineering analysis, design, and synthesis into their academic studies. The undergraduate degree is also sufficiently broad to prepare students for advanced degrees in other fields such as law, medicine, public health, and business.

## CIVIL ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

Prepare BSCE graduates to contribute to their communities through the following career and professional accomplishments:

1. Design and construct both natural and built processes and systems to meet determined needs using technical knowledge; computer tools; design principles; and communication, leadership, and team skills.
2. Utilize measurement and analysis tools along with experimental data in investigating natural and built systems.
3. Understand and incorporate economic, environmental, political, social, safety and global considerations in design, investigation and construction of natural and built systems.
4. Maintain analysis and design tools and experience through life-ong learning and serve others through participation in professional and/or civic activities and responsibilities.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SUMMARY OF REQUIREMENTS

The following curriculum applies to students who were admitted to the civil engineering degree program (classification changed to CEE) in fall 2016 or later.

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Introduction to Engineering | 2 |
| Mathematics and Statistics | 19 |
| Basic Science | 16 |
| Engineering Mechanics | 10 |
| Civil Engineering Mechanics | 6 |
| Civil Engineering Tools | 6 |

Civil Engineering Breadth ..... 23
Civil Engineering Design ..... 10
Civil Engineering Electives ..... 12
Communications ..... 8
Liberal Studies ..... 16
Total Credits ..... 128
INTRODUCTION TO ENGINEERING

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTEREGR 170 | Design Practicum | 3 |
| Total Credits |  | 3 |

MATHEMATICS AND STATISTICS REQUIREMENT

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 221 <br> or MATH 217 <br> or MATH 275 | Calculus and Analytic Geometry 1 <br> Calculus with Algebra and Trigonometry II Topics in Calculus I | 5 |
| MATH 222 or MATH 276 | Calculus and Analytic Geometry 2 Topics in Calculus II | 4 |
| MATH 234 | Calculus--Functions of Several Variables | 4 |
| One of the following courses: |  | 3 |
| STAT 324 | Introductory Applied Statistics for Engineers |  |
| STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I |  |
| One of the following advanced mathematics courses: |  | 3 |
| MATH 319 | Techniques in Ordinary Differential Equations |  |
| MATH 320 | Linear Algebra and Differential Equations |  |

## Total Credits

## BASIC SCIENCE REQUIREMENT

| Code | Title | Credits |
| :---: | :---: | :---: |
| One of the following: |  | 5 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| One of the following: |  | 5 |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| One of the following: |  | 3 |
| GEOSCI 100 | Introductory Geology: How the Earth Works |  |
| GEOSCI/ <br> ENVIR ST 106 | Environmental Geology |  |
| One of the following: |  | 3 |
| ZOOLOGY/ BIOLOGY/ BOTANY 151 | Introductory Biology |  |
| ZOOLOGY 153 | Introductory Biology |  |


| ZOOLOGY/ <br> BOTANY/ <br> ENVIR ST 260 | Introductory Ecology |  |
| :--- | :--- | ---: |
| MICROBIO 101 | General Microbiology |  |
| Total Credits |  | 16 |
| ENGINEERING MECHANICS REQUIREMENT |  |  |
| Code Title | Credits |  |
| E M A 201 | Statics | 3 |
| E M A 202 | Dynamics | 3 |
| or M E 240 | Dynamics |  |
| E M A 303 | Mechanics of Materials |  |
| or M E 306 | Mechanics of Materials | 3 |
| E M A/M E 307 | Mechanics of Materials Lab |  |
| Total Credits |  | 1 |

$\begin{array}{lll}\text { CIVIL ENGINEERING MECHANICS REQUIREMENT } \\ \text { Tode } & \text { Title } & \\ \text { Credits }\end{array}$

| CIV ENGR 310 | Fluid Mechanics | 3 |
| :--- | :--- | :--- |
| CIV ENGR/E M A | 395 Materials for Constructed Facilities | 3 |
| Total Credits | 6 |  |

CIVIL ENGINEERING TOOLS REQUIREMENT

| Code | Title | Credits |
| :--- | :--- | ---: |
| M E 170 | Civil Engineering Graphics | 2 |
| or M E 231 | Introductory Engineering Graphics |  |
| CIV ENGR 251 | Engineering Spatial Measurements | 2 |
| CIV ENGR/G LE 291 | Problem Solving Using Computer <br>  <br>  <br> Tools | 3 |
| Total Credits |  | 7 |


| CIVIL ENGINEERING BREADTH REQUIREMENT |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR/G LE | 330 | Soil Mechanics |
| CIV ENGR 340 | Structural Analysis I | 4 |
| CIV ENGR 370 | Transportation Engineering | 4 |
| CIV ENGR 494 | Civil and Environmental Engineering | 3 |
|  | Decision Making | 3 |
| CIV ENGR 498 | Construction Project Management | 3 |
| Total Credits |  | 23 |

## CIVIL ENGINEERING DESIGN REQUIREMENT

| Code | Title | Credits |
| :---: | :---: | :---: |
| CIV ENGR 578 | Senior Capstone Design | 4 |
| Every student must take at least one class in at least two of the following CEE disciplines, for a total of 6 credits. One of the two classes MUST be completed BEFORE taking CIV ENGR 578 Senior Capstone Design. |  | 6 |
| Water Resources |  |  |
| CIV ENGR 414 | Hydrologic Design |  |


| CIV ENGR 426 | Design of Wastewater Treatment Plants |  |
| :---: | :---: | :---: |
| CIV ENGR 427 | Solid and Hazardous Wastes Engineering |  |
| CIV ENGR 428 | Water Treatment Plant Design |  |
| CIV ENGR 522 | Hazardous Waste Management |  |
| Structural |  |  |
| CIV ENGR 442 | Wood Structures I |  |
| CIV ENGR 445 | Steel Structures I |  |
| CIV ENGR 447 | Concrete Structures I |  |
| CIV ENGR 641 | Highway Bridges |  |
| Geological |  |  |
| CIV ENGR/ <br> GLE 530 | Seepage and Slopes |  |
| CIV ENGR/ <br> GLE 531 | Retaining Structures |  |
| CIV ENGR/ <br> GLE 532 | Foundations |  |
| Transportation |  |  |
| CIV ENGR 573 | Geometric Design of Transport Facilities |  |
| CIV ENGR 574 | Traffic Control |  |
| CIV ENGR 576 | Advanced Pavement Design |  |
| Note: If a student takes three or more courses from the above list, two of those courses will count toward this civil engineering design requirement and the other classes will count towards the electives requirement (see section below). |  |  |
| Total Credits |  | 10 |

## ENGINEERING ELECTIVES REQUIREMENT

1. Students must take at least 3 credits of coursework from an ABETaccredited degree-granting program outside of the Bachelor of Science in Civil Engineering program. InterEGR and E P D courses do not qualify for meeting this requirement; any courses cross-listed with Civil Engineering (CIV ENGR) do not qualify for meeting this requirement.
2. Students must take at least 3 credits of CEE coursework in addition to the civil engineering design requirement. Note: Students in the Construction Engineering Management or Environmental option programs must select from a set of CIV ENGR courses approved for those options. ${ }^{1,2}$
3. Students must take at least 6 credits of coursework that meets at least one of the following ${ }^{1,2}$ :
a. Any course offered by an engineering department, including but not limited to CIV ENGR.
b. Any Intermediate or Advanced level course with a breadth designation of Biological Sciences, Physical Sciences and/or Natural Sciences. These courses cannot also carry a breadth designation of Social Sciences, Humanities or Literature.
c. Any of the following business courses: ACCT I S 300 Accounting Principles, FINANCE/ECON 300 Introduction to Finance, GEN BUS 301 Business Law, M H R 300 Managing Organizations, REAL EST/A A E/ECON/URB R PL 306 The Real Estate Process

Total Credits: 12

1 Up to three credits of CIV ENGR 1 Cooperative Education Program may be used towards Item 2 or 3.
2 Up to six credits of research work (CIV ENGR 299 Independent Study, CIV ENGR 489 Honors in Research and/or CIV ENGR 699 Independent Study) may be used towards Item 2 or 3.

| COMMUNICATIONS |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Communications A (choose one) |  | 3 |
| ENGL 100 | Introduction to College Composition |  |
| LSC 100 | Science and Storytelling |  |
| COM ARTS 100 | Introduction to Speech Composition |  |
| ESL 118 | Academic Writing II |  |
| Speech-Related Course (choose one) |  | 2 |
| E P D 275 | Technical Presentations |  |
| COM ARTS 105 | Public Speaking |  |
| COM ARTS 181 | Elements of Speech-Honors Course |  |
| COM ARTS 262 | Theory and Practice of Argumentation and Debate |  |
| COM ARTS 266 | Theory and Practice of Group Discussion |  |
| Writing-Related Courses (choose one) |  | 3 |
| E P D 397 | Technical Communication |  |
| ENGL 201 | Intermediate Composition |  |
| ENGL 315 | English Phonology |  |
| Total Credits |  | 8 |

## LIBERAL STUDIES REQUIREMENTS

Code Title Credits

## College of Engineering Liberal Studies Requirements

Complete Requirements (p. 229) ${ }^{1}$

## Requirements specific to Civil Engineering:

An economics course must be selected from the following
list:

| ECON 101 | Principles of Microeconomics |
| :--- | :--- |
| ECON 102 | Principles of Macroeconomics |
| ECON 111 | Principles of Economics- |
|  | Accelerated Treatment |

A minimum of three credits of environmental studies course
that meets the breadth designations of humanities, literature,
and/or social science. Courses that also carry breadth designations of Biological Sciences, Natural Sciences, or Physical Sciences will not count towards this requirement.

## Total Credits

1 All liberal studies credits must be identified with the letter H, S, L, or Z. Language courses are acceptable without the letter and are considered humanities. An economics elective and an environmental studies elective are required.
Note: See a CEE advisor and/or the CEE Curriculum Guide (https:// www.engr.wisc.edu/department/civil-environmental-engineering/ academics/bs-civil-engineering) for additional information.

## NAMED OPTIONS

- Civil Engineering: Construction Engineering and Management (p. 254)
- Civil Engineering: Environmental Engineering (p. 254)


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (a) An ability to apply knowledge of mathematics, science, and engineering.
2. (b) An ability to design and conduct experiments, as well as to analyze and interpret data.
3. (c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. (d) An ability to function on multidisciplinary teams.
5. (e) An ability to identify, formulate, and solve engineering problems.
6. (f) An understanding of professional and ethical responsibility.
7. (g) An ability to communicate effectively.
8. (h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. (i) A recognition of the need for, and an ability to engage in life-long learning.
10. (j) A knowledge of contemporary issues.
11. (k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
12. (I) An ability to explain basic concepts in management, business, public policy, and leadership.
13. (m) An ability to explain the importance of professional licensure.
14. ( $n$ ) An ability to understand common failure mechanisms of a component, process, or system and their causes and prevention.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

| First Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 MATH 222 | 4 |
| CHEM 109 | 5 E M A 201 | 3 |
| INTEREGR 170 | 3 M E 170 or 231 | 2 |
| COMMUNICATIONS A | 3 EP D 275 | 2 |
|  | LIBERAL STUDIES | 3 |
|  | BIOLOGY ELECTIVE | 3 |
| 16 |  |  |

## Second Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 234 | 4 MATH 319 or 320 | 3 |
| E M A 202 | 3 E M A 303 or M E 306 | 3 |
| CIV ENGR 320 | 3 E M A/M E 307 | 1 |
| GEOSCI 100 or 106 | 3 Engineering Spatial Measurements ${ }^{1}$ | 2 |
| STAT 324 or 311 | 3 Problem Solving Using Computer Tools ${ }^{1}$ | 2 |
|  | CIV ENGR 310 | 3 |
|  | CIV ENGR 370 | 3 |
|  | 16 | 17 |


| Third Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| CIV ENGR 311 | 3 CIV ENGR/G L E 330 | 4 |
| CIV ENGR 340 | 4 CIV ENGR/E M A 395 | 3 |
| PHYSICS 202 or 208 | 5 CIV ENGR 494 | 3 |
| ECON 101, 102, or 111 | 4 CIV ENGR DESIGN ELECTIVE | 3 |
|  | ETHNIC STUDIES | 3 |
|  | 16 | 16 |


| Fourth Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| CIV ENGR DESIGN ELECTIVE | 3 CIV ENGR 578 | 4 |
| CIV ENGR ELECTIVE | 3 APPLIED ENGR ELECTIVE | 3 |
| CIV ENGR ELECTIVE | 1 APPLIED ENGR ELECTIVE | 3 |
| ENGR OUTSIDE OF CIV ENGR | 3 LIBERAL STUDIES | 3 |
| CIV ENGR 498 | 3 ENV STUDIES ELECTIVE | 3 |
| EP D 397 | 3 |  |
|  | 16 | 16 |

[^11]1 Civil Engineering course numbers to be determined. Until courses are established, CIV ENGR/G L E 291 Problem Solving Using Computer Tools meets both requirements.

## ADVIIING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

Noyce (chair)
Adams
Bahia
Cramer
Hanna
Harrington
Likos
Mcmahon
Noguera
Park
Parra-Montesinos
Ran
Russell
Schauer
Wu
ASSOCIATE PROFESSORS
Ahn
Fratta
Hurley
Loheide
Pincheira

## ASSISTANT PROFESSORS

Block
Ginder-Vogel
Hedegaard
Hicks

Prabhakar
Remucal
Sone
Wright

## ACCREDITATION

## ACCREDITATION

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## CIVIL ENGINEERING: CONSTRUCTION ENGINEERING AND MANAGEMENT

The Department of Civil and Environmental Engineering offers an undergraduate option in construction engineering and management. Students taking the CEM option will earn an ABET-accredited B.S. degree in civil engineering. The transcript and graduate certificate will indicate the CEM option.

Students pursuing the CEM option take the same core courses in mathematics, natural sciences, engineering, communications, and liberal studies as do the other civil engineering students. The applied engineering requirements within the CEM curriculum differ from those of CEE in that students are required to complete courses in construction management and courses in the School of Business. Students must also complete two 1-credit co-op or internship experiences. The total number of credits required for the CEM option is 131 instead of 128 .

## REQUIREMENTS

NOTE: These requirements for applied engineering are not applicable to the general civil (CEE) or environmental engineering (EV).

| Code | Title |
| :--- | ---: |
| Civil \& Environmental Engineering Courses | Credits |
| Business Courses | 21 |
| Total Credits | 6 |

## REQUIREMENTS

Code Title Credits

Choose one:

| CIV ENGR 445 | Steel Structures I |  |
| :--- | :--- | :--- |
| CIV ENGR 447 | Concrete Structures I |  |
| Must take: |  | 4 |
| CIV ENGR 578 | Senior Capstone Design ${ }^{1}$ | 3 |
| Select one of the following: |  |  |

CIV ENGR 392 Building Information Modeling $(\text { BIM })^{2}$
CIV ENGR 414 Hydrologic Design
CIV ENGR 426 Design of Wastewater Treatment Plants

| CIV ENGR 427 | Solid and Hazardous Wastes Engineering |  |
| :---: | :---: | :---: |
| CIV ENGR 428 | Water Treatment Plant Design |  |
| CIV ENGR 442 | Wood Structures I |  |
| CIV ENGR 522 | Hazardous Waste Management |  |
| $\begin{aligned} & \text { CIV ENGR/ } \\ & \text { GLE } 530 \end{aligned}$ | Seepage and Slopes |  |
| CIV ENGR/ <br> GLE 531 | Retaining Structures |  |
| CIV ENGR/ <br> GLE 532 | Foundations |  |
| CIV ENGR 573 | Geometric Design of Transport Facilities |  |
| CIV ENGR 574 | Traffic Control |  |
| CIV ENGR 576 | Advanced Pavement Design |  |
| CIV ENGR 641 | Highway Bridges |  |
| CIV ENGR/BSE 491 | Legal Aspects of Engineering | 3 |
| CIV ENGR 492 | Integrated Project Estimating and Scheduling | 3 |
| Students must take two 1-credit co-ops or internships. A summer internship equals 1 credit; a co-op equals 1 credit. |  | 2 |
| Select one of the following: |  | 3 |
| CIV ENGR 496 | Electrical Systems for Construction |  |
| CIV ENGR 497 | Mechanical Systems for Construction |  |
| Select two of the following: |  | 6 |
| ACCT I S 300 | Accounting Principles |  |
| FINANCE/ <br> ECON 300 | Introduction to Finance |  |
| M H R 300 | Managing Organizations |  |
| REAL EST/ <br> A A E/ECON/ <br> URB R PL 306 | The Real Estate Process |  |
| REAL EST 611 | Residential Property Development |  |
| Total Credits |  | 27 |

1 Must complete both CIV ENGR 445 and CIV ENGR 447 before taking.
2 This course is only available for CM option students.

## CIVIL ENGINEERING: ENVIRONMENTAL ENGINEERING

The Department of Civil and Environmental Engineering offers an undergraduate option in environmental engineering. Students taking the environmental engineering option will earn an ABET-accredited B.S. degree in civil engineering. The transcript and graduate certificate will indicate the environmental engineering option.

Students pursuing the environmental engineering option take the same core courses in mathematics, natural sciences, engineering, communications, and liberal studies as do the other civil engineering students. The applied engineering requirements within the environmental engineering curriculum differ from those of CEE in that students are required to complete several courses with an emphasis in water resources, environmental fluid mechanics, environmental chemistry
and biotechnology, water and wastewater treatment, geoenvironmental and hazardous wastes engineering, air pollution control engineering, or occupational health engineering.

## REQUIREMENTS

Total Credits: 22

| CIVIL ENGINEERING DESIGN REQUIREMENT |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| CIV ENGR 578 | Senior Capstone Design | 4 |
| Every student must take at least one course in the environmental discipline and another course in a different discipline, for a total of 6 credits. One of the two courses MUST be completed BEFORE taking CIV ENGR 578 Senior Capstone Design. |  | 6 |
| Water Resources |  |  |
| CIV ENGR 414 | Hydrologic Design |  |
| Environmental |  |  |
| CIV ENGR 426 | Design of Wastewater Treatment Plants |  |
| CIV ENGR 427 | Solid and Hazardous Wastes Engineering |  |
| CIV ENGR 428 | Water Treatment Plant Design |  |
| CIV ENGR 522 | Hazardous Waste Management |  |
| Structural |  |  |
| CIV ENGR 442 | Wood Structures I |  |
| CIV ENGR 445 | Steel Structures I |  |
| CIV ENGR 447 | Concrete Structures I |  |
| CIV ENGR 641 | Highway Bridges |  |
| Geological |  |  |
| CIV ENGR/ <br> GLE 530 | Seepage and Slopes |  |
| CIV ENGR/ <br> GLE 531 | Retaining Structures |  |
| CIV ENGR/ <br> GLE 532 | Foundations |  |
| Transportation |  |  |
| CIV ENGR 573 | Geometric Design of Transport Facilities |  |
| CIV ENGR 574 | Traffic Control |  |
| CIV ENGR 576 | Advanced Pavement Design |  |

Note: If a student takes three or more courses from the above list, two of those courses will count toward this civil engineering design requirement and the other courses will count toward the electives requirement (see section below).
Total Credits

## ENGINEERING ELECTIVES REQUIREMENT

1. Students must take at least 3 credits of coursework from an ABETaccredited degree-granting program outside of the bachelor of science in civil engineering program. InterEGR and EPD courses do not qualify for meeting this requirement; any courses crosslisted with Civil Engineering (CEE) do not qualify for meeting this requirement.
2. Select at least one of the following: CIV ENGR 322 Environmental Engineering Processes or CIV ENGR 410 Hydraulic Engineering.
3. Students must take at least 6 credits of coursework that meets at least one of the following:
a. Any course offered by an engineering department, including but not limited to CEE.
b. Any intermediate- or advanced-level course with a breadth designation of Biological Sciences, Physical Sciences, and/or Natural Sciences. These courses cannot also carry a breadth designation of Social Sciences, Humanities, or Literature.
c. Any of the following business courses: ACCT I S 300 Accounting PrinciplesAccounting Principles, FINANCE/ECON 300 Introduction to Finance, GEN BUS 301 Business Law, M H R 300 Managing Organizations, REAL EST/A A E/ECON/URB R PL 306 The Real Estate Process.

Total Credits: 12
1 Up to 3 credits of CIV ENGR 1 Cooperative Education Program may be used toward Item 2 or 3.

2
Up to 6 credits of research work (CIV ENGR 299 Independent Study, CIV ENGR 489 Honors in Research and/or CIV ENGR 699 Independent Study) may be used toward Item 2 or 3.

## ENVIRONMENTAL ENGINEERING BREADTH REQUIREMENT

Courses selected to meet the design and electives requirement above must also be selected in a manner that meets this requirement. At least one CEE course must be selected from at least three of the specialty groups in the table below.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Water Resources |  |  |
| CIV ENGR 410 | Hydraulic Engineering | 3 |
| CIV ENGR 412 | Groundwater Hydraulics | 3 |
| CIV ENGR 414 | Hydrologic Design | 3 |
| CIV ENGR 415 | Hydrology | 3 |
| CIV ENGR 416 | Water Resources Systems Analysis | 3 |
| CIV ENGR 619 | Special Topics in Hydrology | 1-3 |
| Environmental Fluid Mechanics |  |  |
| CIV ENGR 411 | Open Channel Hydraulics | 3 |
| CIV ENGR 514 | Coastal Engineering | 2-3 |
| CIV ENGR 618 | Special Topics in Hydraulics and Fluid Mechanics | 1-3 |
| Environmental Chemistry \& Biotechnology |  |  |
| CIV ENGR 500 | Water Chemistry | 3 |
| CIV ENGR 501 | Water Analysis-Intermediate | 3 |
| CIV ENGR/ SOIL SCI 623 | Microbiology of Waterborne Pathogens and Indicator Organisms | 3 |
| CIV ENGR 629 | Special Topics in Environmental Engineering | 1-3 |
| Water \& Wastewater Treatment |  |  |
| CIV ENGR 322 | Environmental Engineering Processes | 3 |
| CIV ENGR/BSE/ SOIL SCI 372 | On-Site Waste Water Treatment and Dispersal | 2 |
| CIV ENGR 426 | Design of Wastewater Treatment Plants | 3 |


| CIV ENGR 428 | Water Treatment Plant Design | 3 |
| :---: | :---: | :---: |
| Geoenvironmental \& Hazardous Wastes |  |  |
| CIV ENGR 427 | Solid and Hazardous Wastes Engineering | 3 |
| CIV ENGR 522 | Hazardous Waste Management | 3 |
| CIV ENGR/G LE 633 | Waste Geotechnics | 3 |
| CIV ENGR/G LE 635 | Remediation Geotechnics | 3 |
| Occupational \& Public Health |  |  |
| CIV ENGR 422 | Elements of Public Health Engineering | 3 |
| Air Pollution Control |  |  |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| CIV ENGR 609 | Special Topics in Water Chemistry | 1-3 |

## GEOLOGICAL ENGINEERING, B.S.

Geological engineering integrates two disciplines-geology and engineering. Geologists study the earth-its origins, its composition, and its evolution. Engineers apply scientific principles to practical ends, such as the design and construction of facilities for practical use by society. Geological engineering is interdisciplinary with faculty from the College of Engineering and the College of Letters \& Science.

Geological engineers find the best way to use the earth's resources to solve technical problems while protecting the environment. They solve a variety of practical problems associated with rock and soils using principles of sustainable engineering. They design and construct structures, transportation facilities, dams, tunnels, and power plants. They mitigate naturally occurring phenomena such as floods, landslides, and earthquakes, and develop safe and environmentally sound sources of energy and minerals. Geological engineers also manage groundwater and surface water resources to ensure the public has access to safe drinking water. They also design and construct subsurface repositories for waste disposal and remediate contaminated sites.

Students pursuing the B.S. degree are encouraged to obtain an additional major in geoscience. The B.S. program is set up so that students can obtain a degree in geological engineering and an additional major in geoscience in a single 125-credit program. No extra credits are required to obtain the additional major in geoscience. The B.S. degree in geological engineering is accredited by the Accreditation Board of Engineering and Technology (ABET), which is required to obtain a professional engineering license.

## GEOLOGICAL ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

Graduates will be prepared to assume positions as geological engineers upon graduation. After proper training and exposure to a comprehensive education in our program, our graduates will demonstrate during the five years after graduation their ability to:

1. apply geological engineering principles, analyses, and synthesis to design and implement projects in the natural and built environment;
2. incorporate economic, environmental, political, ethical, social, safety, and global considerations to generate sustainable solutions in the natural and built environment;
3. exhibit strong communication, leadership, and teamwork skills;
4. serve others through professional responsibility and participation in professional and public activities and good citizenship; and
5. demonstrate a continuing commitment to and interest in their own and others' education.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

Students must complete the College of Engineering Liberal Studies Requirements (p. 229).

Students are encouraged to download a GLE Undergraduate Handbook from the Current Students/Undergraduate page on the department website (http://www.engr.wisc.edu/interd/gep). The handbook has detailed curriculum information as well as other practical information for undergraduate students to supplement the information provided here.

Students completing the geological engineering degree are also eligible to earn an additional major in geoscience with no additional coursework. Students are encouraged to declare an additional major in geoscience.
Students must contact an advisor to complete the necessary paperwork to declare an additional major in geoscience.

## SUMMARY OF REQUIREMENTS

| Code $\quad$ Title | Credits |
| :--- | ---: | ---: |
| Mathematics | 13 |
| Engineering Principles and Professional Issues | $10-13$ |
| Physical Science, Engineering Science, and Geoscience | 44 |


| Required Geological Engineering Courses | 19 |
| :--- | ---: |
| Technical Electives | 15 |
| $\quad$ Geological Engineering Design | 8 |
| Communication Skills | 16 |
| Liberal Studies Electives |  |
| Fundamentals of Engineering Exam | $125-128$ |

## MATHEMATICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| or MATH 217 | Calculus with Algebra and Trigonometry II |  |
| or MATH 275 | Topics in Calculus I |  |
| MATH 222 | Calculus and Analytic Geometry 2 | 4 |
| or MATH 276 | Topics in Calculus II |  |
| MATH 234 | Calculus--Functions of Several <br> Variables | 4 |

Total Credits
ENGINEERING PRINCIPLES AND PROFESSIONAL ISSUES

| Code | Title | Credits |
| :---: | :---: | :---: |
| STAT 324 | Introductory Applied Statistics for Engineers | 3 |
| or STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I |  |
| CIV ENGR/G LE 291 | Problem Solving Using Computer Tools | 3 |
| I SY E 313 | Engineering Economic Analysis | 3 |
| EP D 690 | Special Topics in Engineering Professional Development | 1-4 |
| or ENVIR ST 250 | Introduction to Sustainability Science |  |
| or ENVIR ST/ <br> GEOG 339 | Environmental Conservation |  |
| or ENVIR ST/ <br> PHILOS 441 | Environmental Ethics |  |
| or G L E 401 | Special Topics in Geological Engineering |  |
| Total Credits |  | 10-13 |

## PHYSICAL SCIENCE, ENGINEERING SCIENCE AND GEOSCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| CHEM 109 | Advanced General Chemistry (or |  |
| CHEM 103 \& CHEM 104) |  |  |$\quad 5$


| or GEOSCI/ | Environmental Geology |  |
| :--- | :--- | ---: |
| ENVIR ST 106 |  | 4 |
| GEOSCI 202 | Introduction to Geologic Structures | 4 |
| GEOSCI 204 | Geologic Evolution of the Earth | 3 |
| GEOSCI/G LE 360 | Principles of Mineralogy | 3 |
| GEOSCI/G LE 370 | Elementary Petrology | 1 |
| GEOSCI/G LE 431 | Sedimentary \& Stratigraphy Lab | 4 |
| GEOSCI/G LE 455 | Structural Geology | 44 |

## REQUIRED GEOLOGICAL ENGINEERING COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| G LE 171 | Introduction to Geological | 1 |
|  | Engineering | 4 |
| G L E/CIV ENGR 330 | Soil Mechanics | 3 |
| G LE/GEOSCI/ | Rock Mechanics |  |
| M S \& E 474 |  | 3 |
| G LE 479 | Geological Engineering Design | 3 |
| G LE/GEOSCI 594 | Introduction to Applied Geophysics | 1 |
| G LE/GEOSCI 595 | Field Methods in Applied and | 4 |
| G LE/GEOSCI 627 | Engineering Geophysics | 4 |
| Total Credits |  | 19 |

## TECHNICAL ELECTIVES (15 CREDITS)

Students must take at least 15 credits in the Technical Electives category. All students must complete at least two designated design courses (noted as D in the GLE Undergraduate Handbook (https:// www.engr.wisc.edu/department/civil-environmental-engineering/ academics/bs-geological-engineering)) as part of the technical electives. Students may take up to 6 credits of G L E 489 Honors in Research as technical electives. The technical electives are organized into five tracks, described below. Students may select courses within these tracks to focus coursework in a particular area. However, students may complete the technical electives requirement using courses listed in multiple tracks.

Suggested technical electives and associated credits ( $D$ indicates design course) for each track are included below.

## Energy, Minerals \& Mining

Geological engineers possess knowledge and a skill set that serve society's need to manage extraction of traditional energy and mineral resources in more sustainable and efficient ways, and to lead in new technologies to limit carbon emissions through geological sequestration or to develop geothermal energy in deeper reservoirs.

Within this track, the 16 credits of liberal studies can be framed to match those of the Energy Institute certificate in Energy Sustainability (p. 273).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| E M A 405 | Practicum in Finite Elements | 3 |
| GEOSCI/ | Minerals as a Public Problem | 3 |
| ENVIR ST 410 |  | 3 |
| GEOSCI/ | Energy Resources |  |
| ENVIR ST 411 |  |  |


| GEOSCI 457 | Conducted Field Trip | 2 |
| :--- | :--- | ---: |
| GEOSCI 459 | Field Geology | 6 |
| GEOSCI 515 | Principles of Economic Geology | 4 |
| G LE 401 | Special Topics in Geological <br> Engineering (D) | $1-3$ |
| G L E/GEOSCI/ | Rock Mechanics Applications to | 3 |
| M S \& E 475 | Environmental Problems | 3 |
| G L E/CIV ENGR 530 | Seepage and Slopes (D) | 3 |

## Sustainability \& Environment

Methods for quantifying the long-term effects of development, natural resource extraction, and environmental damage are often neglected or misapplied in cost-benefit life cycle analysis. This track intends to produce professionals capable of leading the field in sustainable design and construction. The Sustainability \& Environment track focuses on quantification, design, and optimization in relation to the use of natural resources and construction materials/methods as well as minimizing the long-term impacts of these activities.

| Code | Title | Credits |
| :---: | :---: | :---: |
| BSE/DS/ | Sustainable Residential | 3 |
| LAND ARC 356 | Construction |  |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 427 | Solid and Hazardous Wastes Engineering | 3 |
| CIV ENGR 619 | Special Topics in Hydrology | 1-3 |
| CIV ENGR 649 | Special Topics in Structural Engineering (Sustainable Construction) | 1-3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 410 \end{aligned}$ | Minerals as a Public Problem | 3 |
| GEOSCI/ <br> ENVIR ST 411 | Energy Resources | 3 |
| GEOSCI/G LE 629 | Contaminant Hydrogeology (D) | 3 |
| G LE 401 | Special Topics in Geological Engineering (D) | 1-3 |
| G L E/CIV ENGR 633 | Waste Geotechnics (D) | 3 |
| GLE/CIV ENGR 635 | Remediation Geotechnics (D) | 3 |
| G LE/CIV ENGR 732 | Unsaturated Soil Geoengineering | 3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| SOIL SCI/ | Soils and Environmental Quality | 3 |

## ENVIR ST 324

## Geohazards

The number of fatalities and amount of economic loss due to geohazards increases every year. These losses may result from various geohazards, such as volcanic eruptions, earthquakes, landslides, flooding and tsunamis. The Geohazards track aims to provide students with the necessary skills to perform analyses that minimize loss of life and economic costs associated with geohazards.

The number of fatalities and amount of economic loss due to geohazards increases every year. These losses may result from various geohazards, such as volcanic eruptions, earthquakes, landslides, flooding and tsunamis. The Geohazards track aims to provide students with the
necessary skills to perform analyses that minimize loss of life and economic costs associated with geohazards.

| Code | Title | Credits |
| :--- | :--- | ---: |
| CIV ENGR 514 | Coastal Engineering | $2-3$ |
| E M A 405 | Practicum in Finite Elements | 3 |
| GEOSCI/GEOG 320 | Geomorphology | 3 |
| GEOSCI/GEOG 326 | Landforms-Topics and Regions | 3 |
| GEOSCI 459 | Field Geology | 6 |
| GLE/CIV ENGR/ | Practical Applications of GPS | 2 |
| ENVIR ST/ | Surveying |  |
| GEOSCI 444 |  |  |
| G LE/CIV ENGR | 530 | Seepage and Slopes (D) |
| GLE 597 | Borehole Geophysics | 3 |
| GLE/CIV ENGR 735 | Soil Dynamics (D) | 3 |

## Water

Water is an essential resource for humans and ecosystems. Water is also linked to mineral and energy resource production, waste management, and land reclamation. Population growth and climate change are creating increasing challenges to this resource. Development and sustainable management of groundwater and surface water, including prevention and mitigation of water quality problems, require combined expertise in geoscience, hydrology, and water resources engineering offered through the Water track.

| Code | Title | Credits |
| :--- | :--- | ---: |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 415 | Hydrology | 3 |
| CIV ENGR 412 | Groundwater Hydraulics | 3 |
| CIV ENGR 500 | Water Chemistry | 3 |
| CIV ENGR 619 | Special Topics in Hydrology | $1-3$ |
| GEOSCI/GEOG 320 | Geomorphology | 3 |
| GEOSCI/GEOG 326 | Landforms-Topics and Regions | 3 |
| GEOSCI/GEOG 420 | Glacial and Pleistocene Geology | 3 |
| GEOSCI 430 | Sedimentology and Stratigraphy | 3 |
| GEOSCI/G LE 629 | Contaminant Hydrogeology (D) | 3 |
| G LE 476 | Field Methods in Geological | 3 |
| G LE/CIV ENGR | Engineering (D) | Seepage and Slopes (D) |
| GLE/CIV ENGR 732 | Unsaturated Soil Geoengineering | 3 |

## Infrastructure

There are many challenges that need to be overcome to address the ageing infrastructure of this country as well as develop cost effective solutions for new infrastructure in developing nations. The Infrastructure track is developed to provide students a background that enables them to perform engineering calculations to design, construct, assess the current condition (level of safety), and develop repair and retrofit solutions for civil engineering structures resting on, or constructed in, soil or rock.

| Code | Title | Credits |
| :--- | :--- | ---: |
| CIV ENGR 649 | Special Topics in Structural | $1-3$ |
|  | Engineering (Sustainable |  |
| Construction) | 3 |  |
| EM A 405 | Practicum in Finite Elements | 3 |
| GEOSCI/GEOG 320 | Geomorphology | 3 |


| GEOSCI 430 | Sedimentology and Stratigraphy |
| :---: | :---: |
| G L E 401 | Special Topics in Geological Engineering (D) |
| G L E/CIV ENGR/ ENVIR ST/ GEOSCI 444 | Practical Applications of GPS Surveying |
| G L E 476 | Field Methods in Geological Engineering (D) |
| G L E/CIV ENGR 530 | Seepage and Slopes (D) |
| G L E/CIV ENGR 531 | Retaining Structures (D) |
| G L E/CIV ENGR 532 | Foundations (D) |
| G L E/CIV ENGR 730 | Engineering Properties of Soils |
| GLE/CIV ENGR 735 | Soil Dynamics (D) |
| COMMUNICATION SKILLS |  |
| Code | Title Credits |
| ENGL 100 <br> or COM ARTS 100 <br> or LSC 100 <br> or ESL 118 | Introduction to College Composition Introduction to Speech Composition Science and Storytelling Academic Writing II |
| E P D 275 <br> or COM ARTS 105 <br> or COM ARTS 181 <br> or COM ARTS 262 <br> or COM ARTS 266 | Technical Presentations <br> Public Speaking <br> Elements of Speech-Honors Course <br> Theory and Practice of Argumentation and Debate <br> Theory and Practice of Group Discussion |
| $\begin{aligned} & \text { E P D } 397 \\ & \text { or ENGL } 201 \\ & \text { or ENGL } 315 \end{aligned}$ | Technical Communication Intermediate Composition English Phonology |

Total Credits
8-9

## LIBERAL STUDIES (16 CREDITS)

Students must complete the $\mathbf{1 6}$ credits of College of Engineering Liberal Studies Requirements (p. 229).

## FUNDAMENTALS OF ENGINEERING EXAM

All students must take the Fundamentals of Engineering exam. The General Engineering or Civil Engineering sections are recommended for the afternoon portion of the exam, as there is no section specifically for Geological Engineering.

## HONORS IN RESEARCH

Students in geological engineering that have completed at least two semesters on the Madison campus with a cumulative GPA of at least 3.5 may apply to participate in the Honors in Research program. Students may register for 1 to 3 credits per semester. A grade of $P$ (Progress) will be assigned each semester until the student completes the honors in research program or drops out of the program, at which time a final grade is assigned (based on research progress and the written thesis, if completed). This becomes the grade for all credits taken in G L E 489 Honors in Research.

A senior thesis worth 3 credits of G L E 489 is required. The senior thesis is a written document reporting on a substantial piece of work that is prepared in the style of a graduate thesis. The thesis advisor determines the grade which the student receives for the thesis. A bound copy of
the thesis must be submitted to the geological engineering office to complete the program.

The designation "Honors in Research" will be recorded on the student's transcript if the following criteria are met:

1. Satisfaction of requirements for an undergraduate degree in Geological Engineering.
2. A cumulative grade-point average of at least 3.3 .
3. Completion of a total of at least 8 credits in G L E 489.
4. Completion of a senior honors thesis with a final grade of $B$ or better.

Students interested in the Honors in Research program should contact their advisor or the G L E chair for more information. Applications to the program are to be submitted to the G L E chair with a supporting letter from the student's academic and thesis advisors. Decisions regarding acceptance are made by the G L E chair.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
|  | Abroad/Study Away programs. |
| Quality of | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (a) an ability to apply knowledge and principles of mathematics, science, and engineering to geological engineering problems.
2. (b) an ability to design and conduct experiments, as well as to analyze and interpret data.
3. (c) an ability to design a system, component, or process to meet required needs within realistic economic, environmental, social, political, ethical, health and safety, constructability, and sustainability goals.
4. (d) an ability to function on multi-disciplinary teams.
5. (e) an ability to identify, formulate, and solve geological engineering problems in space and time.
6. (f) an understanding of professional and ethical responsibility.
7. (g) an ability to communicate effectively.
8. (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. (i) a recognition of the need for and the ability to engage in life-long learning.
10. (j) a knowledge of contemporary issues as related to geological engineering.
11. (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 221 | 5 MATH 222 | 4 |
| CHEM 109 | 5 E M A 201 | 3 |
| GEOSCI 100 or 106 | 3 GEOSCI 204 | 4 |
| Communication A | 3 G L E 171 | 1 |
|  | Liberal Studies Elective | 4 |
|  | 16 | 16 |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| MATH 234 | 4 CIV ENGR 310 | 3 |
| E M A 202 | 3 E M A 303 | 3 |
| GEOSCI/G LE 360 | 3 PHYSICS 202 or 208 | 5 |
| GEOSCI 202 | 4 GEOSCI/G LE 370 | 3 |
| E P D 275 | 2 Liberal Studies Elective | 3 |
|  | 16 | 17 |
| Third Year |  |  |
| Fall | Credits Spring | Credits |
| STAT 324 or 311 | 3 Technical Elective (design) | 3 |
| Technical Elective | 3 Professional Issues | 1-4 |
| CIV ENGR/G LE 330 | $\begin{gathered} \text { 4GLE/GEOSCI/ } \\ \text { MS \& E } 474 \end{gathered}$ | 3 |
| GLE/GEOSCI 431 | 1 GEOSCI/G LE 455 | 4 |
| CIV ENGR/G LE 291 | 3 EP D 397 | 3 |
| CIV ENGR 251 | 2 |  |
|  | 16 | 14-17 |
| Fourth Year |  |  |
| Fall | Credits Spring | Credits |
| Ethnic Studies | 3 G L E 479 | 3 |
| GLE/GEOSCI 594 | 3 Liberal Studies Elective | 3 |
| GLE/GEOSCI 595 | 1 Liberal Studies Elective | 3 |
| GLE/GEOSCI 627 | 4 I SY E 313 | 3 |
| Technical Elective (design) | 3 Technical Elective | 3 |
|  | Technical Elective | 3 |
|  | 14 | 18 |

Total Credits 127-130

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

Barh
Feigl
Goodwin
Holloway
Kung
Likos (chair)
Thurber
Tikoff
Tobin
Wang
Wi

## ASSOCIATE PROFESSORS

Fratta
Tinjum

## ASSISTANT PROFESSORS

Cardiff
Hicks
Loheide II
Sone
Zoet

## RESOURCES AND SCHOLARSHIPS

## FACILITIES

The geological engineering program utilizes laboratories that are shared with other departments. They include:

Land Information and Surveying Laboratories

Fluid Mechanics Laboratory Materials Testing Laboratory
Geology and Hydrogeology Laboratories
Rock Mechanics Laboratory
Geotechnical and Geoenvironmental Laboratories
The Halliburton Geoscience Visualization Center

## ACCREDITATION

## ACCREDITATION

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## ELECTRICAL AND COMPUTER ENGINEERING

The Department of Electrical and Computer Engineering offers the B.S., M.S. and Ph.D. degrees in electrical engineering and the B.S. degree in computer engineering.

Electrical engineers design and develop anything and everything that uses electricity. From the power systems that bring electricity to our homes and communications systems that allow us to keep in touch with family and friends, to the electronic devices, electrical appliances, computers, sensors, and medical equipment that shape our everyday lives. Typical careers may find an EE collaborating with medical doctors or astronauts in the space program, designing advanced automotive and transportation systems, and interacting with other engineers and professionals. Many EEs work as scientists, inventing new kinds of electronic technology, instrumentation, and devices to help people.

Electrical engineers design, develop, analyze, research, and manufacture systems such as those for power generation distribution, communication, control, and instrumentation. Electrical engineers are also concerned with the devices that make up these systems, such as transistors, integrated circuits, rotating machines, antennas, and fusion plasma confinement devices. Low-power, reliable integrated circuits allow dramatic improvements that have driven the revolution in communications and computation. High-power transistors in combination with electronic controls are serving as the foundation for new ways of efficiently utilizing electrical power.

Computer engineers design, develop, analyze, research, and manufacture hardware, software, and systems that process, store, and convey digital information. These systems include personal computers, workstations, mainframe computers, and embedded digital systems. Embedded systems consist of one to many computers within other products such as aircraft, automobiles, communication switching systems, networking components, biomedical instrumentation, and industrial automation systems. These systems are characterized by the use of digital electronic hardware and software in performing useful tasks. Computer software in combination with digital integrated circuits provides the foundation for the current revolution in computers and communications. This focus on software and digital hardware distinguishes the computer engineer from the electrical engineer.

The curricula in the Department of Electrical and Computer Engineering require a strong background in mathematics, physics, and computer science. In addition to basic course requirements in these areas, elective
credits in the curriculum permit the student to pursue more advanced courses in these areas or in other fields, such as chemistry, biology, and mechanics. Additional electives in liberal studies broaden the programs to include such areas as economics, sociology, psychology, and history.

The electrical engineering and computer engineering programs share many courses in the first few semesters, including digital systems, electrical circuits, and electromagnetic fields. Computer engineering students take additional courses in computer science to provide the software part of their background. In the junior year, the electrical engineering program focuses on areas such as electromagnetic fields and analog electronics whereas computer engineering deals with computer hardware design and combined hardware/software design concepts. Technical elective freedom in both curricula makes it possible for students to choose from approximately 50 more specialized courses at the junior and senior levels in electrical and computer engineering, as well as courses from other departments. In both curricula, a student can choose a broad program covering an introductory treatment of a variety of areas or focus in one or two specialized areas. An advising program, beginning in the freshman year, helps students plan their program.

To provide students with hands-on experience in electrical and computer engineering, specialized lab courses are offered at the senior level. For example, one involves the design and fabrication of integrated circuits and the other design and prototyping of a computer. Both classroom instruction and lab work are offered in signal processing and in embedded systems, with microprocessors and personal computers incorporated into larger systems. Independent study and design projects are encouraged at the senior level and an honors research program is available which spans multiple years of the undergraduate program.

Although the B.S. in electrical engineering and B.S. in computer engineering programs are intended to prepare students for immediate entry into the profession of engineering, increasingly, students find an additional year or more of study leading to the M.S. degree very desirable The Ph.D. degree is the most advanced degree and emphasizes training in research.

## DEGREES/MAJORS/CERTIFICATES

- Computer Engineering, B.S. (p. 263)
- Electrical Engineering, B.S. (p. 267)


## PEOPLE

## PROFESSORS

Hagness (chair)
Anderson
Barmish
Booske
Behdad
Boston
Botez
DeMarco
Gubner (vice chair)
Hitchon
Hu
Jahns
Jiang*
Knezevic

Lesieutre
Lipasti
Ma
Mawst
Nowak
Ramanathan (vice chair)
Sayeed
Sethares
Shohet
van der Weide
Van Veen
Venkataramanan
Wendt

## ASSOCIATE PROFESSORS

Davoodi
Milenkovic
Willett

## ASSISTANT PROFESSORS

Farrell
Fawaz
Jog
Kats
Kim
Lessard
Li
Loh
Ludois
Papailiopoulos
San Miguel
Severson
Velten
Yu

## FACULTY ASSOCIATES

Allie
Fredette
Hoffman
Krachey
Lu
Milicic
*For scholarship information, please contact Professor Jiang.

## RESOURCES AND SCHOLARSHIPS

## FACILITIES

Facilities available for instruction and research include:
CAE (Computer-Aided Engineering) and ECE Laboratory Computers
Center for Plasma Theory and Computation Computers
Cross-Disciplinary Electromagnetics Laboratory
Digital Engineering Lab
Digital Logic and Microprocessor Lab
Electronics Lab
Embedded Systems Lab
Grainger Electric Machines and Power Lab
High-Frequency Engineering Lab
HSX Plasma Laboratory
Integrated Circuit Facility

Lab for Molecular Scale Engineering
Photonics Lab
Plasma Processing \& Technology Laboratory
Plexus Collaboratory
Power Electronics Lab
Qualcomm Design Labs
Signal Processing Lab
Vacuum Electronic Devices Lab
Wisconsin Advanced Network Design, Experimentation, and Research (WANDER) Lab

## COMPUTER ENGINEERING, B.S.

Computer engineers design, develop, analyze, research, and manufacture hardware, software, and systems that process, store, and convey digital information. These systems include personal computers, workstations, mainframe computers, and embedded digital systems. Embedded systems consist of one to many computers within other products such as aircraft, automobiles, communication switching systems, networking components, biomedical instrumentation, and industrial automation systems. These systems are characterized by the use of digital electronic hardware and software in performing useful tasks. Computer software in combination with digital integrated circuits provides the foundation for the current revolution in computers and communications. This focus on software and digital hardware distinguishes the computer engineer from the electrical engineer.

## ELECTRICAL ENGINEERING AND COMPUTER ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

Our graduates should be engaged in activities such as:

1. Employment in industry, government, academia, or non-profit using their degree knowledge or skills for professional functions such as teaching, research and development, quality control, technical marketing, intellectual property management, or sales. Graduates may eventually reach a leadership position supervising others.
2. Continuing education through self-study or short courses and workshops through their employer, local or online educational institutions, or attendance at professional events such as conferences.
3. Taking a principal role in starting a new business or product line.
4. Pursuing a postgraduate degree.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world.

Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :---: | :---: |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |
|  | * The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or |
|  | Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements. |

## SUMMARY OF REQUIREMENTS

The following curriculum applies to students who were admitted to the computer engineering degree program (classification changed to CMPE) in fall 2017 or later.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics |  | 19 |
| Science |  | 21 |
| Computer Engineering Core |  | 32 |
| Computer Engineering Advanced Electives |  | 16 |
| Professional Electives |  | 9 |
| Communication Skills |  | 6 |
| Liberal Studies |  | 15 |
| Free Elective |  | 2 |
| Total Credits |  | 120 |
| MATHEMATICS |  |  |
| Code | Title | Credits |
| MATH 221 <br> or MATH 217 <br> or MATH 275 | Calculus and Analytic Geometry 1 <br> Calculus with Algebra and Trigonometry II Topics in Calculus I | 5 |
| MATH 222 or MATH 276 | Calculus and Analytic Geometry 2 Topics in Calculus II | 4 |
| MATH 234 | Calculus--Functions of Several Variables ${ }^{1}$ | 4 |
| MATH/ <br> COMP SCI 240 <br> or MATH/ <br> COMP SCI/ <br> STAT 475 | Introduction to Discrete Mathematics <br> Introduction to Combinatorics | 3 |
| Probability/Statistics | Elective (select one) | 3 |
| STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I |  |
| MATH/STAT 431 | Introduction to the Theory of Probability |  |


| E C E 331 | Introduction to Random Signal |
| :--- | :--- |
|  | Analysis and Statistics |

Total Credits
1 MATH 375 and MATH 376 taken in sequence will fulfill the requirement for MATH 234.

## SCIENCE

| Code | Title | Credits |
| :---: | :---: | :---: |
| COMP SCI 300 | Programming II | 3 |
| COMP SCI 400 | Programming III | 3 |
| PHYSICS 201 | General Physics ${ }^{1}$ | 5 |
| or PHYSICS 207 | General Physics |  |
| or PHYSICS 247 | A Modern Introduction to Physics |  |
| PHYSICS 202 | General Physics | 5 |
| or PHYSICS 208 | General Physics |  |
| or PHYSICS 248 | A Modern Introduction to Physics |  |
| Select one of the following: |  | 5-9 |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| Total Credits |  | 21-25 |
| 1 Students may also fulfill this requirement by taking E M A 201 <br> Statics and E M A 202 Dynamics or E M A 201 Statics and M E 240 Dynamics. |  |  |

## COMPUTER ENGINEERING CORE

| Code | Title | Credits |
| :---: | :---: | :---: |
| E C E 203 | Signals, Information, and Computation | 3 |
| E C E 210 | Introductory Experience in Electrical Engineering | 2 |
| E C E 219 | Analytical Methods for Electromagnetics Engineering | 1 |
| E C E 220 | Electrodynamics I | 3 |
| E C E 230 | Circuit Analysis | 4 |
| E C E/COMP SCI 252 | Introduction to Computer Engineering | 2 |
| E C E 270 | Circuits Laboratory I | 1 |
| E C E 315 | Introductory Microprocessor Laboratory | 1 |
| E C E 340 | Electronic Circuits I | 3 |
| E C E/COMP SCI 352 | Digital System Fundamentals | 3 |
| E C E 353 | Introduction to Microprocessor Systems | 3 |
| E C E/COMP SCI 354 | Machine Organization and Programming | 3 |
| E C E 551 | Digital System Design and Synthesis | 3 |
| Total Credits |  | 32 |

COMPUTER ENGINEERING ADVANCED ELECTIVES
Code Title Credits

Electronic Circuits Elective 3

| E C E 342 | Electronic Circuits II | E C E 334 | State Space Systems Analysis |
| :---: | :---: | :---: | :---: |
| E C E 447 | Applied Communications Systems | E C E 335 | Microelectronic Devices |
| E C E 541 | Analog MOS Integrated Circuit Design | E C E 342 | Electronic Circuits II (may be used if not already used as an Electronic |
| E C E 542 | Introduction to Microelectromechanical Systems |  | Circuits Advanced Elective) |
|  |  | E C E 355 | Electromechanical Energy |
| E C E 548 | Integrated Circuit Design |  | Conversion |
| E C E 555 | Digital Circuits and Components | E C E 356 | Electric Power Processing for |
| Systems Software Elective $\quad$ 3-4 |  |  | Alternative Energy Systems |
|  |  | E C E courses numbered 399 and higher |  |
| COMP SCI 506 | Software Engineering | COMP SCI courses numbered 400 and higher |  |
| COMP SCI 536 | Introduction to Programming Languages and Compilers | MATH 319 | Techniques in Ordinary Differential Equations |
| COMP SCI 537 | Introduction to Operating Systems | MATH 320 | Linear Algebra and Differential Equations ${ }^{1}$ |
| COMP SCI 564 | Database Management Systems: Design and Implementation |  |  |
|  |  | MATH 321 | Applied Mathematical Analysis |
| Capstone Design | 4 | MATH 322 | Applied Mathematical Analysis |
| E C E 453 | Embedded Microprocessor System Design | MATH 340 | Elementary Matrix and Linear Algebra ${ }^{1}$ |
| E C E 454 | Mobile Computing Laboratory ${ }^{1}$ | MATH 341 | Linear Algebra |
| E C E 554 | Digital Engineering Laboratory | MATH courses numbered 400 and higher |  |
| CMPE Elective I 3 |  | STATS courses numbered 400 and higher |  |
| E C E 537 | Communication Networks | Any biological sciences course that is designated as intermediate or advanced level |  |
| E C E/ | Introduction to Computer Architecture |  |  |  |
| COMP SCI 552 |  | Any physical science course that is designated as intermediate or advanced level |  |
| E C E 553 | Testing and Testable Design of Digital Systems |  |  |  |
|  |  | Any natural science course that is designated as advanced level, except that math, computer sciences, and statistics courses must follow the above criteria |  |
| E C E 556 | Design Automation of Digital Systems |  |  |  |
| CMPE Elective II 3 |  | Engineering courses numbered 300 and higher that are not E C E or cross-listed with E C E |  |
| Select from E C E 399 - E C E 699 |  | not E C E or cross-listed with E C E |  |
| Select from COMP SCI 400 - COMP SCI $699{ }^{1}$ |  | Up to six credits of Professional Electives can be taken from School of Business classes numbered 300 and higher. |  |
| Total Credits | 16-17 |  |  |  |
| E C E 454 Mobile Computing Laboratory and COMP SCI 407 Foundations of Mobile Systems and Applications cannot both be taken for degree credit. |  | DS 501 | Special Topics (Wearable Technologies) |
|  |  | DANCE 560 | Current Topics in Dance: Workshop (Making Digital Lighting Controls) |

## PROFESSIONAL ELECTIVES

Code Title Credits

Professional Electives
Courses to be taken in an area of professional interest.
The following courses are acceptable as professional electives if the courses are not used to meet any other degree requirements.

| E C E 1 | Cooperative Education Program <br> (One co-op credit can count towards <br> professional electives.) |
| :--- | :--- |
| E C E/ | Introduction to Solid State |
| PHYSICS 235 | Electronics |
| E C E 320 | Electrodynamics II |
| ECE 330 | Signals and Systems |
| E C E 331 | Introduction to Random Signal |
|  | Analysis and Statistics |
| ECE 332 | Feedback Control Systems |

1 Students may only earn degree credit for MATH 320 or MATH 340, not both.

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENGL 100 | Introduction to College Composition | 3 |
| or LSC 100 | Science and Storytelling |  |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or COM ARTS 181 | Elements of Speech-Honors Course |  |
| or ESL 118 | Academic Writing II |  |
| E P D 397 | Technical Communication | 3 |
| Total Credits |  | 6 |

## LIBERAL STUDIES ELECTIVES

Code $\quad$ Title
College of Engineering Liberal Studies Requirements

Credits


Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (a) an ability to apply knowledge of mathematics, science, and engineering.
2. (b) an ability to design and conduct experiments, as well as to analyze and interpret data.
3. (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. (d) an ability to function on multidisciplinary teams.
5. (e) an ability to identify, formulate, and solve engineering problems.
6. (f) an understanding of professional and ethical responsibility.
7. (g) an ability to communicate effectively.
8. (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. (i) a recognition of the need for, and an ability to engage in life-long learning.
10. (j) a knowledge of contemporary issues.
11. (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

| First Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 MATH 222 | 4 |
| CHEM 109 | 5 PHYSICS 201 | 5 |
| E C E/COMP SCI 252 | 2 E C E 210 | 2 |
| Liberal Studies Elective | 3 Communications A | 3 |
|  | 15 | 14 |

Second Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| E C E 203 | 3 MATH/COMP SCI 240 | 3 |
| EC E/COMP SCI 352 | 3 EC E 219 | 1 |
| MATH 234 | 4 E C E 230 | 4 |
| PHYSICS 202 | 5 E C E 270 | 1 |
|  | COMP SCI 300 | 3 |
|  | Liberal Studies Elective | 3 |
|  | 15 | 15 |

Third Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| ECE353 | 3 ECE315 | 1 |
| ECE220 | 3 ECE551 | 3 |
| E C E 340 | 3 Circuits Elective | 3 |
| E C E/COMP SCI 354 | 3 Probability and Statistics Elective | 3 |
| COMP SCI 400 | 3 E P D 397 | 3 |
|  | Liberal Studies Elective | 3 |
|  | 15 | 16 |

Fourth Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| E C E 453, 454, or 554 | 4 COMP SCI 536, 537, or 564 | 3-4 |
| Computer Engineering Elective | 3 Computer Engineering Elective | 3 |
| Professional Elective | 3 Professional Elective | 3 |
| Liberal Studies Elective | 3 Liberal Studies Elective | 3 |
| Professional Elective | 3 Free Elective | 2 |
|  | 16 | 14-15 |

Total Credits 120-121

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

Hagness (chair)
Anderson
Barmish
Booske
Behdad
Boston
Botez
DeMarco
Gubner (vice chair)
Hitchon
Hu
Jahns
Jiang*
Knezevic
Lesieutre
Lipasti
Ma
Mawst
Nowak
Ramanathan (vice chair)
Sayeed
Sethares
Shohet
van der Weide
Van Veen
Venkataramanan
Wendt

## ASSOCIATE PROFESSORS

Davoodi
Milenkovic
Willett

## ASSISTANT PROFESSORS

Farrell
Fawaz
Jog
Kats
Kim
Lessard
Li
Loh

Ludois
Papailiopoulos
San Miguel
Severson
Velten

## Yu

## FACULTY ASSOCIATES

Allie
Fredette
Hoffman
Krachey
Lu
Milicic
*For scholarship information, please contact Professor Jiang.

## ACCREDITATION

## ACCREDITATION

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## ELECTRICAL ENGINEERING, B.S.

Electrical engineers design, develop, analyze, research, and manufacture systems such as those for power generation distribution, communication, control, and instrumentation. Electrical engineers are also concerned with the devices that make up these systems, such as transistors, integrated circuits, rotating machines, antennas, and fusion plasma confinement devices. Low-power, reliable integrated circuits allow dramatic improvements that have driven the revolution in communications and computation. High-power transistors in combination with electronic controls are serving as the foundation for new ways of efficiently utilizing electrical power.

## ELECTRICAL ENGINEERING AND COMPUTER ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES <br> Our graduates should be engaged in activities such as:

1. Employment in industry, government, academia, or nonprofit using their degree knowledge or skills for professional functions such as teaching, research and development, quality control, technical marketing, intellectual property management, or sales. Graduates may eventually reach a leadership position supervising others.
2. Continuing education through self-study or short courses and workshops through their employer, local or online educational institutions, or attendance at professional events such as conferences.
3. Taking a principal role in starting a new business or product line.
4. Pursuing a postgraduate degree.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/
academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

The following curriculum applies to students who were admitted to the electrical engineering degree program (classification changed to EE) in Fall 2017 or later.

## SUMMARY OF REQUIREMENTS

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Mathematics | 16 |
| Science | 18 |
| Electrical Engineering Core | 31 |
| Electrical Engineering Advanced Electives | 24 |
| Professional Electives | 9 |
| Communication Skills | 6 |
| Liberal Studies | 15 |
| Free Elective | 1 |
| Total Credits | 120 |

## MATHEMATICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| or MATH 217 <br> or MATH 275 | Calculus with Algebra and Trigonometry II <br> MATH 222 | Copics in Calculus I |
| Cr MATH 276 | Topics in Calculus II |  |
| MATH 234 | Calculus--Functions of Several <br> Variables 1 | 4 |
| Probability and Statistics Elective | 4 |  |


| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I |
| :--- | :--- | :--- |
| STAT/M E 424 | Statistical Experimental Design |

1 MATH 375 and MATH 376 taken in sequence will fulfill the requirement for MATH 234.

## SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| COMP SCI 300 | Programming II | 3 |
| PHYSICS 201 | General Physics |  |
| or PHYSICS 207 | General Physics | 5 |
| or PHYSICS 247 | A Modern Introduction to Physics |  |
| PHYSICS 202 | General Physics |  |
| or PHYSICS 208 <br> or PHYSICS 248 | General Physics | 5 |


| Select one of the following: | $5-9$ |  |
| :--- | :--- | :--- |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 | General Chemistry I |  |
| \& CHEM 104 | and General Chemistry II |  |

Total Credits 18-22
1 Students may also fulfill this requirement by taking E M A 201
Statics and E M A 202 Dynamics or E M A 201 Statics and M E 240 Dynamics.

## ELECTRICAL ENGINEERING CORE

| Code | Title | Credits |
| :---: | :---: | :---: |
| E C E 203 | Signals, Information, and Computation | 3 |
| ECE 210 | Introductory Experience in Electrical Engineering | 2 |
| E C E 219 | Analytical Methods for Electromagnetics Engineering | 1 |
| E C E 220 | Electrodynamics I | 3 |
| E C E 230 | Circuit Analysis | 4 |
| ECE/PHYSICS 235 | Introduction to Solid State Electronics | 3 |
| E C E/COMP SCI 252 | Introduction to Computer Engineering | 2 |
| E C E 270 | Circuits Laboratory I | 1 |
| E C E 271 | Circuits Laboratory II | 1 |
| E C E 330 | Signals and Systems | 3 |
| E C E 340 | Electronic Circuits I | 3 |
| ECE/COMP SCI 352 | Digital System Fundamentals | 3 |
| E C E 370 | Advanced Laboratory | 2 |
| Total Credits |  | 31 |

## ELECTRICAL ENGINEERING ADVANCED ELECTIVES

Students must take 22 credits in at least three of six areas and at least 2 credits in two laboratory courses.

- At least 9 credits must be in courses numbered 400 and above.
- At least one course must be a capstone design course.
- Students can count 1 credit of E C E 1 Cooperative Education Program toward advanced electives.
- Students can count up to 6 credits of E C E 399 Independent Study, E C E 489 Honors in Research or E C E 699 Advanced Independent Study towards advanced electives.
- Students can take E C E 379 Special Topics in Electrical and Computer Engineering and E C E 601 Special Topics in Electrical and Computer Engineering as advanced electives.


## Laboratory

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select at least one course from E C E 301 to ECE 317 |  |  |
| An additional laboratory course must be taken from the following list: |  |  |
| E C E 303 | Introduction to Real-Time Digital Signal Processing |  |
| E C E 304 | Electric Machines Laboratory |  |
| E C E 305 | Semiconductor Properties Laboratory |  |
| E C E 306 | Linear Active Circuits Laboratory |  |
| E C E 308 | Nonlinear Electronic Circuits Laboratory |  |
| E C E 313 | Optoelectronics Lab |  |
| E C E 315 | Introductory Microprocessor Laboratory |  |
| E C E 317 | Sensors Laboratory |  |
| E C E 432 | Digital Signal Processing Laboratory |  |
| E C E 453 | Embedded Microprocessor System Design |  |
| E C E 504 | Electric Machine \& Drive System Laboratory |  |
| E C E 512 | Power Electronics Laboratory |  |
| E C E 545 | Advanced Microwave <br> Measurements for Communications |  |
| E C E 549 | Integrated Circuit Fabrication Laboratory |  |
| E C E 554 | Digital Engineering Laboratory |  |
| ECE/M E 577 | Automatic Controls Laboratory |  |

## Fields \& Waves

| Code | Title | Credits |
| :--- | :--- | ---: |
| E C E 320 | Electrodynamics II | 3 |
| E C E 420 | Electromagnetic Wave | 3 |
|  | Transmission | 3 |
| E C E 434 | Photonics | 3 |
| E C E 440 | Electromagnetic Fields and Waves | 3 |
| E C E/N E/ | Introduction to Plasmas | 3 |
| PHYSICS 525 |  | 3 |
| E C E/N E/ | Plasma Confinement and Heating | 3 |
| PHYSICS 527 |  |  |


| EC E/N E 528 | Plasma Processing and Technology | 3 |
| :--- | :--- | ---: |
| EC E536 | Integrated Optics and <br> Optoelectronics | 3 |
| EC E/PHYSICS 546 | Lasers | $2-3$ |
| ECE547 | Advanced Communications Circuit <br> Design |  |
|  |  | 3 |


| Systems \& Control |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| E C E 332 | Feedback Control Systems | 3 |
| E C E 334 | State Space Systems Analysis | 3 |
| E C E/M E 439 | Introduction to Robotics ${ }^{1}$ | 3 |
| E C E/B M E 461 | Mathematical and Computer |  |
|  | Modeling of Physiological Systems | 3 |
| E C E/M E 577 | Automatic Controls Laboratory ${ }^{1}$ |  |


| Power \& Machines |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ECE355 | Electromechanical Energy Conversion | 3 |
| ECE356 | Electric Power Processing for Alternative Energy Systems | 3 |
| ECE411 | Introduction to Electric Drive Systems | 3 |
| ECE412 | Power Electronic Circuits ${ }^{1}$ | 3 |
| ECE 427 | Electric Power Systems | 3 |
| ECE504 | Electric Machine \& Drive System Laboratory | 2-3 |
| ECE511 | Theory and Control of Synchronous Machines | 3 |
| ECE512 | Power Electronics Laboratory ${ }^{1}$ | 3 |


| Communications \& Signal Processing |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| EC E 331 | Introduction to Random Signal Analysis and Statistics | 3 |
| ECE431 | Digital Signal Processing ${ }^{1}$ | 3 |
| EC E 432 | Digital Signal Processing <br> Laboratory ${ }^{1}$ | 3 |
| E C E/COMP SCI/ MATH 435 | Introduction to Cryptography | 3 |
| E C E 436 | Communication Systems ${ }^{1}$ | 3 |
| ECE437 | Communication Systems II ${ }^{1}$ | 3 |
| E C E 447 | Applied Communications Systems ${ }^{1}$ | 3 |
| E C E/COMP SCI/ ME 532 | Matrix Methods in Machine Learning ${ }^{1}$ | 3 |
| ECE/COMP SCI 533 | Image Processing ${ }^{1}$ | 3 |
| ECE537 | Communication Networks ${ }^{1}$ | 3 |
| E C E/COMP SCI/ ME 539 | Introduction to Artificial Neural Network and Fuzzy Systems ${ }^{1}$ | 3 |
| ECE/MATH 641 | Introduction to Error-Correcting Codes | 3 |


| Circuits \& Devices |  |
| :--- | :--- |
| Code | Title |
| E C E 335 | Microelectronic Devices |

Credits
Microelectronic Devices

| ECE342 | Electronic Circuits II | 3 |
| :---: | :---: | :---: |
| ECE401 | Electro-Acoustical Engineering | 3 |
| ECE445 | Semiconductor Physics and Devices | 3 |
| ECE/BME 462 | Medical Instrumentation ${ }^{1}$ | 3 |
| ECE466 | Electronics of Solids | 3 |
| ECE541 | Analog MOS Integrated Circuit Design ${ }^{1}$ | 3 |
| ECE542 | Introduction to Microelectromechanical Systems ${ }^{1}$ | 3 |
| $\begin{aligned} & \text { E C E/CBE/ } \\ & \text { M S\&E } 544 \end{aligned}$ | Processing of Electronic Materials | 3 |
| ECE545 | Advanced Microwave <br> Measurements for Communications 1 | 3 |
| ECE548 | Integrated Circuit Design ${ }^{1}$ | 3 |
| ECE549 | Integrated Circuit Fabrication Laboratory ${ }^{1}$ | 3 |
| ECE555 | Digital Circuits and Components ${ }^{1}$ | 3 |

## Computers \& Computing



## PROFESSIONAL ELECTIVES

## Code Title Credits

Classes to be taken in an area of professional interest. 9
The following courses are acceptable as professional electives if the courses are not used to meet any other degree requirements.

| MATH/ | Introduction to Discrete |
| :--- | :--- |
| COMP SCI 240 | Mathematics |
| ECE320 | Electrodynamics II |
| E C E 331 | Introduction to Random Signal |
|  | Analysis and Statistics |
| EC E 332 | Feedback Control Systems |
| ECE334 | State Space Systems Analysis |
| ECE335 | Microelectronic Devices |
| ECE342 | Electronic Circuits II |


| E C E 353 | Introduction to Microprocessor Systems |
| :---: | :---: |
| ECE/ COMP SCI 354 | Machine Organization and Programming |
| E C E 355 | Electromechanical Energy Conversion |
| E C E 356 | Electric Power Processing for Alternative Energy Systems |
| E C E courses numbered 399 and higher |  |
| COMP SCI courses numbered 400 and higher |  |
| MATH 319 | Techniques in Ordinary Differential Equations |
| MATH 320 | Linear Algebra and Differential Equations ${ }^{1}$ |
| MATH 321 | Applied Mathematical Analysis |
| MATH 322 | Applied Mathematical Analysis |
| MATH 340 | Elementary Matrix and Linear Algebra ${ }^{1}$ |
| MATH 341 | Linear Algebra |
| MATH courses numbered 400 and higher |  |
| STATS courses numbered 400 and higher |  |
| Any biological science course that is designated as intermediate or advanced |  |
| Any physical science course that is designated as intermediate or advanced |  |
| Any natural science course that is designated as advanced except that Math, Computer Sciences, and Statistics courses must follow the above criteria |  |
| Engineering courses numbered 300 and higher that are not E C E or cross-listed with E C E |  |
| Up to six credits of Professional Electives can be taken from School of Busienss classes numbered 300 and higher. |  |
| DS 501 | Special Topics (Wearable Technologies) |
| DANCE 560 | Current Topics in Dance: Workshop (Making Digital Lighting Controls) |

1 Students may only earn degree credit for MATH 320 Linear Algebra and Differential Equations or MATH 340 Elementary Matrix and Linear Algebra, not both.

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENGL 100 | Introduction to College Composition | 3 |
| or LSC 100 | Science and Storytelling |  |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or COM ARTS 181 | Elements of Speech-Honors Course |  |
| or ESL 118 | Academic Writing II |  |
| E P D 397 | Technical Communication | 3 |
| Total Credits |  | 6 |

## LIBERAL STUDIES ELECTIVES

Code
Title

| Complete requirements $\left(\right.$ p. 229 $^{1}$ | 15 |
| :--- | :--- |
| 1otal Crits |  |

Total Credits
1 All liberal studies credits must be identified with the letter $\mathrm{H}, \mathrm{S}, \mathrm{L}$, or Z. Language courses are acceptable without the letter and are considered humanities. Note: See an ECE advisor and/or the EE Curriculum Guide for additional information.

## TOTAL DEGREE CREDITS: 120

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
|  | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |

## LEARNING OUTCOMES

1. (a) an ability to apply knowledge of mathematics, science, and engineering.
2. (b) an ability to design and conduct experiments, as well as to analyze and interpret data.
3. (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. (d) an ability to function on multidisciplinary teams.
5. (e) an ability to identify, formulate, and solve engineering problems.
6. (f) an understanding of professional and ethical responsibility.
7. (g) an ability to communicate effectively.
8. (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. (i) a recognition of the need for, and an ability to engage in life-long learning.
10. (j) a knowledge of contemporary issues.
11. (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

| FOUR-YEAR PLAN |  |  |
| :---: | :---: | :---: |
| SAMPLE FOUR-YEAR PLAN |  |  |
| First Year |  |  |
| Fall | Credits Spring | Credits |
| CHEM 109 | 5 ECE/COMP SCI 252 | 2 |
| MATH 221 | 5 PHYSICS 201 | 5 |
| E C E 210 | 2 MATH 222 | 4 |
| Liberal Studies Elective | 3 Communication A | 3 |
|  | 15 | 14 |


| Second Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| PHYSICS 202 | 5 E C E 220 | 3 |
| MATH 234 | 4 COMP SCl 300 | 3 |
| E C E 219 | 1 E C E 230 | 4 |
| E C E 203 | 3 E C E 270 | 1 |
| Liberal Studies Elective | 3 Liberal Studies Elective | 3 |
|  | 16 | 14 |


| Third Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| E C E/PHYSICS 235 | 3 ECE Advanced Elective | 3 |
| Statistics/Probability | 3 ECE Advanced Elective | 3 |
| Elective | 3 EP D 397 | 3 |
| E C E 340 | 1 EE Advanced Lab (3XX) | 1 |
| EC E 271 | 3 Liberal Studies Elective | 3 |
| E C E/COMP SCI 352 | 3 Professional Elective | 3 |
| EC E 330 | 16 | 16 |


| Fourth Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| Liberal Studies Elective | 3 Professional Elective | 3 |
| ECE Advanced Elective | 3 ECE Advanced Elective (4XX) | 3 |
| ECE Advanced Elective | 4 ECE Advanced Elective (4XX) | 3 |
| EE Advanced Lab (3XX) | 1 ECE Capstone Design | 3 |
| E C E 370 | 2 Free Elective | 1 |
| Professional Elective | 3 |  |
|  | 16 | 13 |

Total Credits 120

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

Hagness (chair)
Anderson
Barmish
Booske
Behdad
Boston
Botez
DeMarco
Gubner (vice chair)
Hitchon
Hu
Jahns
Jiang*
Knezevic
Lesieutre
Lipasti
Ma
Mawst
Nowak
Ramanathan (vice chair)
Sayeed
Sethares
Shohet
van der Weide
Van Veen
Venkataramanan
Wendt

## ASSOCIATE PROFESSORS

Davoodi
Milenkovic
Willett

## ASSISTANT PROFESSORS

Farrell
Fawaz
Jog
Kats
Kim
Lessard
Li
Loh

Ludois
Papailiopoulos
San Miguel
Severson
Velten
Yu

## FACULTY ASSOCIATES

Allie
Fredette
Hoffman
Krachey
Lu
Milicic
*For scholarship information, please contact Professor Jiang

## ACCREDITATION

## ACCREDITATION

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## ENGINEERING PHYSICS

The Department of Engineering Physics (EP) within the University of Wisconsin-Madison College of Engineering is the home of three undergraduate degree programs (nuclear engineering; engineering mechanics and astronautics; and engineering physics) and two graduate degree programs (nuclear engineering and engineering physics; and engineering mechanics). The department's faculty conducts research in the areas of nuclear systems, plasma physics and fusion energy science, and experimental and theoretical mechanics. This combination of topics fosters synergies with respect to neutronics, nuclear materials, mechanics of novel materials, fluid dynamics, and computation. The graduate nuclear engineering program has been ranked in the top four nationally, by U.S. News and World Report in each of the past ten years.

## DEGREES/MAJORS/CERTIFICATES

- Engineering for Energy Sustainability, Certificate (p. 273)
- Engineering Mechanics, B.S. (p. 276)
- Engineering Physics, B.S. (p. 283)
- Nuclear Engineering Materials, Certificate (p. 288)
- Nuclear Engineering, B.S. (p. 288)


## PEOPLE

## PROFESSORS

Henderson (chair)
T. Allen

Blanchard
Bonazza
Crone
Fonck
Hegna

## Lakes

Smith (also Mathematics)
Sovinec
Waleffe (also Mathematics)
Wilson

## ASSOCIATE PROFESSORS

M. Allen

Schmitz
Witt

## ASSISTANT PROFESSORS

Couet
Notbohm
Scarlat
Thevamaran
See department website (https://directory.engr.wisc.edu/display.php/ faculty/?page=ep\&search=faculty) for list.

## RESOURCES AND SCHOLARSHIPS

## FACILITIES

Facilities available for instruction and research include:
Fluid Mechanics and Heat Transfer Laboratories
Instructional Computing Labs (in Computer Aided Engineering)
Nanomechanics Laboratory
Nuclear Instrumentation Laboratory
Plasma Physics Laboratories
Superconductivity and Cryogenics Laboratories

## ENGINEERING FOR ENERGY SUSTAINABILITY, CERTIFICATE

Equity and sustainability of energy resources in the face of increasing global population and economic development are key issues at the center of the public discourse today. The objective of this certificate program is to offer undergraduate students a suite of courses addressing energy sustainability. The courses span across the engineering curriculum, with firm roots in real-world design and engineering practices.

Students enrolled as degree-seeking undergraduates with a minimum GPA of 2.5 and a plan of study to fulfill the certificate requirements may enroll in the program. Applications may be submitted at any time, but students are encouraged to apply early in their undergraduate careers in order to ensure successful completion of the program; however, students may take courses that fulfill certificate requirements before submitting an application.

## HOW TO GET IN

## DECLARING THE CERTIFICATE

A student interested in completing the certificate program must contact a designated faculty member in the major department to apply. The student and faculty member must complete a Declaration of Intent and Study Plan to enter the certificate program.

Required: Declaration of Intent and Study Plan (https://energy.wisc.edu/ sites/default/files/dec_of_intent-2017.pdf)

The following faculty members have been designated as a point of contact for each department:

- Douglas J. Reinemann (https://energy.wisc.edu/about/energy-experts/doug-reinemann), Biological Systems Engineering
- Robert G. Radwin (http://www.engr.wisc.edu/bme/faculty/ radwin_robert.html), Biomedical Engineering
- Thatcher Root (https://energy.wisc.edu/about/energy-experts/ thatcher-root), Chemical and Biological Engineering
- Andrea Hicks (https://energy.wisc.edu/about/energy-experts/andreahicks), Civil and Environmental Engineering
- Giri Venkataramanan (https://energy.wisc.edu/about/energy-experts/ giri-venkataramanan), Electrical and Computer Engineering
- James Tinjum (https://energy.wisc.edu/about/energy-experts/jamestinjum), Geological Engineering
- Jeffrey Linderoth (https://directory.engr.wisc.edu/ie/faculty/ linderoth_jeffrey), Industrial and Systems Engineering
- Dane Morgan (https://energy.wisc.edu/about/energy-experts/danemorgan), Materials Science and Engineering
- Jaal Ghandhi (https://energy.wisc.edu/about/energy-experts/jaalghandhi), Mechanical Engineering
- Paul Wilson (https://energy.wisc.edu/about/energy-experts/ paul-wilson), Nuclear Engineering, Engineering Mechanics, and Engineering Physics

Students who are not engineering majors should contact Scott Williams (spwilliams@wisc.edu) to discuss options for completing the certificate or alternative programs.

When the student and faculty member have filled out and signed the Declaration of Intent and Study Plan, the student must hand them in to Room 1150 Wisconsin Energy Institute.

## REQUIREMENTS

## REQUIREMENTS

Students must select 16 "sustainability credits" from a suite of available courses that are divided into the following categories:

- Liberal Studies and Science (Minimum of 3, maximum of 6 sustainability credits)
- Engineering (Minimum of 3, maximum of 6 sustainability credits)
- Capstone (Minimum of 3, maximum of 6 sustainability credits)
- Seminar (1 sustainability credit required)

The seminar requirement is fulfilled through the course CBE 555 Seminar-Chemical Engineering Connections, or E P 602 Special Topics in Engineering Physics (Sustainable Energy Challenges and Solutions), both of which are open to all engineering majors.

Not all courses have the same number of sustainability credits as academic credits; some courses have fewer sustainability credits depending on how closely related they are to energy and sustainability. Students should review the sustainability credits associated with each course while filling out their study plan.

## PREAPPROVED COURSES

| Liberal Studies and Science |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ENVIR ST 112 | Environmental Studies: The Social Perspective ${ }^{3}$ sustainability credits | 3 |
| ENVIR ST 113 | Environmental Studies: The Humanistic Perspective ${ }^{3}$ sustainability credits | 3 |
| ENVIR ST/GEOG 139 | Living in the Global Environment: An Introduction to People-Environment Geography ${ }^{3}$ sustainability credits | 3-4 |
| ENVIR ST/A A E 244 | The Environment and the Global Economy ${ }^{3}$ sustainability credits | 3 |
| ENVIR ST 250 | Introduction to Sustainability Science ${ }^{3}$ sustainability credits | 3 |
| ENVIR ST/GEOG 339 | Environmental Conservation ${ }^{3}$ sustainability credits | 4 |
| ENVIR ST/A A E/ ECON 343 | $\underset{\text { Environmental Economics }{ }^{3}}{ }$ sustainability credits | 3-4 |
| ENVIR ST/ |  | 3 |
| ENVIR ST/GEOG/ HISTORY 460 | American Environmental History ${ }^{3}$ sustainability credits | 4 |
| ENVIR ST/A A E/ CIV ENGR/ URB R PL 561 | Energy Markets ${ }^{3}$ sustainability credits | 3 |

## Engineering

| Code | Title | Credits |
| :---: | :---: | :---: |
| BSE/DS/ | Sustainable Residential | 3 |
| LAND ARC 356 | Construction 2 sustainability credits |  |
| BSE/ENVIR ST 367 | Renewable Energy Systems ${ }^{3}$ sustainability credits | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources ${ }^{3}$ sustainability credits | 3 |
| BSE 461 | Food and Bioprocessing Operations 1 sustainability credit | 3 |
| CBE 250 | Process Synthesis ${ }^{1}$ sustainability credit | 3 |
| CBE 310 | Chemical Process Thermodynamics <br> 1 sustainability credit | 3 |
| CBE 311 | Thermodynamics of Mixtures ${ }^{1}$ sustainability credit | 3 |
| CBE 326 | Momentum and Heat Transfer Operations <br> 1 sustainability credit | 3 |
| CBE 430 | Chemical Kinetics and Reactor Design 1 sustainability credit | 3 |
| CBE 450 | Process Design 1 sustainability credit | 3 |
| CBE 562 | Special Topics in Chemical <br> Engineering (Energy and <br> Sustainability) ${ }^{3 \text { sustainability credits }}$ | 3 |
| CBE/M E 567 | Solar Energy Technology ${ }^{3}$ sustainability credits | 3 |
| CIV ENGR 320 | Environmental Engineering ${ }^{1}$ sustainability credit | 3 |


| CIV ENGR 370 | Transportation Engineering ${ }^{1}$ sustainability credit | 3 |
| :---: | :---: | :---: |
| CIV ENGR 421 | Environmental Sustainability Engineering 3 sustainability credits | 3 |
| E C E 355 | Electromechanical Energy Conversion ${ }^{1}$ sustainability credit | 3 |
| ECE356 | Electric Power Processing for Alternative Energy Systems ${ }^{3}$ sustainability credits | 3 |
| E C E 412 | Power Electronic Circuits ${ }^{1}$ sustainability credit | 3 |
| E C E 427 | Electric Power Systems ${ }^{1}$ sustainability credit | 3 |
| G L E 401 | Special Topics in Geological Engineering (Wind Energy Site Design and Construction) ${ }^{3}$ sustainability credits | 1-4 |
| or CIV ENGR 639 | Special Topics in Geotechnical Engineering |  |
| M E 361 | Thermodynamics ${ }^{1}$ sustainability credit | 3 |
| M E 370 | Energy Systems Laboratory ${ }^{1}$ sustainability credit | 3 |
| M E 466 | Air Pollution Effects, Measurements and Control ${ }^{1}$ sustainability credit | 3 |
| or CIV ENGR 423 | Air Pollution Effects, Measurement and Control |  |
| M S \& E 330 | Thermodynamics of Materials ${ }^{1}$ sustainability credit | 4 |
| M S \& E 331 | Transport Phenomena in Materials ${ }^{1}$ sustainability credit | 3 |
| N E 571 | Economic and Environmental Aspects of Nuclear Energy ${ }^{3}$ sustainability credits | 3 |

1 Topic: Energy and Sustainability, 3 credits
2 Topic: Wind Energy Site Design and Construction, 3 credits

## Capstone

Courses numbered 489, 491, 599, 601, and 699 (not exhaustive) are examples of courses that may count towards this requirement.

## Seminar

| Code | Title | Credits |
| :--- | :--- | ---: |
| E P 602 | Special Topics in Engineering <br> Physics 1 sustainability credit | $1-3$ |
| CBE 555 | Seminar-Chemical Engineering <br> Connections 1 sustainability credit | 1 |

## COURSE AUTHORIZATION

Some courses may require additional approval to appear in students' DARS reports as having fulfilled part of the certificate requirements. Students who are taking a course for the capstone requirement must fill out this DARS Authorization Form (https:// uwmadison.co1.qualtrics.com/jfe/form/SV_bpFYQNVcKo4Uogl) to receive the proper number of sustainability credits. For more information on obtaining credits for capstone courses, see Capstone Course Guidelines (http://energy.wisc.edu/education/energy-certificate/ capstone-guidelines).

In addition, students who wish to receive sustainability credits for courses that are not currently on the preapproved list may also complete the DARS Authorization Form (https://uwmadison.co1.qualtrics.com/jfe/ form/SV_bpFYQNVcKo4Uogl) and explain why the course should receive sustainability credits.

Once a form is filled out, it will be sent to the certificate faculty committee for approval. To expedite the approval process, students should submit their DARS Authorization Form (https://uwmadison.co1.qualtrics.com/ jfe/form/SV_bpFYQNVcKo4Uogl) before or near the beginning of the semester in which they plan to take the course.

A student interested in completing the certificate program must contact a designated faculty member in his or her major department to apply. The student and faculty member must fill out the Declaration of Intent and Study Plan (http://www.energy.wisc.edu/sites/default/files/education/ dec-of-intent-1.pdf) to enter the certificate program.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Understand the physical properties and processes related to energy resources and the conversion technologies involved.
2. Uunderstand how energy decisions are impacted by environmental, social, economic or political factors.
3. Synthesize knowledge of the technical/physical aspects of energy with the social/environmental factors to analyze how energy choices impact the sustainability of energy systems.
4. Apply interdisciplinary energy knowledge to analyze, design or solve a matter of real world significance related to sustainability of energy use.

## PEOPLE

The following faculty members have been designated as a point of contact for each department:

- Douglas J. Reinemann (https://energy.wisc.edu/about/energy-experts/doug-reinemann), Biological Systems Engineering
- Robert G. Radwin (http://www.engr.wisc.edu/bme/faculty/ radwin_robert.html), Biomedical Engineering
- Thatcher Root (https://energy.wisc.edu/about/energy-experts/ thatcher-root), Chemical and Biological Engineering
- Andrea Hicks (https://energy.wisc.edu/about/energy-experts/andreahicks), Civil and Environmental Engineering
- Giri Venkataramanan (https://energy.wisc.edu/about/energy-experts/ giri-venkataramanan), Electrical and Computer Engineering
- James Tinjum (https://energy.wisc.edu/about/energy-experts/jamestinjum), Geological Engineering
- Jeffrey Linderoth (https://directory.engr.wisc.edu/ie/faculty/ linderoth_jeffrey), Industrial and Systems Engineering
- Dane Morgan (https://energy.wisc.edu/about/energy-experts/danemorgan), Materials Science and Engineering
- Jaal Ghandhi, (https://energy.wisc.edu/about/energy-experts/jaalghandhi) Mechanical Engineering
- P (https://directory.engr.wisc.edu/ep/Faculty/Wilson_Paul)aul Wilson (https://energy.wisc.edu/about/energy-experts/paul-wilson), Nuclear Engineering, Engineering Mechanics, and Engineering Physics

Students who are not engineering majors should contact Scott Williams (spwilliams@wisc.edu) to discuss options for completing the certificate or alternative programs.

## ENGINEERING PHYSICS DEPARTMENT PROFESSORS

Henderson (chair)<br>T. Allen<br>Blanchard<br>Bonazza<br>Crone<br>Fonck<br>Hegna<br>Lakes<br>Smith (also Mathematics)<br>Sovinec<br>Waleffe (also Mathematics)<br>Wilson

## ASSOCIATE PROFESSORS

M. Allen

Schmitz
Witt

## ASSISTANT PROFESSORS

Couet
Notbohm
Scarlat
Thevamaran
See department website (https://directory.engr.wisc.edu/display.php/ faculty/?page=ep\&search=faculty) for list.

## ENGINEERING MECHANICS, B.S.

The Department of Engineering Physics administers the B.S., M.S., and Ph.D. degrees in engineering mechanics. The B.S. degree in engineering mechanics may be accompanied by an option in astronautics.

Engineering mechanics is the scholarly term for the study of forces and the resulting deformations, accelerations, motions, vibrations and other action that they cause. As such, engineering mechanics forms the foundation of a degree in aerospace, mechanical or civil engineering and it is fundamental to important parts of biomedical engineering, chemical engineering, materials science, and other engineering disciplines. Hence, a degree in engineering mechanics provides a broad scientific background which enables its graduates to tackle challenging problems in most fields of engineering. The curriculum emphasizes the basic sciences-mathematics, computer science, physics and the engineering sciences-fluid dynamics, thermodynamics, mechanics, materials science, and electrical engineering. Although the degree program is entitled engineering mechanics at UW-Madison, the program is most comparable to aerospace engineering and mechanical engineering programs at various universities across the United States. However,
internationally, this field is more commonly known as "mechanics" rather than "mechanical engineering" or "aerospace engineering." A few select universities in the United States offer programs that are similar to UW-Madison's engineering mechanics program under titles such as "engineering science" or "theoretical and applied mechanics."

The objective of the program is to provide the student with a broad background in the fundamental physical sciences and applied mathematics, coordinated with both theoretical and applied engineering methods and experimental techniques. This type of educational background will give the student the degree of versatility necessary for dealing with the variety and complexity of modern technological problems as well as the ability to adapt to the rapidly changing needs and interests of industry, government, and society.

An education in engineering mechanics provides many advantages. First, the foundation offered by a degree in mechanics allows our graduates to more easily interact with co-workers on interdisciplinary teams including chemists, physicists, and mathematicians. Second, many industrial organizations prefer engineers that have a broad, fundamental scientific background rather than a narrow view of just one discipline. Third, and probably most important, great changes have taken place in science and engineering during recent years. Among the most important of these have been the rapid diffusion of scientific knowledge and disciplines into engineering, the increasing use of analytical and computer methods for the solution of practical problems, the need for a better understanding of the properties and behavior of materials, and the increasing need for engineers who can adapt known methods to new situations and develop new experimental and analytical methods. By focusing on core competency in physics and applied mathematics the engineering mechanics degree prepares students for these challenges.

The required courses taken early in the curriculum are intended to give the student a fundamental background in mathematics, science, and engineering. In addition to developing versatility through exposure to important concepts in various scientific fields, the required courses allow the students to identify areas of interest. With the relatively large number of elective credits available in the latter part of the program, the student may either continue to follow a general program or may prefer to concentrate elective courses in such areas as stress analysis and structural mechanics, dynamics and vibrations, aerodynamics and flight mechanics, experimental mechanics, applied mathematics, materials science, geological engineering, biomechanics, aerospace mechanics, mechanical systems analysis, etc.

Engineering mechanics graduates are sought by most industries and governmental agencies including in particular those participating in the newly developing areas of engineering such as space technology, performance of new structural materials, and so on. Their work often involves participation in design, research and development projects where the problems are sufficiently complex or unusual that their solutions require engineers with (1) a thorough understanding of the fundamentals of engineering, (2) advanced education in the established experimental and analytical methods, and (3) the ability to develop new experimental and analytical methods to attack problems for which standard methods, formulas, and materials have not yet been developed. The program also provides excellent preparation for graduate study in a variety of related disciplines.

## ENGINEERING MECHANICS AND NUCLEAR ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

The faculty recognize that our graduates will choose to use the knowledge and skills they have acquired during their undergraduate years
to pursue a wide variety of career and life goals and we encourage this diversity of paths. Initially, we expect graduates will begin their careers in fields that utilize their knowledge, education and training in solid mechanics and fluid mechanics as it applies to aeronautics/astronautics and mechanics in design and manufacturing.

Whatever path our graduates choose to pursue, our educational objectives for the nuclear engineering and engineering mechanics programs are to allow them to:

1. Exhibit strong performance and continuous development in problemsolving, leadership, teamwork, and communication, initially applied to nuclear engineering or engineering mechanics, and demonstrating an unwavering commitment to excellence.
2. Demonstrate continuing commitment to, and interest in, his or her training and education, as well as those of others.
3. Transition seamlessly into a professional environment and make continuing, well-informed career choices.
4. Contribute to their communities.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison
to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

The following curriculum applies to students who entered the College of Engineering after fall 2016.

## ENGINEERING MECHANICS CURRICULUM <br> SUMMARY OF REQUIREMENTS

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Mathematics and Statistics | 22 |
| Science | 10 |
| Engineering Science | 26 |
| Engineering Mechanics Core | 31 |
| EMA Electives | 9 |
| Communication Skills | 8 |
| Liberal Studies | 16 |
| Technical Electives | 6 |
| Total Credits | 128 |

## MATHEMATICS AND STATISTICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 221 <br> or MATH 217 <br> or MATH 275 | Calculus and Analytic Geometry 1 <br> Calculus with Algebra and Trigonometry II Topics in Calculus I | 5 |
| MATH 222 or MATH 276 | Calculus and Analytic Geometry 2 Topics in Calculus II | 4-5 |
| MATH 234 | Calculus--Functions of Several Variables | 4 |
| MATH 320 | Linear Algebra and Differential Equations | 3 |
| MATH 321 | Applied Mathematical Analysis | 3 |
| STAT 324 | Introductory Applied Statistics for Engineers | 3 |
| Total Credits |  | 22-23 |

## SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | $5-9$ |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 | General Chemistry I |  |
| \& CHEM 104 | and General Chemistry II |  |
| PHYSICS 202 | General Physics | 5 |
| Total Credits |  | $10-14$ |

## ENGINEERING SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTEREGR 170 | Design Practicum | 3 |
| M E 231 | Introductory Engineering Graphics | 2 |
| E P 271 | Engineering Problem Solving I | 3 |
| or COMP SCI 310 | Problem Solving Using Computers |  |
| M S \& E 350 | Introduction to Materials Science | 3 |
| M E 361 | Thermodynamics | 3 |
| M E 363 | Fluid Dynamics | 3 |
| or CIV ENGR 310 | Fluid Mechanics |  |
| M E 364 | Elementary Heat Transfer | 3 |
| E C E 376 | Electrical and Electronic Circuits | 3 |
| or PHYSICS 321 | Electric Circuits and Electronics |  |

Computing Elective ${ }^{1}$
Total Credits ..... 3
26

1 Choose from COMP SCI 300 Programming II, COMP SCI 412 Introduction to Numerical Methods, EM A/E P 471 Intermediate Problem Solving for Engineers, E P/E M A 476 Introduction to Scientific Computing for Engineering Physics

## ENGINEERING MECHANICS CORE

| Code | Title | Credits |
| :---: | :---: | :---: |
| E M A 201 | Statics | 3 |
| E M A 202 | Dynamics | 3 |
| E M A 303 | Mechanics of Materials | 3 |
| E M A/M E 307 | Mechanics of Materials Lab | 1 |
| E M A 405 | Practicum in Finite Elements | 3 |
| E M A 469 | Design Problems in Engineering | 3 |
| E M A 506 | Advanced Mechanics of Materials I | 3 |
| Select one of the following: |  | 3 |
| E M A/M E 570 | Experimental Mechanics |  |
| E M A/M E 540 | Experimental Vibration and Dynamic System Analysis |  |
| E M A 611 | Advanced Mechanical Testing of Materials |  |
| EM A 522 | Aerodynamics Lab |  |
| EMA521 or M E 563 | Aerodynamics <br> Intermediate Fluid Dynamics | 3 |
| EMA 542 or EMA545 | Advanced Dynamics <br> Mechanical Vibrations | 3 |
| E M A 569 | Senior Design Project | 3 |

## ENGINEERING MECHANICS AND ASTRONAUTICS ELECTIVES

Code Title Credits

Select 9 credits from any E M A course numbered 500 and 9 above

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENGL 100 | Introduction to College Composition | 3 |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or LSC 100 | Science and Storytelling |  |
| or ESL 118 | Academic Writing II |  |
| E P D 275 | Technical Presentations | 2 |
| E P D 397 | Technical Communication | 3 |
| Total Credits |  | 8 |

## TECHNICAL ELECTIVES

Code Title Credits

Select 6 credits at a level that requires two semesters of 6

## LIBERAL STUDIES

| Code Title |
| :--- |
| College of Engineering Liberal Studies Requirements |
| Complete Requirements (p. 229) ${ }^{1}$ |
| Total Credits |
| Students must take 16 credits that carry H, S, L, or Z breadth |
| designators. These credits must fulfill the following subrequirements: |
| 1. A minimum of two courses from the same department or program. At least |
| one of these two courses must be designated as above the elementary |
| level (I, A, or D) in the course listing. |
| 2. A minimum of 6 credits designated as humanities (H, L, or Z in the course |
| listing), and an additional minimum of 3 credits designated as social |
| science (S or Z in the course listing). Foreign language courses count |
| as H credits. Retroactive credits for language courses may not be used |
| to meet the Liberal Studies credit requirement (they can be used for |
| subrequirement 1 above). |
| 3. At least 3 credits in courses designated as ethnic studies (lower case "e" in |
| the course listing). These courses may help satisfy subrequirements 1 and |
| 2 above, but they count only once toward the total required. Note: Some |
| courses may have "e" designation but not H, S, L, or Z designation; these |
| courses do not count toward the Liberal Studies requirement. |

## TOTAL CREDITS: 128

For information on credit load, adding or dropping courses, course substitutions, pass/fail, auditing courses, dean's honor list, repeating courses, probation, and graduation, see the College of Engineering Official Regulations (https://www.engr.wisc.edu/academics/student-services/ academic-advising/undergraduate-engineering-students/rules-andregulations).

## ASTRONAUTICS OPTION IN ENGINEERING MECHANICS

- Engineering Mechanics: Astronautics (p. 281)


## ENGINEERING MECHANICS SCHOLARS AND DISTINGUISHED SCHOLARS PROGRAM

Students who achieve at least a 3.0 GPA in their first semester, and maintain it throughout their career, may be designated Scholars. They also may be exempted from some formal requirements for the Bachelor of Science in Engineering Mechanics degree other than total credits. However, they must meet certain restrictions on the distribution of courses chosen. Students who achieve at least a 3.70 grade point average (GPA) for the first semester of the freshman year or a 3.5 GPA for the first four semesters, may be designated Distinguished Scholars. These students, with the approval of their advisor, may be exempted from most formal requirements for the Bachelor of Science in Engineering Mechanics degree other than the total credit hours, so long as they maintain a satisfactory performance record and the main thrust of their work is along the lines of engineering mechanics education. The general education and liberal studies requirements must be met by Scholars and Distinguished Scholars. Students transferring into the engineering mechanics degree program may be eligible to qualify for either of these scholars programs as late as the beginning of the seventh semester.

## HONORS IN UNDERGRADUATE RESEARCH PROGRAM

Qualified undergraduates may earn a Honors in Research designation on their transcript and diploma by completing 8 credits of undergraduate honors research, including a senior thesis. Further information is available in the department office.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| Wrade point average specified by the school, college, or |  |
| Grademic program to remain in good academic standing. |  |
| acader |  |

## LEARNING OUTCOMES

1. An ability to identify, formulate, and solve engineering problems. This includes: a. an ability to apply knowledge of basic mathematics, science and engineering; b. an ability to use advanced mathematical and computational techniques to analyze, model, and design physical systems consisting of solid and fluid components under steady state and transient conditions; c. an ability to design a system, component or process to meet desired needs; $d$. an ability to use the techniques, skills and modern engineering tools necessary for engineering practice.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to function on multi\#disciplinary teams.
4. Knowledge of professional and ethical standards.
5. An ability to communicate effectively.
6. The broad education necessary to understand the impact of engineering solutions in a global and societal context.
7. A recognition of the need for, and ability to engage in life-long learning.
8. A knowledge of contemporary issues.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

First Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 109 | 5 E M A 201 |  |
| MATH 221 | 5 MATH 222 | 3 |
| Communication A | 3 M E 231 | 4 |
| INTEREGR $170^{2}$ | 3 STAT 324 | 2 |
|  | Liberal Studies Elective |  |
|  | 16 | 3 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| MATH 234 | 4 MATH 320 | 3 |
| PHYSICS 202 | 5 Technical Elective | 3 |
| EM A 202 | 3 M E 361 | 3 |
| E P 271 or COMP SCI 310 | 3 EM A $303{ }^{4}$ | 3 |
| $\begin{aligned} & \text { E P D } 275 \text { or COM ARTS } \\ & 105 \end{aligned}$ | $2 \mathrm{EMA/ME} 307^{4}$ | 1 |
|  | Liberal Studies Elective | 3 |
|  | 17 | 16 |

## Third Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| E M A 506 | 3 E M A 405 | 3 |
| E M A 542 or $545^{5}$ | Experimental Mechanics <br> Course | 3 |
| MATH 321 | 3 M E 363 or CIV ENGR | 3 |
| M S \& E 350 | 310 | 3 |
| E P D 397 | 3 Computing Elective | 3 |
| Liberal Studies Elective | 3 Technical Elective | 3 |
|  | 3 | 15 |
| Fourth Year | 18 | Credits |
| Fall |  | 3 |
| E M A 469 | Credits Spring | 3 |
| E M A 521 ${ }^{7}$ | 3 EM A 569 Elective | 3 |
| EMA Elective | 3 EMA Elective | 3 |
| E C E 376 | 3 M E 364 | 3 |
| Liberal Studies Elective | 4 Liberal Studies Elective | 3 |
|  | 16 | 15 |

## Total Credits 128

1 Students should take CHEM 109 Advanced General Chemistry, 5 cr; students with inadequate preparation in high school chemistry may substitute CHEM 103 General Chemistry I and CHEM 104 General Chemistry II for a total of 9 credits.
Students who were not able to take INTEREGR 170 Design Practicum as freshmen may, with the approval of their advisor, substitute a course offered in the College of Engineering or in the departments of Chemistry, Computer Sciences, Mathematics, and Physics.
Students may substitute PHYSICS 201 General Physics, 5 credits, for E M A 201 Statics, 3 credits, with the approval of their advisor.
M E 306 Mechanics of Materials and M E/E M A 307 Mechanics of Materials Lab are acceptable substitutions for E M A 303 Mechanics of Materials and EMA/M E 307 Mechanics of Materials Lab.
5 Students electing E M A 545 Mechanical Vibrations instead of E M A 542 Advanced Dynamics should note that E M A 545 Mechanical Vibrations is offered in the spring semester only.
EMA 611 Advanced Mechanical Testing of Materials or EM A/ M E 540 Experimental Vibration and Dynamic System Analysis or E M A/M E 570 Experimental Mechanics or E M A 522 Aerodynamics Lab. Note that EM A/M E 540 Experimental Vibration and Dynamic System Analysis is typically offered in the fall.

7 M E 563 Intermediate Fluid Dynamics may be substituted for E M A 521 Aerodynamics.

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

Henderson (chair)
T. Allen

Blanchard
Bonazza
Crone
Fonck
Hegna
Lakes
Smith (also Mathematics)
Sovinec
Waleffe (also Mathematics)
Wilson

## ASSOCIATE PROFESSORS

M. Allen

Schmitz
Witt

## ASSISTANT PROFESSORS

Couet
Notbohm
Scarlat
Thevamaran
See department website (https://directory.engr.wisc.edu/display.php/ faculty/?page=ep\&search=faculty) for list.

## RESOURCES AND SCHOLARSHIPS

## FACILITIES

Facilities available for instruction and research include:

## Mechanics Holographic Lab

Viscoelasticity and Composites Lab
Wisconsin Laboratory for Structures and Materials Testing: Materials
Testing Lab
Wind Tunnel Laboratory
Structural Mechanics Lab
Structural Dynamics and Vibrations Lab
Fatigue/Fracture Lab
Instructional Computing Lab (in Computer Aided Engineering)
Research Computing Lab

## ACCREDITATION

## ACCREDITATION

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## ENGINEERING MECHANICS: ASTRONAUTICS

The astronautics option in engineering mechanics prepares students for design, development, and research, with an emphasis on applied mathematics and astronautics. Its purpose is to improve and expand the educational opportunities of students at the university who wish to pursue careers in astronautics and space-related areas. This is accomplished by providing in depth exposure to course sequences in astrodynamics, orbital mechanics, and flight dynamics, as well as a core curriculum of structural and material analysis, advanced dynamics, and vibrations. The program requires a minimum of 127 credits; students selecting this option must submit an option declaration form to the department office.

## REQUIREMENTS

The following curriculum applies to students who entered the College of Engineering after fall 2016.

## SUMMARY OF REQUIREMENTS

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Mathematics and Statistics | 22 |
| Science | 10 |
| Engineering Science | 26 |
| Engineering Mechanics/Astronautics Core | 40 |
| E M A Electives | 6 |
| Communication Skills | 8 |
| Liberal Studies | 16 |
| Total Credits | 128 |


| MATHEMATICS AND STATISTICS |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| MATH 221 or MATH 217 or MATH 275 | Calculus and Analytic Geometry 1 | 5 |
|  | Calculus with Algebra and Trigonometry II |  |
|  | Topics in Calculus I |  |
| MATH 222 or MATH 276 | Calculus and Analytic Geometry 2 | 4 |
|  | Topics in Calculus II |  |
| MATH 234 | Calculus--Functions of Several | 4 |
|  | Variables |  |
| MATH 320 | Linear Algebra and Differential | 3 |
|  | Equations |  |
| MATH 321 | Applied Mathematical Analysis | 3 |
| STAT 324 | Introductory Applied Statistics for Engineers | 3 |
| Total Credits |  | 22 |

## SCIENCE

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 5-9 |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| PHYSICS 202 | General Physics | 5 |
| Total Credits |  | 10-14 |
| ENGINEERING SCIENCE |  |  |
| Code | Title | Credits |
| INTEREGR 170 | Design Practicum | 3 |
| M E 231 | Introductory Engineering Graphics | 2 |
| EP 271 | Engineering Problem Solving I | 3 |
| or COMP SCI 310 | Problem Solving Using Computers |  |
| M E 361 | Thermodynamics | 3 |
| M E 363 | Fluid Dynamics | 3 |
| ECE 376 | Electrical and Electronic Circuits | 3 |
| M E 364 | Elementary Heat Transfer | 3 |
| ECE 332 | Feedback Control Systems | 3 |
| or M E 346 | Introduction to Feedback Control for Engineers | anical |
| or M E 446 | Automatic Controls |  |
| Computing Elective ${ }^{1}$ |  | 3 |
| Total Credits |  | 26 |

1 Choose from COMP SCI 300 Programming II, COMP SCI 412 Introduction to Numerical Methods, EM A/E P 471 Intermediate Problem Solving for Engineers, E P/E M A 476 Introduction to Scientific Computing for Engineering Physics

ENGINEERING MECHANICS/ASTRONAUTICS CORE

| Code | Title | Credits |
| :--- | :--- | ---: |
| E M A 201 | Statics | 3 |
| E M A 202 | Dynamics | 3 |
| E M A 303 | Mechanics of Materials | 3 |
| E M A/M E 307 | Mechanics of Materials Lab | 1 |
| E M A 405 | Practicum in Finite Elements | 3 |


| E M A 469 | Design Problems in Engineering | 3 |
| :--- | :--- | :--- |
| E M A 506 | Advanced Mechanics of Materials I | 3 |
| Select one of the following: | 3 |  |
| E M A/M E 540 | Experimental Vibration and <br> Dynamic System Analysis |  |
| E M A/M E 570 | Experimental Mechanics |  |


| E M A/ | Astrodynamics |
| :--- | :--- |
| ASTRON 550 |  |
| E M A 610 | Structural Finite Element Model <br> Validation |
| E M A 642 | Satellite Dynamics |
| Select one of the following: |  |


| E M A 523 | Flight Dynamics and Control |
| :--- | :--- |
| E M A 601 | Special Topics in Engineering <br> Mechanics (Rocket Propulsion) |

## TECHNICAL ELECTIVES

## Code Title

Select three credits at an academic level that requires
Credits

2 semesters of calculus or 2 semesters of physics as a pre-requisite. E M A 1 may also be used to satisfy this requirement.

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENGL 100 | Introduction to College Composition | 3 |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or LSC 100 | Science and Storytelling |  |
| or ESL 118 | Academic Writing II |  |
| E P D 275 | Technical Presentations | 2 |
| E P D 397 | Technical Communication | 3 |
| Total Credits |  | 8 |

## LIBERAL STUDIES

Code Title Credits

College of Engineering Liberal Studies Requirements

| Complete Requirements (p. 229) $^{1}$ | 16 |
| :--- | :--- |

$\begin{array}{ll}\text { Total Credits } & 16\end{array}$
1 Students must take 16 credits that carry H, S, L, or Z breadth designators. These credits must fulfill the following subrequirements:

1. A minimum of two courses from the same department or program. At least one of these two courses must be designated as above the elementary level ( $I, A$, or $D$ ) in the course listing.
2. A minimum of 6 credits designated as humanities $(H, L$, or $Z$ in the course listing), and an additional minimum of 3 credits designated as social science ( S or Z in the course listing). Foreign language courses count
as H credits. Retroactive credits for language courses may not be used to meet the Liberal Studies credit requirement (they can be used for subrequirement 1 above).
3. At least 3 credits in courses designated as ethnic studies (lower case "e" in the course listing). These courses may help satisfy subrequirements 1 and 2 above, but they count only once toward the total required. Note: Some courses may have "e" designation but not $\mathrm{H}, \mathrm{S}, \mathrm{L}$, or Z designation; these courses do not count toward the Liberal Studies requirement.

For information on credit load, adding or dropping courses, course substitutions, pass/fail, auditing courses, dean's honor list, repeating courses, probation, and graduation, see the College of Engineering Official Regulations (https://www.engr.wisc.edu/academics/student-services/ academic-advising/undergraduate-engineering-students/rules-andregulations).

## FOUR-YEAR PLAN

## ASTRONAUTICS OPTION IN ENGINEERING MECHANICS <br> EXAMPLE FOUR YEAR PLAN

First Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 109 | ( E M A 201 |  |

Third Year
Fall Credits Spring Credits

| E M A 506 | 3 E M A 545 | 3 |
| :--- | :--- | ---: |
| E M A 405 | 3 Aerospace Elective | 3 |
| E M A 542 | 3 E P D 397 | 3 |
| M E 363 or CIV ENGR | 3 M E 364 | 3 |
| 310 | 3 Computing Elective | 3 |
| MATH 321 Liberal Studies Elective | 3 | 15 |

Fourth Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| E M A 469 | 3 E M A 569 | 3 |
| E M A 521 | 3 Aerospace Elective | 3 |


| EMA611, 540, 570, or 522 | 3 E C E 332 or M E 446 | 3 |
| :---: | :---: | :---: |
| E C E 376 | 3 Technical Elective | 3 |
| Liberal Studies Elective | 4 Liberal Studies Elective | 3 |
|  | 16 | 15 |
| Total Credits 128 |  |  |
| 1 Students should take CHEM 109 Advanced General Chemistry, 5 cr; students with inadequate preparation in high school chemistry may substitute CHEM 103 General Chemistry I and CHEM 104 General Chemistry II for a total of 9 credits. |  |  |
| 2 Students who were not able to take INTEREGR 170 Design Practicum as freshmen may, with the approval of their advisor, substitute a course offered in the College of Engineering or in the departments of Chemistry, Computer Sciences, Mathematics, and Physics. |  |  |
| Students may substitute PHYSICS 201 General Physics, 5 credits, for E M A 201 Statics, 3 credits, with the approval of their advisor. |  |  |
| 4 M E 306 Mechanics Materials Lab are ac of Materials and EM | als and M E/EMA 307 Me ubstitutions for E M A 303 07 Mechanics of Materials |  |

## ENGINEERING PHYSICS, B.S.

The Department of Engineering Physics offers the B.S. degree in engineering physics. The degree is designed to provide graduates with skills in emerging technological areas. These graduates are highly prepared to pursue advanced graduate degrees and will become a source of qualified employees for high-tech start-up companies and traditional engineering firms, as well as positions in academia, government, and national laboratories.

Students specialize in one of three technological focus areas: nanoengineering, plasma science and engineering, and scientific computing.

Distinguishing features of the engineering physics degree include a strong emphasis on math, physics, and engineering fundamentals; choice of a technical focus area; and emphasis on research as part of a campus research group or through individually mentored research with a faculty member, culminating in a senior thesis.

## THE OBJECTIVES OF THE ENGINEERING PHYSICS PROGRAM ARE TO:

- Educate students to think and participate deeply, creatively, and analytically in emerging areas of engineering technology.
- Educate students in the basics of instrumentation, design of laboratory techniques, measurement, data acquisition, interpretation, and analysis.
- Educate students in the methodology of research.
- Provide and facilitate teamwork and multidisciplinary experiences throughout the curriculum.
- Foster the development of effective oral and written communication skills.
- Expose students to environmental, ethical and contemporary issues.


## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-
adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of
one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

The following curriculum applies to students who entered the program after fall 2016.

## SUMMARY OF REQUIREMENTS



| MATH 319 | Techniques in Ordinary Differential <br> Equations | 3 |
| :---: | :--- | ---: |
| MATH 321 | Applied Mathematical Analysis | 3 |
| MATH 340 | Elementary Matrix and Linear | 3 |
| or MATH 341 | Algebra <br> Linear Algebra |  |
| STAT 324 | Introductory Applied Statistics for <br>  Engineers | 3 |

## Total Credits

## SCIENCE

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 5-10 |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| PHYSICS 202 or PHYSICS 208 | General Physics <br> General Physics | 5 |
| PHYSICS 241 or PHYSICS 205 | Introduction to Modern Physics Modern Physics for Engineers | 3 |
| PHYSICS 322 | Electromagnetic Fields | 3 |
| $\begin{aligned} & \text { E P } 271 \\ & \text { or COMP SCI } 310 \end{aligned}$ | Engineering Problem Solving I Problem Solving Using Computers | 3 |
| M S \& E 350 or M S \& E 351 or CBE 440 | Introduction to Materials Science <br> Materials Science-Structure and Property <br> Relations in Solids <br> Chemical Engineering Materials | 3 |
| N E 305 | Fundamentals of Nuclear Engineering | 3 |
| or PHYSICS 531 | Introduction to Quantum Mechanics |  |
| Computing Elective (select one) |  | 3 |
| COMP SCI 300 | Programming II |  |
| COMP SCI 412 | Introduction to Numerical Methods ((required for students in Scientific Computing Focus Area)) |  |
| EP/EMA 471 | Intermediate Problem Solving for Engineers |  |
| EP/EMA 476 | Introduction to Scientific Computing for Engineering Physics |  |

Total Credits 28-33

ENGINEERING SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| E M A 201 | Statics | 3 |
| or PHYSICS 201 | General Physics |  |
| or PHYSICS 207 | General Physics |  |
| PHYSICS 311 | Mechanics |  |
| or E M A 202 | Dynamics | 3 |
| E M A 303 | Mechanics of Materials |  |
| E M A/M E 307 | Mechanics of Materials Lab |  |
| or M E/E M A 307 | Mechanics of Materials Lab | 3 |
| M E 361 | Thermodynamics | 1 |
| or M S \& E 330 | Thermodynamics of Materials | 3 |
| E C E 376 | Electrical and Electronic Circuits | 3 |


| or PHYSICS 321 | Electric Circuits and Electronics |  |
| :--- | :--- | ---: |
| M E 363 | Fluid Dynamics | 3 |
| M E 364 | Elementary Heat Transfer | 3 |
| or M S \& E 331 | Transport Phenomena in Materials |  |
| INTEREGR 170 | Design Practicum | 3 |
| Total Credits |  | 25 |

## FOCUS AREA

## Research and Development/Senior Thesis

## Expectations for Research Projects

Completion of the engineering physics degree program requires satisfactory completion of the E P 468 Introduction to Engineering Research, E P 469 Research Proposal in Engineering Physics, E P 568 Research Practicum in Engineering Physics I, E P 569 Research Practicum in Engineering Physics II coursework sequence, which culminates in a senior research thesis. The research topic chosen by the student and agreed upon by the advisor should be on a topic connected to the chosen Focus Area. The research conducted should be such that the student participates in the creation of new knowledge, experiences the excitement of the research process, and makes a contribution so that it would be appropriate to include the student's name on a scholarly publication if one results from the research.

## Senior Thesis

A senior thesis, completed during enrollment in E P 569 Research Practicum in Engineering Physics II is required. The senior thesis is a written document reporting on a substantial piece of work. It should be written in the style of a graduate thesis. The faculty advisor, in consultation with a research mentor, determines the grade which the student receives for the thesis. A bound copy of the thesis must be submitted to the engineering physics department office.

On or before the Friday of finals week of the semester in which E P 569 Research Practicum in Engineering Physics II, the senior thesis must be presented orally by the student to a committee of three professors in a publicly announced seminar. Interested faculty and students will be invited to attend.

| Research and Development |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Research and Development |  | 8 |
| EP468 | Introduction to Engineering Research |  |
| E P 469 | Research Proposal in Engineering Physics |  |
| E P 568 | Research Practicum in Engineering Physics I |  |
| EP569 | Research Practicum in Engineering Physics II |  |


| Focus Area Electives |
| :--- |
| Nanoengineering |
| Title |


| Code | Credits |  |
| :--- | :--- | ---: |
| Focus Area Total Credits: | 14 |  |
| Required: | Solid State Physics |  |
| PHYSICS 551 | $3-6$ |  |
| \& E P/E M A 615 | and Micro- and Nanoscale <br> Mechanics |  |
| or M S \& E 553 | Nanomaterials \& Nanotechnology |  |


| At Least One of: |  |  |
| :---: | :---: | :---: |
| E M A 506 | Advanced Mechanics of Materials I | 3 |
| E M A 622 | Mechanics of Continua | 3 |
| E M A 519 | Fracture Mechanics | 3 |
| At Least One of: |  |  |
| M S \& E 448 | Crystallography and X-Ray Diffraction | 3 |
| E M A 611 | Advanced Mechanical Testing of Materials | 3 |
| M E 601 | Special Topics in Mechanical Engineering (Micro \& Nano Fabrication) | 1-3 |
| NE 602 | Special Topics in Reactor Engineering (Vacuum Technology <br> Lab) | 3 |
| PHYSICS 623 | Electronic Aids to Measurement | 4 |
| PHYSICS 625 | Applied Optics | 4 |
| M S \& E 748 | Structural Analysis of Materials | 3 |
| Open Electives: |  |  |
| M S \& E 333 | Microprocessing of Materials | 3 |
| ECE335 | Microelectronic Devices | 3 |
| M S \& E 434 | Introduction to Thin-Film Deposition Processes | 3 |
| M S \& E 441 | Deformation of Solids | 3 |
| E C E 445 | Semiconductor Physics and Devices | 3 |
| M S \& E 451 | Introduction to Ceramic Materials | 3 |
| E M A/M S \& E 541 | Heterogeneous and Multiphase Materials | 3 |
| CBE/E C E/ <br> MS\&E 544 | Processing of Electronic Materials | 3 |
| M S \& E 560 | Fundamentals of Atomistic Modeling | 3 |
| M S \& E 570 | Properties of Solid Surfaces | 3 |
| CHEM 630 | Selected Topics in Analytical Chemistry | 1-3 |
| M S \& E 756 | Structure and Properties of Advanced Electronic Materials | 3 |

Plasma Science and Engineering
Code Title Credits
Focus Area Total Credits: ..... 14
Required:

N E/E C E/ Introduction to Plasmas 3

PHYSICS 525
At Least One of:
N E/E C E/ Plasma Confinement and Heating

PHYSICS 527
N E/E C E 528 Plasma Processing and Technology 3
At Least One of:
N E 526 Laboratory Course in Plasmas 3

Open Electives:

| N E 408 | lonizing Radiation | 3 |
| :--- | :--- | :--- |
| N E 536 | Feasibility St of Power from | 3 |


| Any plasma-related special topics course in NE |  |  |
| :---: | :---: | :---: |
| PHYSICS 415 | Thermal Physics | 3 |
| PHYSICS 623 | Electronic Aids to Measurement | 4 |
| PHYSICS 625 | Applied Optics | 4 |
| N E/E C E/ PHYSICS 724 | Waves and Instabilities in Plasmas | 3 |
| N E/E C E/ PHYSICS 725 | Plasma Kinetic Theory and Radiation Processes | 3 |
| N E/ECE/ PHYSICS 726 | Plasma Magnetohydrodynamics | 3 |
| Scientific Computing |  |  |
| Code | Title | Credits |
| Focus Area Total Credi |  | 14 |
| At Least One of: |  |  |
| N E/MED PHYS 506 | Monte Carlo Radiation Transport | 3 |
| M E 573 | Computational Fluid Dynamics | 3 |
| EM A 605 | Introduction to Finite Elements | 3 |
| ECE 742 | Computational Methods in Electromagnetics | 3 |
| At Least One of: |  |  |
| Students must take at least two credits of laboratory experience in the Physical or Biological Sciences |  |  |
| Open Electives: |  |  |
| EP/EM A 476 | Introduction to Scientific Computing for Engineering Physics | 3 |
| COMP SCI 300 | Programming II | 3 |
| COMP SCI/ <br> MATH 513 | Numerical Linear Algebra | 3 |
| COMP SCI/ <br> MATH 514 | Numerical Analysis | 3 |
| Any scientific-computing-related special topics course in NE |  |  |
| COMP SCI/I SY E/ <br> MATH/STAT 525 | Linear Programming Methods | 3 |
| COMP SCI 577 | Introduction to Algorithms | 4 |
| COMP SCI/ MATH 714 | Methods of Computational Mathematics I | 3 |
| COMP SCI/ <br> MATH 715 | Methods of Computational Mathematics II | 3 |
| M S \& E 560 | Fundamentals of Atomistic Modeling | 3 |
| M E/COMP SCI/ ECE/EMA/EP 759 | High Performance Computing for Applications in Engineering | 3 |

## TECHNICAL ELECTIVE

Select 6 credits at a level that requires two semesters of calculus or two semesters of physics as a prerequisite.

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENGL 100 | Introduction to College Composition | 3 |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or LSC 100 | Science and Storytelling |  |
| or ESL 118 | Academic Writing II |  |
| EP D 275 | Technical Presentations | 2 |

EP D 397
Total Credits

## LIBERAL STUDIES

Code Title
Credits
Complete Requirements (p.229) ${ }^{1}$
1
Students must take 16 credits that carry $\mathrm{H}, \mathrm{S}, \mathrm{L}$, or Z breadth designators. These credits must fulfill the following subrequirements:

1. A minimum of two courses from the same department or program. At least one of these two courses must be designated as above the elementary level ( $\mathrm{I}, \mathrm{A}$, or D ) in the course listing.
2. A minimum of 6 credits designated as humanities $(H, L$, or $Z$ in the course listing), and an additional minimum of 3 credits designated as social science ( S or Z in the course listing). Foreign language courses count as H credits. Retroactive credits for language courses may not be used to meet the Liberal Studies credit requirement (they can be used for subrequirement 1 above)
3. At least 3 credits in courses designated as ethnic studies (lower case "e" in the course listing). These courses may help satisfy subrequirements 1 and 2 above, but theyonly count once toward the total required. Note: Some courses may have "e" designation but not have $\mathrm{H}, \mathrm{S}, \mathrm{L}$, or Z designation; these courses do not count toward the Liberal Studies requirement.

## TOTAL CREDITS: 130-132

For information on credit load, adding or dropping courses, course substitutions, pass/fail, auditing courses, dean's honor list, repeating courses, probation, and graduation, see the College of Engineering Official Regulations.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. An ability to apply knowledge of basic mathematics, science and engineering.
2. An ability to use advanced mathematical and computational techniques to analyze, model, and design physical systems consisting of solid and fluid components under steady state and transient conditions.
3. An ability to design a system, component or process to meet desired needs.
4. An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.
5. An ability to design and conduct experiments, as well as to analyze and interpret data.
6. An ability to function on multi\#disciplinary teams.
7. Knowledge of professional and ethical standards.
8. An ability to communicate effectively.
9. The broad education necessary to understand the impact of engineering solutions in a global and societal context.
10. A recognition of the need for, and ability to engage in life-long learning.
11. A knowledge of contemporary issues.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

| First Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| CHEM 109 | 5 E M A 201 | 3 |
| MATH 221 | 5 MATH 222 | 4 |
| Communications A | 3 PHYSICS 202 | 5 |
| INTEREGR 170 | 3 Liberal Studies Elective | 3 |
|  | 16 | 15 |

## Second Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 319 | 3 MATH 234 | 4 |
| PHYSICS 241 or 205 | 3 PHYSICS 322 | 3 |
| PHYSICS 311 | 3 M S \& E 350, 351, or CBE | 3 |
| E P 271 or COMP SCI | 440 | 3 |
| 310 | 3 E M A 303 | 3 |
| E P D 275 or COM ARTS | 2 E M A/M E 307 | 1 |
| 105 | 3 Liberal Studies Elective | 3 |
| STAT 324 | 17 | 17 |


| Third Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| E P 468 | 1 E P 469 | 1 |
| N E 305 or PHYSICS 531 | 3 Technical Elective | 3 |
| E P Focus Area Course | 3 E P D 397 | 3 |
| MATH 321 | 3 E C E 376 or PHYSICS | $3-4$ |
| M E 361 or M S E 330 | 321 |  |
| Computing Elective | 3 MATH 340 or 341 | 3 |
|  | 3 Liberal Studies Elective | 3 |

## Fourth Year

Fall
Credits Spring
Credits

3 E P 569
E P 568

| M E 363 | 3 E P Focus Area Course | 2 |
| :--- | :--- | ---: |
| E P Focus Area Course | 3 M E 364 or M S E 331 | 3 |
| E P Focus Area Course | 3 Technical Elective | 3 |
| Liberal Studies Elective | 4 E P Focus Area Course | 3 |
|  | Liberal Studies Elective | 3 |
|  | 16 | 17 |

Total Credits 130-131

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

Henderson (chair)
T. Allen

Blanchard
Bonazza
Crone
Fonck
Hegna
Lakes
Smith (also Mathematics)
Sovinec
Waleffe (also Mathematics)
Wilson

## ASSOCIATE PROFESSORS

M. Allen

Schmitz
Witt

## ASSISTANT PROFESSORS

Couet
Notbohm
Scarlat

## Thevamaran

See department website (https://directory.engr.wisc.edu/display.php/ faculty/?page=ep\&search=faculty) for list.

## RESOURCES AND SCHOLARSHIPS

## FACILITIES

Facilities available for instruction and research include:
Fluid Mechanics and Heat Transfer Laboratories
Instructional Computing Labs (in Computer Aided Engineering)
Nanomechanics Laboratory
Nuclear Instrumentation Laboratory
Plasma Physics Laboratories
Superconductivity and Cryogenics Laboratories

## NUCLEAR ENGINEERING <br> MATERIALS, CERTIFICATE

The goal of this certificate is to combine a comprehensive set of course curricula that will provide students with an understanding of the challenges and remedial measures associated with materials in nuclear energy systems. It includes courses in radiation damage, nuclear fuel performance, corrosion, and joining/welding. A laboratory course will provide hands-on experimental analysis in the areas of corrosion, welding, radiation damage, and non-destructive evaluation.

Students learn the challenges and remedial measures associated with materials in nuclear energy system and conduct experimental analysis in corrosion, welding, radiation damage, and nondesctructive evaluation.

## REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Required courses (13 credits) |  |  |
| N E/M S \& E 423 | Nuclear Engineering Materials ${ }^{1}$ | 3 |
| N E 424 | Nuclear Materials Laboratory | 1 |
| N E 541 | Radiation Damage in Metals ${ }^{1}$ | 3 |
| M S \& E/M E 435 | Joining of Materials: Structural, Electronic, Bio and Nano Materials | 3 |
| or M S \& E/ <br> ME 462 | Welding Metallurgy |  |
| Elective courses (minimum 6 cr ) |  |  |
| CIV ENGR 445 | Steel Structures I | 3 |
| CIV ENGR 447 | Concrete Structures I | 3 |
| M S \& E 330 | Thermodynamics of Materials | 4 |
| M S \& E 352 | Materials Science-Transformation of Solids | 3 |
| M S \& E/N E 433 | Principles of Corrosion | 3 |
| M S \& E 463 | Materials for Elevated Temperature Service | 3 |
| M S \& E 560 | Fundamentals of Atomistic Modeling | 3 |
| M S \& E 570 | Properties of Solid Surfaces | 3 |

1 Because M S \& E 350 Introduction to Materials Science or M S \& E 351 Materials Science-Structure and Property Relations in Solids are prerequisites for N E/M S \& E 423 Nuclear Engineering Materials and N E 541 Radiation Damage in Metals, students are expected to take one of the two of these courses as prerequisites for the certificate.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Identify the challenges and remedial measures associated with materials in nuclear energy systems by integrating the contents within each class into a complete understanding.
2. Describe and apply basic radiation damage, nuclear fuel performance, corrosion, and joining/welding concepts.
3. Design and conduct basic hands-on experiments in the areas of nuclear materials characterization.
4. Discuss scientifically and confidently about nuclear materials degradation issues with experts.

## NUCLEAR ENGINEERING, B.S.

The Department of Engineering Physics offers the B.S. degree in nuclear engineering and M.S. and Ph.D. degrees in nuclear engineering and engineering physics.

Nuclear engineering is defined as the application of nuclear and radiation processes in technology. An important application is the generation of electricity using nuclear reactors. Another important application is in medicine, where radiation and radioisotopes are used to diagnose and treat illness. Nuclear engineering offers students an important opportunity to help meet the energy needs of our society and to contribute to the improvement of health through medical applications. Further, because the nuclear engineering curriculum is very rich in engineering physics, graduates are prepared to work in a number of technical activities outside the nuclear engineering field.

Nuclear energy, both from fission and fusion, offers a promising approach to meeting the nation's energy needs--an approach that may preserve jobs, raise the standard of living of Americans, and alleviate the depletion of natural resources including natural gas, petroleum, and coal. Even more important, nuclear energy offers the only practical, environmentally benign approach to generating electricity on a large scale because it releases no harmful SO2, NOX, CO 2 , or particulate matter into the atmosphere. Nuclear energy has played, and continues to play, an important role in space exploration. Nuclear engineering has enabled the use of isotopic power supplies in deep space probes like the Cassini mission, and may eventually be used to design fission or fusion-based systems for more demanding missions

Since the discovery of fission many years ago, electricity is being produced commercially in a several hundred billion-dollar industry.

Applications of radioactive tracers have been made in medicine, science, and industry. Radiation from particle accelerators and materials made radioactive in nuclear reactors are used worldwide to treat cancer and other diseases, to provide power for satellite instrumentation, to preserve food, to sterilize medical supplies, to search for faults in welds and piping, and to polymerize chemicals. Low energy plasmas are used in the manufacture of microelectronics components and to improve the surface characteristics of materials. High energy plasmas offer the possibility of a new energy source using thermonuclear fusion.

Because the breadth and rate of change in this field requires that the nuclear engineer have a broad educational background, the curriculum consists of physics, math, materials science, electronics, thermodynamics, heat transfer, computers, courses in the humanities and social science areas, and numerous elective courses. Courses of a specific nuclear engineering content come primarily in the third and fourth years.

The curriculum prepares students for careers in the nuclear industry and government-with electric utility companies, in regulatory positions with the federal or state governments, or for major contractors on the design and testing of improved reactors for central station power generation or for propulsion of naval vessels.

The curriculum also prepares the graduate for work in many areas where a broad technical background is more important than specialization in a specific field. Thus, the graduate is also prepared to work in any area where a broad engineering background is helpful, such as management, technical sales, or law. The curriculum gives students excellent preparation for graduate study in the fission and fusion areas, medical and health physics, applied superconductivity, particle accelerator technology, and other areas of engineering science in addition to study in areas such as materials science, physics, mathematics, and medicine.

## OBJECTIVES OF THE NUCLEAR ENGINEERING PROGRAM

- educate students in the fundamental subjects necessary for a career in nuclear engineering, and prepare students for advanced education in it and related fields;
- educate students in the basics of instrumentation, design of laboratory techniques, measurement, and data acquisition, interpretation and analysis;
- educate students in the methodology of design;
- provide and facilitate teamwork and multidisciplinary experiences throughout the curriculum;
- foster the development of effective oral and written communication skills;
- expose students to environmental, ethical and contemporary issues.


## ENGINEERING MECHANICS AND NUCLEAR ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

The faculty recognize that our graduates will choose to use the knowledge and skills they have acquired during their undergraduate years to pursue a wide variety of career and life goals and we encourage this diversity of paths. Initially, we expect graduates will begin their careers in fields that utilize their knowledge, education and training in solid mechanics and fluid mechanics as it applies to aeronautics/astronautics and mechanics in design and manufacturing.

Whatever path our graduates choose to pursue, our educational objectives for the nuclear engineering and engineering mechanics programs are to allow them to:

1. Exhibit strong performance and continuous development in problemsolving, leadership, teamwork, and communication, initially applied to nuclear engineering or engineering mechanics, and demonstrating an unwavering commitment to excellence.
2. Demonstrate continuing commitment to, and interest in, his or her training and education, as well as those of others.
3. Transition seamlessly into a professional environment and make continuing, well-informed career choices.
4. Contribute to their communities.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and
selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## NUCLEAR ENGINEERING CURRICULUM

The nuclear engineering curriculum is divided into two options, one emphasizing nuclear power and one emphasizing medical and other nonpower applications of radiation sciences. The power option is more appropriate for students seeking careers in the nuclear power industry, while the radiation sciences option is better suited for students interested in medical and non-power applications.

## POWER OPTION CURRICULUM

The following curriculum applies to students who entered the program after fall 2016.

| SUMMARY OF REQUIREMENTS |  |
| :--- | ---: |
| Code $\quad$ Title | Credits |
| Mathematics and Statistics | 22 |
| Science | 13 |
| Engineering Science | 31 |
| Nuclear Engineering Core | 24 |
| Nuclear Engineering Electives | 12 |
| Introduction to Engineering | 3 |
| Communication Skills | 8 |
| Liberal Studies | 16 |
| Total Credits | 129 |

## MATHEMATICS AND STATISTICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| or MATH 217 | Calculus with Algebra and Trigonometry II |  |
| or MATH 275 | Topics in Calculus I |  |
| MATH 222 | Calculus and Analytic Geometry 2 | 4 |
| or MATH 276 | Topics in Calculus II |  |
| MATH 234 | Calculus--Functions of Several | 4 |
|  | Variables |  |
| MATH 320 | Linear Algebra and Differential | 3 |
|  | Equations |  |
| MATH 321 | Applied Mathematical Analysis | 3 |
| STAT 324 | Introductory Applied Statistics for Engineers | 3 |
|  |  |  |
| Total Credits |  | 22 |

## SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | $5-9$ |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 | General Chemistry I |  |
| \& CHEM 104 | and General Chemistry II | 5 |
| PHYSICS 202 | General Physics |  |
| or PHYSICS 208 | General Physics |  |
| PHYSICS 241 | Introduction to Modern Physics |  |
| or PHYSICS 205 | Modern Physics for Engineers | 3 |

Total Credits

## ENGINEERING SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| E M A 201 | Statics | 3 |
| E M A 202 | Dynamics | 3 |
| or M E 240 | Dynamics |  |
| E M A 303 | Mechanics of Materials | 3 |
| or M E 306 | Mechanics of Materials |  |
| E M A/M E 307 | Mechanics of Materials Lab | 1 |
| E P 271 | Engineering Problem Solving I | 3 |


| or COMP SCI 310 | Problem Solving Using Computers |  |
| :--- | :--- | ---: |
| M S \& E 350 | Introduction to Materials Science | 3 |
| M E 231 | Introductory Engineering Graphics | 2 |
| M E 361 | Thermodynamics (or M E 363 and <br> M E 364) | 3 |
| or PHYSICS 322 | Electromagnetic Fields |  |
| CBE/B M E 320 | Introductory Transport Phenomena | 4 |
| E C E 376 | Electrical and Electronic Circuits |  |
| or PHYSICS 321 | Electric Circuits and Electronics | 3 |
| Computing Elective |  | 3 |
| Total Credits |  | 31 |

## NUCLEAR ENGINEERING CORE

| Code | Title | Credits |
| :--- | :--- | ---: |
| N E 305 | Fundamentals of Nuclear | 3 |
|  | Engineering | 3 |
| N E 405 | Nuclear Reactor Theory | 3 |
| N E 408 | lonizing Radiation | 3 |
| N E 411 | Nuclear Reactor Engineering | 5 |
| N E 412 | Nuclear Reactor Design | 2 |
| N E 427 | Nuclear Instrumentation Laboratory | 2 |
| N E 428 | Nuclear Reactor Laboratory | 3 |
| N E 571 | Economic and Environmental |  |
| Total Credits | Aspects of Nuclear Energy | 24 |

## NUCLEAR ENGINEERING ELECTIVES

| Code | Title | Credits |
| :---: | :---: | :---: |
| Technical Electives |  | 3 |
| Technical Electives (not to be confused with Nuclear Engineering Electives or Medical Physics Electives) must be chosen from courses offered by the College of Engineering or by the departments of Physics, Mathematics, Computer Sciences, or Chemistry. |  |  |
| Nuclear Engineering El | lectives | 9 |
| Select credits in the power track |  |  |
| Total Credits |  | 12 |
| Nuclear Engineering Electives Course List ${ }^{1}$ |  |  |
| Code | Title | Credits |
| N E 234 | Principles and Practice of Nuclear Reactor Operations | 4 |
| N E 406 | Nuclear Reactor Analysis | 3 |
| N E/M S \& E 423 | Nuclear Engineering Materials | 3 |
| N E 424 | Nuclear Materials Laboratory | 1 |
| N E/CIV ENGR/ ISYE 460 | Uncertainty Analysis for Engineers | 3 |
| N E/MED PHYS 506 | Monte Carlo Radiation Transport | 3 |
| M E/N E 520 | Two-Phase Flow and Heat Transfer | 3 |
| N E/ECE/ PHYSICS 525 | Introduction to Plasmas | 3 |
| N E 536 | Feasibility St of Power from Controlled Thermonuclear Fusion | 3 |
| N E 541 | Radiation Damage in Metals | 3 |


| N E 550 | Advanced Nuclear Power Engineering |
| :---: | :---: |
| N E 555 | Nuclear Reactor Dynamics 3 |
| N E/M E 565 | Power Plant Technology 3 |
| N E/MED PHYS 569 | Health Physics and Biological Effects |
| N E/I SY E 574 | Methods for Probabilistic Risk <br> Analysis of Nuclear Power Plants |
| Students are encouraged to access the online N E future course offering grid to plan their future course schedules and to confirm the offering of a course in the table. |  |
| 1 Courses meeting are all N E course required curriculu Independent Study the NE handbook website (https:// physics/academ | the Nuclear Engineering Electives requirement numbered above 200 that are not part of the <br> m. No more than 3 credits of N E 699 Advanced <br> $y$, may be used to meet this requirement. (Refer to under Degree Information on the NE department www.engr.wisc.edu/department/engineering-s/bs-nuclear-engineering)). |

## INTRODUCTION TO ENGINEERING

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTEREGR 170 | Design Practicum | 3 |
| Total Credits |  | 3 |

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENGL 100 | Introduction to College Composition | 3 |
| or LSC 100 | Science and Storytelling |  |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or ESL 118 | Academic Writing II |  |
| E P D 275 | Technical Presentations | 2 |
| E P D 397 | Technical Communication | 3 |
| Total Credits |  | 8 |

## LIBERAL STUDIES ELECTIVES

| Code $\quad$ Title | Credits |
| :--- | ---: |
| College of Engineering Liberal Studies Requirements |  |
| Complete Requirements $\left(\right.$ p. 229) $^{1}$ | 16 |
| Total Credits | 16 |

1 Students must take 16 credits that carry H, S, L, or Z breadth designators. These credits must fulfill the following subrequirements:

1. A minimum of two courses from the same department or program. At least one of these two courses must be designated as above the elementary level $(I, A$, or $D)$ in the course listing.
2. A minimum of 6 credits designated as humanities $(H, L$, or $Z$ in the course listing), and an additional minimum of 3 credits designated as social science (S or Z in the course listing). Foreign language courses count as H credits. Retroactive credits for language courses may not be used to meet the Liberal Studies credit requirement (they can be used for subrequirement 1 above).
3. At least 3 credits in courses designated as ethnic studies (lower case "e" in the course listing). These courses may help satisfy subrequirements 1 and 2 above, but they only count once toward the total required. Note: Some courses may have "e" designation but not have $\mathrm{H}, \mathrm{S}, \mathrm{L}$, or Z designation; these courses do not count toward the Liberal Studies requirement.

For information on credit load, adding or dropping courses, course substitutions, pass/fail, auditing courses, dean's honor list, repeating courses, probation, and graduation, see the College of Engineering Official Regulations (https://www.engr.wisc.edu/academics/student-services/ academic-advising/undergraduate-engineering-students/rules-andregulations).

## RADIATION SCIENCES TRACK CURRICULUM

The following curriculum applies to students who entered the program after fall 2016. Students selecting the radiation sciences option must submit an option declaration form to the department office.

## SUMMARY OF REQUIREMENTS

| Citle | Credits |
| :--- | ---: |
| Code | 22 |
| Mathematics and Statistics | 16 |
| Science | 27 |
| Engineering Science | 24 |
| Nuclear Engineering Core Requirement | 9 |
| Medical Physics Electives | 3 |
| Introduction to Engineering | 8 |
| Communication Skills | 16 |
| Liberal Studies | 3 |
| Technical Elective | 1 |
| Free Elective | 129 |

## MATHEMATICS AND STATISTICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| or MATH 217 | Calculus with Algebra and Trigonometry II |  |
| or MATH 275 | Topics in Calculus I |  |
| MATH 222 | Calculus and Analytic Geometry 2 | 4 |
| or MATH 276 | Topics in Calculus II |  |
| MATH 234 | Calculus--Functions of Several | 4 |
|  | Variables |  |
| MATH 320 | Linear Algebra and Differential | 3 |
|  | Equations |  |
| MATH 321 | Applied Mathematical Analysis | 3 |
| STAT 324 | Introductory Applied Statistics for | 3 |
|  |  |  |

## SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | $5-10$ |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 | General Chemistry I |  |
| \& CHEM 104 | and General Chemistry II |  |
| PHYSICS 202 | General Physics |  |
| or PHYSICS 208 | General Physics | 5 |
| PHYSICS 241 | Introduction to Modern Physics |  |
| or PHYSICS 205 | Modern Physics for Engineers | 3 |


| PHYSICS 322 | Electromagnetic Fields | 3 |
| :--- | :--- | ---: |
| Total Credits |  | $16-21$ |
| ENGINEERING SCIENCE |  |  |
| Code | Title | Credits |
| E M A 201 | Statics | 3 |
| E M A 202 | Dynamics | 3 |
| or M E 240 | Dynamics |  |
| E M A 303 | Mechanics of Materials | 3 |
| or M E 306 | Mechanics of Materials |  |
| E M A/M E 307 | Mechanics of Materials Lab | 1 |
| E P 271 | Engineering Problem Solving I | 3 |
| or COMP SCI 310 | Problem Solving Using Computers |  |
| M E 231 | Introductory Engineering Graphics | 2 |
| M S \& E 350 | Introduction to Materials Science | 3 |
| M E 361 | Thermodynamics | 3 |
| E C E 376 | Electrical and Electronic Circuits | 3 |
| or PHYSICS 321 | Electric Circuits and Electronics |  |
| Computing elective |  | 3 |
| Total Credits |  | 27 |

## NUCLEAR ENGINEERING CORE REQUIREMENT

Code Title Credits
Radiation Sciences Core

| N E 305 | Fundamentals of Nuclear <br> Engineering | 3 |
| :--- | :--- | ---: |
| N E 405 | Nuclear Reactor Theory | 3 |
| NE 408 | lonizing Radiation | 3 |
| N E 412 | Nuclear Reactor Design | 5 |
| NE 427 | Nuclear Instrumentation Laboratory | 2 |
| N E 428 | Nuclear Reactor Laboratory | 2 |
| MED PHYS/ | Radiological Physics and Dosimetry | 3 |
| B M E/H ONCOL/ |  |  |
| PHYSICS 501 |  | 3 |
| NE 571 | Economic and Environmental |  |
| Total Credits | Aspects of Nuclear Energy |  |

## MEDICAL PHYSICS ELECTIVES

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select nine credits ${ }^{1}$ |  | 9 |
| MED PHYS/ | Radiobiology |  |
| H ONCOL 410 |  |  |
| MED PHYS/ | Radionuclides in Medicine and |  |
| PHYSICS 563 | Biology |  |
| MED PHYS/ | Physics of Radiotherapy |  |
| B M E 566 |  |  |
| MED PHYS/ | The Physics of Diagnostic |  |
| B M E 567 | Radiology |  |
| N E/ | Health Physics and Biological |  |
| MED PHYS 569 | Effects (Recommended) |  |
| MED PHYS/ | Medical Image Science: |  |
| B M E 573 | Mathematical and Conceptual |  |
|  | Foundations |  |


| MED PHYS/ Non-lonizing Diagnostic Imaging |
| :--- |
| B M E 578 |
| Total Credits |
| 1 Courses meeting the Medical Physics Electives requirement are |
| MED PHYS courses numbered 400 and above and selected Physics |
| courses at or above the 400 level. No more than 3 credits of N E 699 |
| Advanced Independent Study, may be used to meet this requirement. <br> (Refer to the NE handbook under Degree Information on the NE <br> department website (https://www.engr.wisc.edu/department/ <br> engineering-physics/academics/bs-nuclear-engineering)). |

## INTRODUCTION TO ENGINEERING

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTEREGR 170 | Design Practicum | 3 |
| Tored |  | 3 |

## TECHNICAL ELECTIVES

Code Title

Credits
Technical Electives (not to be confused with Nuclear
Engineering Electives or Medical Physics Electives) must be chosen from courses offered by the College of Engineering, or by the departments of Physics, Mathematics, Computer Science, or Chemistry.

## Total Credits

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENGL 100 | Introduction to College Composition | 3 |
| or LSC 100 | Science and Storytelling |  |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or ESL 118 | Academic Writing II |  |
| E P D 275 | Technical Presentations | 2 |
| E P D 397 | Technical Communication | 3 |
| Total Credits |  | 8 |

## LIBERAL STUDIES ELECTIVES

| Code $\quad$ Title | Credits |
| :--- | ---: |
| College of Engineering Liberal Studies Requirements |  |
| Complete Requirements (p. 229) |  |
| 1 | 16 |

1 Students must take 16 credits that carry H, S, L, or Z breadth designators. These credits must fulfill the following subrequirements:

1. A minimum of two courses from the same department or program. At least one of these two courses must be designated as above the elementary level $(I, A$, or $D)$ in the course listing.
2. A minimum of 6 credits designated as humanities $(H, L$, or $Z$ in the course listing), and an additional minimum of 3 credits designated as social science ( S or Z in the course listing). Foreign language courses count as H credits. Retroactive credits for language courses may not be used to meet the Liberal Studies credit requirement (they can be used for subrequirement 1 above).
3. At least 3 credits in courses designated as ethnic studies (lower case " $e$ " in the course listing). These courses may help satisfy subrequirements 1 and 2 above, but they only count once toward the total required. Note: Some courses may have "e" designation but not have $\mathrm{H}, \mathrm{S}, \mathrm{L}$, or Z designation; these courses do not count toward the Liberal Studies requirement.

For information on credit load, adding or dropping courses, course substitutions, pass/fail, auditing courses, dean's honor list, repeating courses, probation, and graduation, see the College of Engineering Official Regulations (https://www.engr.wisc.edu/academics/student-services/ academic-advising/undergraduate-engineering-students/rules-andregulations).

## HONORS IN UNDERGRADUATE RESEARCH PROGRAM

Qualified undergraduates may earn an Honor in Research designation on their transcript and diploma by completing 8 credits of undergraduate honors research, including a senior thesis. Further information is available in the department office.

## NUCLEAR ENGINEERING SCHOLARS AND DISTINGUISHED SCHOLARS PROGRAM

Students who achieve at least a 3.0 GPA in their first semester, and maintain it throughout their career, may be designated Scholars. They also may be exempted from some formal requirements for the Bachelor of Science in Nuclear Engineering degree other than total credits. However, they must meet certain restrictions on the distribution of courses chosen. Students who achieve at least a 3.70 grade point average (GPA) for the first semester of the freshman year or a 3.5 GPA for the first four semesters, may be designated Distinguished Scholars. These students, with the approval of their advisor, may be exempted from most formal requirements for the Bachelor of Science in Nuclear Engineering degree other than the total credit hours, so long as they maintain a satisfactory performance record and the main thrust of their work is along the lines of nuclear engineering education. The general education and liberal studies requirements must be met by Scholars and Distinguished Scholars. Students transferring into the nuclear engineering department may be eligible to qualify for either of these programs as late as the beginning of the seventh semester.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. An ability to identify, formulate, and solve engineering problems.

This includes: a. an ability to apply knowledge of basic mathematics, science and engineering; $b$. an ability to use advanced mathematical and computational techniques to analyze, model, and design physical systems consisting of solid and fluid components under steady state and transient conditions; c. an ability to design a system, component or process to meet desired needs; $d$. an ability to use the techniques, skills and modern engineering tools necessary for engineering practice.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to function on multi\#disciplinary teams.
4. Knowledge of professional and ethical standards.
5. An ability to communicate effectively.
6. The broad education necessary to understand the impact of engineering solutions in a global and societal context.
7. A recognition of the need for, and ability to engage in life-long learning.
8. A knowledge of contemporary issues.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

| First Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| CHEM 109 | 5 E M A 201 |  |


| Third Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| N E 305 | 3 N E 405 | 3 |
| MATH 321 | 3 N E 408 | 3 |
| M S \& E 350 | 3 CBE/B M E 320 | 4 |
| Technical Elective | 3 Computing Elective | 3 |


| Liberal Studies Elective | 4 E C E 376 or PHYSICS | 3 |
| :--- | :---: | ---: |
|  | 321 | 16 |
| Fourth Year |  |  |
| Fall | Credits Spring | Credits |
| N E 411 | 3 N E 412 | 5 |
| N E 427 | 2 N E 428 | 2 |
| Nuclear Engineering | 3 N E 571 | 3 |
| Elective | 3 Nuclear Engineering |  |
| Nuclear Engineering | Elective | 3 |
| Elective | 3 Liberal Studies Elective | 3 |
| Liberal Studies Elective | 3 | 16 |
| E P D 397 | 17 |  |

Total Credits 129
1 Students should take CHEM 109 Advanced General Chemistry, 5 cr; students with inadequate preparation in high school chemistry may substitute CHEM 103 General Chemistry I and CHEM 104 General Chemistry II for a total of 9 credits. Three credits of CHEM 103/CHEM 104 may be counted towards Technical Electives credits.
2 Students who were not able to take INTEREGR 170 Design Practicum as freshmen may, with the approval of their advisor, substitute a course offered in the College of Engineering or in the Departments of Chemistry, Computer Sciences, Mathematics, and Physics.
3 Students may substitute PHYSICS 201 General Physics, 5 credits, for E M A 201 Statics, 3 credits, with the approval of their advisor.
4 M E 306 Mechanics of Materials and M E/E M A 307 Mechanics of Materials Lab are acceptable substitutions for E M A 303 Mechanics of Materials and E M A/M E 307 Mechanics of Materials Lab.
M E 363 Fluid Dynamics and M E 364 Elementary Heat Transfer are acceptable substitutions for CBE/B M E 320 Introductory Transport Phenomena.

## RADIATION SCIENCES OPTION IN NUCLEAR ENGINEERING EXAMPLE FOUR YEAR PLAN

First Year

| Fall | Credits Spring | Credits |  |  |  |
| :--- | :---: | ---: | :---: | :---: | :---: |
| CHEM 109 | 5 E M A 201 | 3 |  |  |  |
| MATH 221 | 5 MATH 222 | 4 |  |  |  |
| Communication A | 3 M E 231 | 2 |  |  |  |
| INTEREGR $170^{2}$ | 3 STAT 324 | 3 |  |  |  |
| Liberal Studies Elective |  |  |  |  |  |
|  |  |  |  | 16 | 15 |

## Second Year

## Fall

Credits Spring
Credits
MATH $234 \quad 4$ MATH 320
PHYSICS 2025 PHYSICS 241 or 2053
EMA202 3 ME361 3
EP 271 or COMP SCI 3 EM A 303

310

| E P D 275 or COM ARTS 105 | 2EMA/ME 307 | 1 |
| :---: | :---: | :---: |
|  | Liberal Studies Elective | 3 |
|  | 17 | 16 |
| Third Year |  |  |
| Fall | Credits Spring | Credits |
| N E 305 | 3 N E 405 | 3 |
| MATH 321 | 3 N E 408 | 3 |
| M S \& E 350 | 3 PHYSICS 322 | 3 |
| Technical Elective ${ }^{5}$ | 3 Computing Elective | 3 |
| Liberal Studies Elective | 4 E C E 376 or PHYSICS 321 | 3 |
|  | Free Elective | 2 |
|  | 16 | 17 |
| Fourth Year |  |  |
| Fall | Credits Spring | Credits |
| N E 427 | 2 NE412 | 5 |
| MED PHYS/B M E/ H ONCOL/PHYSICS 501 | 3 NE571 | 3 |
| Medical Physics Elective | 3 N E 428 | 2 |
| Medical Physics Elective | 3 Medical Physics Elective | 3 |
| Liberal Studies Elective | 3 Liberal Studies Elective | 3 |
| EP D 397 | 3 |  |
|  | 17 | 16 |

Total Credits 130
1 Students should take CHEM 109 Advanced General Chemistry, 5 cr.; students with inadequate preparation in high school chemistry may substitute CHEM 103 General Chemistry I and CHEM 104 General Chemistry II, for a total of 9 credits. Three credits of CHEM 103/CHEM 104 may be counted as Technical Electives credits
2 Students who were not able to take INTEREGR 170 Design Practicum as freshmen may, with the approval of their advisor, substitute a course offered in the College of Engineering or in the Departments of Chemistry, Computer Science, Mathematics, and Physics.
3
Students may substitute PHYSICS 201 General Physics, 5 cr., for E M A 201 Statics, 3 cr., with the approval of their advisor.
4
M E 306 Mechanics of Materials and M E/E M A 307 Mechanics of Materials Lab are acceptable substitutions for E M A 303 Mechanics of Materials and E M A/M E 307 Mechanics of Materials Lab.
5 PHYSICS 623 Electronic Aids to Measurement is recommended for students in the Radiation Sciences track.

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops
and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

Henderson (chair)
T. Allen

Blanchard
Bonazza
Crone
Fonck
Hegna
Lakes
Smith (also Mathematics)
Sovinec
Waleffe (also Mathematics)
Wilson

## ASSOCIATE PROFESSORS

M. Allen

Schmitz
Witt

## ASSISTANT PROFESSORS

Couet
Notbohm
Scarlat
Thevamaran

See department website (https://directory.engr.wisc.edu/display.php/ faculty/?page=ep\&search=faculty) for list.

## RESOURCES AND SCHOLARSHIPS

## FACILITIES

Facilities available for instruction and research include:

Nuclear Reactor Laboratory
Nuclear Instrumentation Laboratory
Fluid Mechanics and Heat Transfer Laboratories
Plasma Physics Laboratories
Superconductivity and Cryogenics Laboratories
Instructional Computing Labs (in Computer Aided Engineering)

## ACCREDITATION

## ACCREDITATION

ABET (http://www.abet.org)

# ENGINEERING PROFESSIONAL DEVELOPMENT 

## DEGREES/MAJORS/CERTIFICATES

- Technical Communication, Certificate (p. 296)
- Technical Japanese Studies for Undergraduates, Certificate (p. 299)


## TECHNICAL COMMUNICATION, CERTIFICATE

The Technical Communication Certificate (TCC) has established itself as a program that meets industry and government agencies' demands for students with skills as communicators and for communication specialists. Because employers value well-developed communication skills, TCC courses will enhance success in co-op/intern positions and post-graduation careers. TCC graduates overwhelmingly confirm not only that the certificate gave them an edge over other candidates during the recruitment process, but also that the communication knowledge, skills, and attitudes they acquired while in the program helped them succeed in their jobs and helped prepare them for the diverse communication and management tasks in today's multifunctional team environments.

The Technical Communication Certificate, offered by the Department of Engineering Professional Development (EPD), complements all undergraduate degrees, but is especially designed to fit in well with an engineering degree. TCC students gain experience in career-applicable skills by

- Receiving education in principles and processes for communicating about technical subjects (including problem solving methods, audience analysis, rhetorical analysis, conventions of format, and usability testing).
- Gaining education in the fundamentals of written, oral, and visual communication (including organization, structure, style, mechanics, format, and delivery).
- Learning effective interpersonal communication and management skills (including teamwork, interviewing, leading and facilitating groups, project management, and international communication).
- Gaining opportunities to research and think analytically about contemporary issues and to consider ethical issues.
- Using current technology to encourage effective communication in a variety of environments (including use of the web, distance communication, electronic publishing, group software, and layout and presentation software).

While the certificate is designed especially for engineering students, students from other fields sometimes seek out the program to enhance their career options. Students who complete the certificate will have the notation "Technical Communication Certificate" added to their transcripts.

Aside from the relevant courses offered in the TCC, students especially value the close contact with faculty through advising and development of a TC Certificate Portfolio. Students in the program often take on
leadership roles in other college or campus student organizations and projects, further developing their communication, team, and management skills.

## HOW TO GET IN

Undergraduates who and would like to enroll in the Technical Communication Certificate may download the TCC Application form (PDF) (https://tc.engr.wisc.edu/certificate/applying-to-the-technical-communication-certificate) or pick one up from Suite 2107 in the Mechanical Engineering Building. Please include a current transcript or DARS report with the application form. Graduate students and non-degree-seeking students cannot enroll in the TCC.

## PREREQUISITES FOR ADMISSION TO THE TCC PROGRAM

- A grade of at least B in Communication A or equivalent course or AP English credits (score of at least 4 out of 5).
- Four courses (12-credit minimum) in science and/or engineering, including at least one intermediate-level (minimum 200-level) course.
- Three courses (9-credit minimum) in humanities, social sciences, and/or foreign language.
- Overall GPA of at least 2.5 .

Applications are accepted throughout the semester, though students are encouraged to submit applications as early as possible so they have ample time to plan their coursework. Please drop completed applications off at Suite 2107, Mechanical Engineering, or email completed pdf applications to Dr. Laura Grossenbacher at Irgrossenbac@wisc.edu. The program will notify all new admissions via email.

## REQUIREMENTS

To graduate with the certificate in technical communication, students must complete at least 24 credits, with a minimum of 9 credits in technical proficiency courses and a minimum of 15 credits in both technical and non-technical communication courses.

In addition to course requirements, students must achieve at least a $B$ in the required Technical Communication (E P D 397) and the Technical Communications Internship (E P D 398). All students must complete the program within five years from their application date. Students must meet regularly with their assigned certificate advisor and must compile and submit a portfolio of their work for the internship course. Students cannot count courses completed on a pass/fail basis toward the certificate.

Substitution of courses substantively equivalent to those listed will be considered by the Technical Communication Curriculum Committee. Students must submit requests for substitution with supporting material before beginning the course.

## PREREQUISITES

Code
Title
Credits
$A$ grade of at least $B$ in Communication $A$ or equivalent course or AP English credits (score of at least 4 or 5)
Select four courses (12-credit minimum) in science and/ or engineering, including at least one intermediate-level (minimum 200-level) course

Select three courses (9-credit minimum) in liberal studies including a foreign language
Overall GPA of at least 2.5

## TECHNICAL PROFICIENCY

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select a minimum of one course each from three areas: ${ }^{1}$ |  | 9 |
| Mathematics/Statistics |  |  |
| Computer Science |  |  |
| Management/Economics/Business |  |  |
| Total Credits |  | 9 |
| Mathematics/Statistics |  |  |
| Code | Title | Credits |
| Mathematics or Statistics courses (200-level or above) |  |  |
| COM ARTS 361 | Introduction to Quantitative | 3 |
|  | Research in Communication |  |
| GEN BUS 303 | Business Statistics | 3 |
| PSYCH 210 | Basic Statistics for Psychology | 3 |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | 3-4 |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| Computer Science |  |  |
| Code | Title | Credits |
| CBE 255 | Introduction to Chemical Process | 3 |
|  | Modeling |  |
| CIV ENGR/G LE 291 | Problem Solving Using Computer | 3 |
|  | Tools |  |
| COMP SCI 200 | Programming I | 3 |
| COMP SCI 300 | Programming II | 3 |
| COMP SCI 301 | Introduction to Data Programming | 3 |
| COMP SCI 310 | Problem Solving Using Computers | 3 |
| COMP SCI/ | Technology of Computer-Based | 3 |
| INFO SYS 371 | Business Systems |  |
| LSC 532 | Web Design for the Sciences | 3 |


| Management/Economics/Business |  |  |
| :--- | :--- | :--- |
| Code | Title |  |


| A A E/INTL ST 374 | The Growth and Development of Nations in the Global Economy | 3 |
| :---: | :---: | :---: |
| CIV ENGR/BSE 491 | Legal Aspects of Engineering | 3 |
| CIV ENGR 492 | Integrated Project Estimating and Scheduling | 3 |
| CIV ENGR 494 | Civil and Environmental Engineering Decision Making | 3 |
| CIV ENGR 498 | Construction Project Management | 3 |
| CIV ENGR 570 | Environmental Impact of Transportation Systems | 3 |
| ECON 301 | Intermediate Microeconomic Theory | 4 |
| ECON 302 | Intermediate Macroeconomic Theory | 4 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON 590 | Tutorial in Research Project Design | 3 |


| GEN BUS 301 | Business Law | 3 |
| :---: | :---: | :---: |
| GEN BUS 302 | Business Organizations and Negotiable Instruments | 3 |
| GEN BUS 365 | Contemporary Topics | 1-3 |
| GEN BUS/ ENVIR ST 601 | Systems Thinking and Sustainable Businesses | 3 |
| INTL BUS 200 | International Business | 3 |
| INTL BUS/ GEN BUS 320 | Intercultural Communication in Business | 3 |
| I SY E 313 | Engineering Economic Analysis | 3 |
| I SY E/PSYCH 349 | Introduction to Human Factors | 3 |
| I SY E 476 | Industrial Engineering Projects | 3 |
| I SY E 515 | Engineering Management of Continuous Process Improvement | 3 |
| I SY E 575 | Introduction to Quality Engineering | 3 |
| I SY E/PSYCH 652 | Sociotechnical Systems | 3 |
| MARKETNG 300 | Marketing Management | 3 |
| MARKETNG 310 | Marketing Research | 3 |
| MARKETNG 415 | Marketing Communications | 3 |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| M E 314 | Manufacturing Fundamentals | 3 |
| M E 549 | Product Design | 3 |
| M HR 300 | Managing Organizations | 3 |
| M H R 365 | Contemporary Topics | 1-3 |
| M H R 420 | Managing Change and Organizational Effectiveness | 3 |
| M H R 612 | Labor-Management Relations | 3 |
| N E 571 | Economic and Environmental Aspects of Nuclear Energy | 3 |
| OTM 365 | Contemporary Topics | 1-3 |
| R M I 300 | Principles of Risk Management | 3 |

## TECHNICAL COMMUNICATION REQUIRED COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| E P D 397 | Technical Communication | 3 |
| E P D 398 | Technical Communications | 1 |
|  | Internship (Required. This course, <br> completed in conjunction with <br> the Technical Communication <br> Internship, can be repeated for an <br> additional credit, which will count <br> toward elective courses in technical <br> communication from EPD. Also, this <br> course can be substituted with a <br> special project completed as an <br> Independent Study course. ) |  |
|  |  |  |
|  |  |  |

Total Credits

## TECHNICAL COMMUNICATION ELECTIVES

| Code | Title | Credits |
| :--- | ---: | ---: |
| Select a minimum of 8 credits |  | 8 |
| Total Credits | 8 |  |


| Elective Cours | es in Communication |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| EPD 275 | Technical Presentations | 2 |
| EPD/EASIAN 374 | Intermediate Technical Japanese I | 3 |
| EP D 690 | Special Topics in Engineering <br> Professional Development (The <br> Wisconsin Engineer Magazine - up <br> to 2 semesters may count) | 2 |
| M E 231 | Introductory Engineering Graphics | 2 |
| I SYE 515 | Engineering Management of Continuous Process Improvement | 3 |
| BSE 375 | Special Topics | 1-4 |
| CBE 324 | Transport Phenomena Lab | 3 |
| CBE 424 | Operations and Process Laboratory | 5 |
| COM ARTS 260 | Communication and Human Behavior | 3 |
| COM ARTS 262 | Theory and Practice of Argumentation and Debate | 3 |
| COM ARTS 263 | Speech Composition | 3 |
| COM ARTS 266 | Theory and Practice of Group Discussion | 3 |
| COM ARTS 272 | Introduction to Interpersonal Communication | 3 |
| COM ARTS 355 | Introduction to Media Production | 4 |
| COM ARTS 368 | Theory and Practice of Persuasion | 3 |
| COM ARTS 410 | Miscommunication | 3 |
| COM ARTS 560 | Communication Theory | 3 |
| COM ARTS 562 | Theories of Deliberation and Controversy | 3 |
| COM ARTS 575 | Communication in Complex Organizations | 3 |
| ENGL 201 | Intermediate Composition | 3 |
| ENGL 315 | English Phonology | 3 |
| ENGL 500 | Writing in Workplaces | 3 |
| ENGL 318 | Second Language Acquisition | 3 |
| GEN BUS 300 | Professional Communication | 3-4 |
| GEN BUS/ <br> ENVIR ST 601 | Systems Thinking and Sustainable Businesses | 3 |
| HIST SCI 201 | The Origins of Scientific Thought | 3 |
| HIST SCI 202 | The Making of Modern Science | 3 |
| HIST SCI 203 | Science in the Twentieth Century: A Historical Overview | 3 |
| JOURN 425 | Video Journalism | 4 |
| JOURN 447 | Strategic Media Planning | 4 |
| LSC 515 | Public Information Campaigns and Programs | 3 |
| JOURN/POLI SCI/ URB R PL 373 | Introduction to Survey Research | 3 |
| JOURN 563 | Law of Mass Communication | 4 |
| LIS 601 | Information: Perspectives and Contexts | 3 |
| LIS/LEGALST 663 | Introduction to Cyberlaw | 3 |
| LSC 320 | Feature Writing | 3 |
| LSC 350 | Visualizing Science and Technology | 3 |


| LSC 515 | Public Information Campaigns and Programs | 3 |
| :---: | :---: | :---: |
| M H R 365 | Contemporary Topics | 1-3 |
| M H R 401 | The Management of Teams | 3 |
| PHILOS 210 | Reason in Communication | 3-4 |
| PHILOS 241 | Introductory Ethics | 3-4 |
| PHILOS 243 | Ethics in Business | 3-4 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PSYCH/SOC 456 | Introductory Social Psychology | 3-4 |
| PSYCH/I SYE 652 | Sociotechnical Systems | 3 |
| PSYCH/I SY E 653 | Organization and Job Design | 3 |
| SOC 250 | Organizations and Society | 3-4 |
| SOC 535 | Talk and Social Interaction | 3 |
| Independent Study courses by instructor approval only ${ }^{3}$ |  |  |
| 2 Note: These E P D courses do NOT count toward the TCC: <br> - EP D 654 Teaching in Science and Engineering <br> - EP D 690 Core Competency in Sustainability <br> - E P D 690 ATE Powertrain <br> - E P D 690 Essential Skills for Engineering Productivity |  |  |
| Special credits in Technical Communication include E P D 299 Sophomore Independent Study, E P D 399 Junior Independent Study and E P D 499 Senior Independent Study. |  |  |

## SENIOR DESIGN OR CAPSTONE

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| B M E 400 | Capstone Design Course in Biomedical Engineering |  |
| CIV ENGR 578 | Senior Capstone Design |  |
| G L E 479 | Geological Engineering Design |  |
| E M A 469 | Design Problems in Engineering |  |
| I SY E 476 | Industrial Engineering Projects |  |
| M E 349 | Engineering Design Projects |  |
| M E 351 | Interdisciplinary Experiential Design Projects I |  |
| M E 352 | Interdisciplinary Experiential Design Projects II |  |
| M S \& E 470 | Capstone Project I |  |
| M S \& E 471 | Capstone Project II |  |
| N E 571 | Economic and Environmental Aspects of Nuclear Energy |  |

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Understand and apply principles and processes for communicating about technical subjects to diverse audiences.
2. Understand and apply fundamentals of written, oral, and visual communication.
3. Apply improved skills in interpersonal communication, teamwork, and management.
4. Research, identify, and think analytically about social, global, economic, political, environmental, and ethical issues as they impact technical projects or engineering work.
5. Use current technology to communicate effectively in a variety of formats and environments.
6. Engage in real world experiences through communication internships and guest lectures.

> TECHNICAL JAPANESE STUDIES FOR UNDERGRADUATES, CERTIFICATE

Japanese has become an important language in engineering and in business. In all major industrial fields Japanese technology is regarded as world class. An increasing number of American companies are establishing technical operations in Japan. These companies need engineers who can read and communicate in both English and Japanese. To meet this need, the College of Engineering offers a sequence of courses leading to a Certificate in Technical Japanese Studies for Undergraduates. This option is recommended for students who seek a balance among comprehension of technical Japanese, the ability to use Japanese in daily life, and an understanding of Japanese culture.

## REQUIREMENTS

In order to receive this certificate a student must complete a minimum of 18 credits. This certificate is available to all undergraduate students at UW-Madison, regardless of major. Students may not elect the pass/ fail option for any course that is used to satisfy the requirements for this certificate. Students who receive this certificate develop conversational and written skills in colloquial Japanese, as well as reading and translation skills in technical Japanese. These skills are valued by employers when students apply for Japan-related jobs. The following courses are required:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Japanese Language Courses (12 credits) |  |  |
| E ASIAN 104 | Second Semester Japanese ${ }^{1}$ | 6 |
| E ASIAN 203 | Third Semester Japanese ${ }^{2}$ | 6 |
| Technical Japanese Courses (6 credits) |  |  |
| EP D/E ASIAN 374 | Intermediate Technical Japanese I | 3 |
| EP D/E ASIAN 375 | Intermediate Technical Japanese II 3 | 3 |
| Total Credits |  | 18 |
| 1 In order to enroll in E ASIAN 104 students must either. <br> - complete E ASIAN 103 ( 6 credits) or <br> - complete E ASIAN 123 and E ASIAN 124 or <br> - place out of EASIAN 103 by passing a placement test. |  |  |

2 The combination of E ASIAN 104 and E ASIAN 203 will give students a strong foundation for interacting with Japanese counterparts. E ASIAN 203 is frequently offered during the summer. This makes it possible for students with heavy credit loads to begin or continue their study of Japanese during the summer.

3
The combination of E P D/E ASIAN 374 and E P D/E ASIAN 375 will give students experience reading Japanese essays on a range of scientific and technical topics-including computer science, physics, chemistry, and various fields of engineering. Students read and translate essays from all of these fields into English. In the process, students develop a strong technical vocabulary in Japanese and learn expressions that frequently appear in Japanese journal articles and technical reports.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Acquire a fundamental understanding of modern Japanese grammar.
2. Acquire a basic vocabulary in scientific and technical fields in Japanese.
3. Be able to translate scientific or technical documents in his/her field from Japanese into English.

## ENGINEERING-COLLEGE-WIDE

## DEGREES/MAJORS/CERTIFICATES

- College of Engineering Honors in the Liberal Arts (http:// guide.wisc.edu/undergraduate/engineering/college-wide/college-engineering-honors-liberal-arts)
- International Engineering, Certificate (p. 299)
- Naval Science, BNS (p. 300)


## INTERNATIONAL ENGINEERING, CERTIFICATE

The certificate in international engineering provides recognition for a student's efforts to prepare for an international career by learning about one or more countries outside the United States. An undergraduate student in the College of Engineering or the Department of Biological Systems Engineering can earn the certificate by completing at least 16 credits in courses with a primary focus on the language, culture, history, geography, society, or institutions of a particular country or region of the world.

## HOW TO GET IN

The application and list of advisors are available on the Certificate in International Engineering website (https://www.engr.wisc.edu/ academics/undergraduate-academics/certificate-in-internationalengineering). Only students with a GPA of at least 2.75 who have met progression requirements may apply.

## REQUIREMENTS

## CERTIFICATE COURSE REQUIREMENTS

A minimum of 16 credits is required.

## LANGUAGE COURSES (0-9 CREDITS)

Although not required, a maximum of 9 credits may be devoted to courses in a foreign language. Only foreign language courses beyond the initial 8 credits in that particular language may be used to satisfy this requirement. A maximum of 3 credits from Independent Study or Directed Study may be counted toward either the language requirement or the area studies requirement. Advanced Placement credits, foreign language retroactive credits, and transfer credits are accepted.

## AREA STUDIES COURSES (6-15 CREDITS)

A minimum of 6 credits must be devoted to courses with a major emphasis on the culture, history, geography, society, or institutions of one country or the countries in a geographically identifiable region of the world. These courses must be selected from at least two departments. A maximum of 3 credits from Independent Study or Directed Study may be counted toward either the language requirement or the area studies requirement. Advanced Placement credits, foreign language retroactive credits, and transfer credits are accepted.

## INTERNATIONAL EXPERIENCE

A documented minimum stay of five weeks for study or work (including internship and co-op) in the designated country or region is required.

## INTERNATIONAL ENGINEERING COURSE

After one's international experience, successful completion of the 1-credit course INTEREGR 413 Current Issues in International Engineering is required.

Students may not elect the pass/fail option for any course that is used to satisfy the requirements for the certificate. However, courses taken on a study abroad program through International Engineering Studies and Programs (IESP) (http://international.engr.wisc.edu) are exempt from this grading requirement. Successful completion of certificate requirements will be noted on the student's official transcript. For additional information, contact International Engineering Studies and Programs (http://international.engr.wisc.edu) (Room 1150 Engineering Hall, 1415 Engineering Drive; international@engr.wisc.edu).

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Study the language and/or culture of a specific area of the world.
2. Obtain a significant international experience in that same area of the world (meaning spending at least 5 weeks in the area).
3. Understand and be able to articulate specific insights about the international dimension of engineering as a profession.

## NAVAL SCIENCE, BNS

The College of Engineering recommends candidates for the bachelor of naval science degree.

Earning both the BNS degree and the B.S. degree in the field of engineering may require five years. Engineering students in an ROTC program may require four and one-half to five years to complete both degree and commissioning requirements.

For additional information see the Officer Education (p. 17) section of the Guide.

## HOW TO GET IN

The naval science BNS is not a stand-alone degree. Students interested in pursuing this degree should consult with the Navy ROTC:
1610 University Ave, Madison, WI 53726 | 608-262-3794 |
nrotc.admin@wisc.edu

## REQUIREMENTS

The College of Engineering recommends candidates for the bachelor of naval science degree. Requirements for the degree are:

1. A total of 136 credits including no fewer than 100 credits of elected and required courses in one of the engineering curricula.
2. Completion of these additional requirements as approved by the Department of Naval Science: English, two semesters; American Military Affairs/National Security Policy, one semester

Earning both the BNS degree and the B.S. degree in the field of engineering may require five years. Engineering students in an ROTC program may require four and one-half to five years to complete both degree and commissioning requirements.

## LEARNING OUTCOMES

1. Understand and apply the fundamentals and principles of Naval Science.
2. Understand and apply Naval Science professional knowledge and core competencies.
3. Be prepared to perform successfully in the technical and critical reasoning requirements of their careers and pursue continuing education in a field of application within the Naval Service.
4. Understand and demonstrate a strong sense of personal integrity, honor, and individual responsibility and associated ethical leadership required of military officers.

## ADVISING AND CAREERS

Naval science BNS students should meet with the Navy ROTC for advising:
1610 University Avenue Madison, WI 53726; 608-262-3794; nrotc.admin@wisc.edu

## INDUSTRIAL AND SYSTEMS ENGINEERING

The first bachelor of science in industrial engineering at the University of Wisconsin-Madison was awarded in 1972. Since that time the demand for industrial engineers has grown dramatically for one chief reason: the need for organizations to raise their level of productivity through thoughtful, systematic applications.

Becoming an industrial engineer (IE) places one in an exciting field of engineering that focuses on productivity improvement worldwide. It is a field that deals as much with human aspects of work as with today's sophisticated tools of work.

What sets industrial engineering apart from other engineering disciplines is its broader scope. An IE deals with people as well as things. The industrial engineer applies problem-solving techniques in almost every kind of industry, business, or institution. There are IEs in banks, hospitals, government at all levels, transportation, construction, processing, social services, electronics, facilities design, manufacturing, and warehousing.

An IE looks at the "big picture" of what makes society perform best -the right combination of human resources, natural resources, and human-made structures and equipment. An IE bridges the gap between management and operations, dealing with and motivating people as well as determining what tools should be used and how they should be used. Industrial engineering is concerned with performance measures and standards, research of new products and product applications, ways to improve use of scarce resources, and many other problem-solving adventures.

Because industrial engineering serves a broad cross-section of business, industry and institutions, the IE's work environment varies from office to plant to field. Choices can be made even after the IE begins his or her career. Few other vocations offer a graduating student such a wide selection of places to work or kind of work to perform. Need for industrial engineers makes this profession particularly attractive from the financial standpoint. Beginning salaries rank in the top group of high-paying engineering disciplines, and fast advancement is not unusual.

In the industrial and systems engineering department at UW-Madison, the course curriculum is set up to provide a diversified background and at the same time allow choices according to individual interests. Specialized coursework might be categorized in five main areas:

- Decision Science and Operations Research
- Health Systems Engineering
- Human Factors and Ergonomics
- Manufacturing and Production Systems


## - Quality Engineering

Although there is no sub major within IE, it is possible to achieve a degree of specialization through a judicious choice of IE technical electives. Courses focusing on teams and design projects prepare students to succeed in the workplace.

## DEGREES/MAJORS/CERTIFICATES

- Industrial Engineering, B.S. (p. 301)


## PEOPLE

## PROFESSORS

Alagoz
Bier
Carayon
Krishnamurthy
Lee
Li
Linderoth (chair)
Radwin
Shi
Veeramani
Zhou

## ASSOCIATE PROFESSORS

Albert
Luedtke
Wiegmann

## ASSISTANT PROFESSORS

Del Pia
Liu
Wang
Werner
Zayas-Caban
See also Industrial and Systems Engineering Faculty Directory (http:// directory.engr.wisc.edu/ie/faculty).

## INDUSTRIAL ENGINEERING, B.S.

The first bachelor of science in industrial engineering at the University of Wisconsin-Madison was awarded in 1972. Since that time the demand for industrial engineers has grown dramatically for one chief reason: the need for organizations to raise their level of productivity through thoughtful, systematic applications.

Becoming an industrial engineer (IE) places one in an exciting field of engineering that focuses on productivity improvement worldwide. It is a field that deals as much with human aspects of work as with today's sophisticated tools of work.

What sets industrial engineering apart from other engineering disciplines is its broader scope. An IE deals with people as well as things. The industrial engineer applies problem-solving techniques in almost every kind of industry, business, or institution. There are IEs in banks, hospitals,
government at all levels, transportation, construction, processing, social services, electronics, facilities design, manufacturing, and warehousing.

An IE looks at the "big picture" of what makes society perform best -the right combination of human resources, natural resources, and human-made structures and equipment. An IE bridges the gap between management and operations, dealing with and motivating people as well as determining what tools should be used and how they should be used. Industrial engineering is concerned with performance measures and standards, research of new products and product applications, ways to improve use of scarce resources, and many other problem-solving adventures.

Because industrial engineering serves a broad cross-section of business, industry and institutions, the IE's work environment varies from office to plant to field. Choices can be made even after the IE begins his or her career. Few other vocations offer a graduating student such a wide selection of places to work or kind of work to perform. Need for industrial engineers makes this profession particularly attractive from the financial standpoint. Beginning salaries rank in the top group of high-paying engineering disciplines, and fast advancement is not unusual.

In the industrial and systems engineering department at UW-Madison, the course curriculum is set up to provide a diversified background and at the same time allow choices according to individual interests. Specialized coursework might be categorized in five main areas:

- Decision Science and Operations Research
- Health Systems Engineering
- Human Factors and Ergonomics
- Manufacturing and Production Systems
- Quality Engineering

Although there is no sub major within IE, it is possible to achieve a degree of specialization through a judicious choice of IE technical electives. Courses focusing on teams and design projects prepare students to succeed in the workplace.

## INDUSTRIAL ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

1. Graduates will demonstrate competence in the professional practice of industrial engineering.
2. Graduates will demonstrate the skills needed to assume leadership in their workplaces and profession.
3. Graduates will act with professional and ethical responsibility, and appreciate the impact of proposed solutions in a global/societal context.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/
progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core
of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## INDUSTRIAL ENGINEERING CURRICULUM

The following curriculum applies to students admitted to the industrial engineering degree program beginning in fall 2016 or later. Required courses are indicated. The Industrial Engineering Undergraduate Curriculum Guide (https://www.engr.wisc.edu/department/industrial-systems-engineering/academics/bachelor-of-science-in-industrial-and-systemsengineering) contains lists of courses that fulfill the requirements in the following categories: General Education Communication Elective, Mathematics, Science, Engineering and Science Electives, IE Required Courses, IE Technical Electives, Junior Design and Senior Design. For Liberal Studies Electives refer to the College of Engineering Liberal Studies Guidelines.

## MATHEMATICS AND STATISTICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| MATH 222 | Calculus and Analytic Geometry 2 | 4 |
| MATH 234 | Calculus--Functions of Several Variables | 4 |
| MATH 340 | Elementary Matrix and Linear Algebra | 3 |
| STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I | 3 |
| STAT 312 | Introduction to Theory and Methods of Mathematical Statistics II | 3 |
| Total Credits |  | 22 |
| SCIENCE |  |  |
| Code | Title | Credits |
| PHYSICS 201 | General Physics (or) | 5 |
| E M A 201 | Statics (and) |  |
| E M A 202 | Dynamics (or) ${ }^{1}$ |  |
| M E 240 | Dynamics ${ }^{1}$ |  |
| PHYSICS 202 | General Physics | 5 |
| CHEM 109 | Advanced General Chemistry | 5 |

COMP SCI 301 Introduction to Data Programming 3
or COMP SCI 200 Programming I
or COMP SCI 300 Programming II
Total Credits
1 E M A 202 or M E 240 will fulfill Engineering Science credit requirements.

## ENGINEERING AND SCIENCE ELECTIVES

Code
Title
Credits

Engineering Science (non I Sy E or E P D) ${ }^{2} 3$
Statistics Elective 3
Computer Science Elective 3
Math, Biology, Engineering Science, Statistics, or 6
Computer Science additional electives
$\begin{array}{ll}\text { Total Credits } & 15\end{array}$
2 INTEREGR 170 Design Practicum will count toward the Engineering \& Science elective credits.

## REQUIRED ISYE COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACCT I S 300 | Accounting Principles | 3 |
| or ACCT IS 100 | Introductory Financial Accounting |  |
| I SY E 313 | Engineering Economic Analysis | 3 |
| I SY E 315 | Production Planning and Control | 3 |
| I SY E 320 | Simulation and Probabilistic <br> Modeling | 3 |
| I SY E 321 | Simulation Modeling Laboratory | 1 |
| I SY E 323 | Operations Research-Deterministic <br> Modeling | 3 |
| I SY E 348 | Introduction to Human Factors <br>  <br> I SY E/PSYCH 349 | Engineering Laboratory |

## I SY E TECHNICAL ELECTIVES

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Human Factors Area | 3 |
| Quantitative Methods Area | 3 |
| Quality Area | 3 |
| Additional I Sy E elective or internship/co-op | 2 |
| Total Credits | 11 |

3 This course is not required for transfer students. INTEREGR 110 Introduction to Engineering will count as a 1 credit undesignated I SY E Technical Elective for I SY E students.

COMMUNICATION SKILLS AND LIBERAL STUDIES

| Code | Title |
| :--- | :--- |
| ENGL 100 | Introduction to College Composition |
| or COM ARTS 100 | Introduction to Speech Composition |
| or LSC 100 | Science and Storytelling |
| or ESL 118 | Academic Writing II |
| E P D 397 | Technical Communication |
| Liberal Studies Electives (according to CoE regulations) |  |
| ECON 101 | Principles of Microeconomics |
| Total Credits |  |
| MINIMUM REQUIRED CREDITS: 120 |  |
| UNIVERSITY | DEGREE REQUIREMENTS |


| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Apply knowledge of math, science, economics, and engineering principles to solve I SY E, social or business problems.
2. Recognize, describe, predict and analyze systems behavior.
3. Apply experimental design or data analytics.
4. Demonstrate ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
5. Design effective and efficient human and technical work systems.
6. Contribute to solving I SY E problems and cooperate with engineers to solve engineering and societal problems.
7. Identify, formulate, and solve engineering problems using appropriate information and approaches.
8. Understand physiological, cognitive, and sociotechnical aspects of humans as components in complex systems.
9. Identify opportunities and apply engineering solutions for evaluating productivity and quality improvement.

## responsibility.

11. Demonstrate an understanding of the impact of engineering solutions in a global, economic, environmental, and societal context.
12. Demonstrate knowledge of contemporary issues across various industries.
13. Show proficiency and effectiveness in technical communications.
14. Engage in continued learning and demonstrate an appreciation of the benefits of lifelong learning.
15. Apply the techniques, skills, and modern engineering tools necessary for engineering practice, such as quality engineering, optimization, simulation, and project management.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

## First Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 221, 217, or 275 | 5 MATH 222 or 276 | 4 |
| CHEM 109 | 5 PHYSICS 201 | 5 |
| Communications A | 3 ECON 101 | 4 |
|  | Liberal Studies Elective | 3 |
|  | 13 | 16 |


| Second Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 234 | 4 STAT 311 | 3 |
| PHYSICS 202 | 5 I SY E 313 | 3 |
| COMP SCI 301 | 3 I SY E 315 | 3 |
| Engineering Science | 3 MATH 340 | 3 |
| Elective | Engineering and Science | 3 |
|  | Elective (Stats) |  |
|  | 15 | 15 |
| Third Year | Credits Spring | Credits |
| Fall | 3 I SY E 320 | 3 |
| I SY E 323 | 1 I SY E 321 | 1 |
| I SY E 348 | 3 I SY E 350 | 3 |
| I SY E/PSYCH 349 | 3 E P D 397 | 3 |
| ACCT I S 300 or 100 | 3 Engineering and Science | 3 |
| STAT 312 | Elective (Comp Sci) |  |
| Liberal Studies Elective | 3 I Sy E Technical Elective | 2 |
|  | 16 | 15 |

## Fourth Year

Fall
Credits Spring
Credits
I SY E 415
I Sy E Technical Elective (Human Factors)

3 I SY E 450
3
3 I Sy E Technical Elective
(Quantitative Methods)

| I SY E 417 | 3 I Sy E Technical Elective <br> (Quality) | 3 |
| :--- | :---: | :---: |
| Engineering Science <br> Elective (ENGR) | 3 Liberal Studies Elective | 3 |
| Liberal Studies Elective | 3 Engineering Science <br> Elective | 3 |

15
Total Credits 120

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

## Alagoz

Bier
Carayon
Krishnamurthy
Lee
Li
Linderoth (chair)
Radwin
Shi
Veeramani
Zhou

## ASSOCIATE PROFESSORS

Albert
Luedtke
Wiegmann
ASSISTANT PROFESSORS
Del Pia
Liu
Wang
Werner

## Zayas-Caban

See also Industrial and Systems Engineering Faculty Directory (http:// directory.engr.wisc.edu/ie/faculty).

## ACCREDITATION

## ACCREDITATION

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## MATERIALS SCIENCE AND ENGINEERING

The Department of Materials Science and Engineering offers a B.S. degree in materials science and engineering and M.S. and Ph.D. degrees in materials engineering.

Advances in technology are closely linked to the materials that people can design, manipulate, and produce. How we live is connected to our abilities to process materials and manufacture products; to develop and design nontraditional as well as traditional materials for an increasingly broad range of industries; and to research and develop high-performance materials for practical applications in coming decades. The materials that change the way we live may be the next generation of superalloys for applications in extreme conditions such as high-temperature or highly corrosive environments; new materials for application in energy generation, storage, and transmission; organic and inorganic materials for use and integration in applications ranging from electronics to medicine; or new materials systems yet to be developed for the everincreasing needs of our society. Materials experts find employment in a broad range of industries and may practice experimental, computational, or theoretical materials science and engineering, or all of these in combination. The undergraduate curriculum leads to the Bachelor of Science Degree in Materials Science and Engineering. The curriculum is designed to prepare students with the foundation needed to thrive in broad and rapidly changing industries that are based on materials. It also provides substantial flexibility, through electives and with the assistance of a materials science and engineering faculty advisor, for tailoring to students' specific interests within the materials field. Science, engineering, teamwork, broad thinking, and communication skills all are integral parts of the curriculum. Graduates are well prepared for careers in industry or for graduate studies.

## DEGREES/MAJORS/CERTIFICATES

- Materials Science and Engineering, B.S. (p. 306)


## PEOPLE

## PROFESSORS

## Arnold

Babcock
Eom
Evans
Gopalan
Kou

Lagally
Morgan
Perepezko
Robertson
Stone
Szlufarska
Thoma
Voyles (chair)

## Wang

## ASSISTANT PROFESSORS

Hu
Kawasaki

## FACULTY ASSOCIATES

Haas
Saatchi

## MATERIALS SCIENCE AND <br> ENGINEERING, B.S.

The Department of Materials Science and Engineering offers a B.S. degree in materials science and engineering and M.S. and Ph.D. degrees in materials engineering.

Advances in technology are closely linked to the materials that people can design, manipulate, and produce. How we live is connected to our abilities to process materials and manufacture products; to develop and design nontraditional as well as traditional materials for an increasingly broad range of industries; and to research and develop high-performance materials for practical applications in coming decades. The materials that change the way we live may be the next generation of superalloys for applications in extreme conditions such as high-temperature or highly corrosive environments; new materials for application in energy generation, storage, and transmission; organic and inorganic materials for use and integration in applications ranging from electronics to medicine; or new materials systems yet to be developed for the everincreasing needs of our society. Materials experts find employment in a broad range of industries and may practice experimental, computational, or theoretical materials science and engineering, or all of these in combination. The undergraduate curriculum leads to the Bachelor of Science Degree in Materials Science and Engineering. The curriculum is designed to prepare students with the foundation needed to thrive in broad and rapidly changing industries that are based on materials. It also provides substantial flexibility, through electives and with the assistance of a materials science and engineering faculty advisor, for tailoring to students' specific interests within the materials field. Science, engineering, teamwork, broad thinking, and communication skills all are integral parts of the curriculum. Graduates are well prepared for careers in industry or for graduate studies.

## MATERIALS SCIENCE AND ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

Objective 1: Skills and Tools. Graduates will be applying the tools and skills acquired during their undergraduate experience either in postgraduate educational programs or as employees in materials-related industries.

Objective 2: Early Career Growth. Graduates will have experienced professional growth in their chosen post-baccalaureate pursuits, for
example, through acquisition of advanced degrees or advancement in employment rank.

Objective 3: Professional Citizenship. Graduates will have demonstrated awareness of contemporary issues in technology and society and ethical responsibility.

Objective 4: Life-Long Learning: Graduates will have demonstrated a continuing commitment to learning.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/ academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

The following curriculum applies to students admitted to the materials science and engineering degree program (MS\&E) in or after fall semester of 2011.

## SUMMARY OF REQUIREMENTS

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Mathematics and Statistics | 19 |
| Science Foundation | 21 |
| Engineering Foundation | 7 |
| MS\&E Required Courses | 40 |
| Materials Emphasis Elective Requirements | 15 |
| Communication Skills | 6 |
| Liberal Studies | 16 |


| Free Electives | 4 |
| :--- | ---: |
| Total Credits | 128 |

## MATHEMATICS AND STATISTICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 221 <br> or MATH 217 <br> or MATH 275 | Calculus and Analytic Geometry 1 <br> Calculus with Algebra and Trigonometry II Topics in Calculus I | 5 |
| MATH 222 or MATH 275 | Calculus and Analytic Geometry 2 Topics in Calculus I | 4 |
| MATH 234 | Calculus--Functions of Several Variables | 4 |
| MATH 319 <br> or MATH 320 | Techniques in Ordinary Differential Equations <br> Linear Algebra and Differential Equations | 3 |
| STAT 324 | Introductory Applied Statistics for Engineers | 3 |
| Total Credits |  | 19 |
| SCIENCE FOUNDATION |  |  |
| Code <br> Physics | Title | Credits |
| Select one of the fo | wing: | 10 |
| PHYSICS 201 <br> \& PHYSICS 202 | General Physics and General Physics |  |
| PHYSICS 207 <br> \& PHYSICS 208 | General Physics and General Physics |  |
| PHYSICS 247 <br> \& PHYSICS 248 | A Modern Introduction to Physics and A Modern Introduction to Physics |  |
| Chemistry |  |  |
| CHEM 103 <br> \& CHEM 104 <br> or CHEM 109 | General Chemistry I and General Chemistry II Advanced General Chemistry | 5 |
| CHEM 343 or CHEM 341 | Introductory Organic Chemistry Elementary Organic Chemistry | 3 |
| Science Elective |  |  |
| Select one of the fo | wing: | 3 |
| CHEM 311 | Chemistry Across the Periodic Table |  |
| CHEM 327 | Fundamentals of Analytical Science |  |
| CHEM 329 | Fundamentals of Analytical Science |  |
| CHEM 345 | Intermediate Organic Chemistry |  |
| GEOSCI 203 | Earth Materials |  |
| PHYSICS 205 | Modern Physics for Engineers |  |
| PHYSICS/ <br> ECE 235 | Introduction to Solid State Electronics |  |
| PHYSICS 241 | Introduction to Modern Physics |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY/ } \\ & \text { BOTANY } 151 \end{aligned}$ | Introductory Biology |  |


| ZOOLOGY 153 | Introductory Biology |  |
| :---: | :---: | :---: |
| Total Credits |  | 21 |
| ENGINEERING FOUNDATION |  |  |
| Code | Title | Credits |
| Introduction to Engineering |  |  |
| Engineering Foundations Elective |  |  |
| M S \& E 250 | Introduction to Modern Materials | 1 |
| Select one of the follo | wing: | 3 |
| CBE 255 | Introduction to Chemical Process Modeling |  |
| COMP SCI 200 | Programming I |  |
| COMP SCI 300 | Programming II |  |
| COMP SCI 310 | Problem Solving Using Computers |  |
| COMP SCI 400 | Programming III |  |
| E C E 230 | Circuit Analysis |  |
| EC E 376 | Electrical and Electronic Circuits |  |
| E M A 303 | Mechanics of Materials |  |
| ENVIR ST/ BOTANY/ ZOOLOGY 260 | Introductory Ecology |  |
| ENVIR ST/ GEOSCI 410 | Minerals as a Public Problem |  |
| M E/STAT 424 | Statistical Experimental Design |  |
| PHYSICS 321 | Electric Circuits and Electronics |  |
| Engineering and Society Elective |  |  |
| Select one of the following: |  | 3 |
| ZOOLOGY/ <br> BOTANY/ <br> ENVIR ST 260 | Introductory Ecology |  |
| CIV ENGR/ <br> BSE 491 | Legal Aspects of Engineering |  |
| ENVIR ST/ <br> ATM OCN 171 | Global Change: Atmospheric Issues and Problems |  |
| ENVIR ST/A A E/ ECON 343 | Environmental Economics |  |
| ENVIR ST/ <br> BSE 367 | Renewable Energy Systems |  |
| ENVIR ST/ <br> GEOSCI 411 | Energy Resources |  |
| I SYE 313 | Engineering Economic Analysis |  |
| I SY E/PSYCH 349 | Introduction to Human Factors |  |
| PHILOS 241 | Introductory Ethics |  |
| PHILOS 243 | Ethics in Business |  |
| PHILOS 341 | Contemporary Moral Issues |  |

## MATERIALS SCIENCE AND ENGINEERING REQUIRED COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| M S \& E 330 | Thermodynamics of Materials | 4 |
| M S \& E 331 | Transport Phenomena in Materials | 3 |
| M S \& E 332 | Macroprocessing of Materials | 3 |
| M S \& E 333 | Microprocessing of Materials | 3 |


| M S \& E 351 | Materials Science-Structure and <br> Property Relations in Solids | 3 |
| :--- | :--- | ---: |
| M S \& E 352 | Materials Science-Transformation <br> of Solids | 3 |
| M S \& E 360 | Materials Laboratory I | 1 |
| M S \& E 361 | Materials Laboratory II | 2 |
| M S \& E 362 | Materials Laboratory III | 2 |
| M S \& E/CHEM 421 | Polymeric Materials | 3 |
| M S \& E 441 | Deformation of Solids | 3 |
| M S \& E 451 | Introduction to Ceramic Materials | 3 |
| M S \& E 456 | Electronic, Optical, and Magnetic | 3 |
| M S \& E 470 | Properties of Materials | 1 |
| M S \& E 471 | Capstone Project I | 3 |
| Total Credits |  | 40 |

## MATERIALS SCIENCE AND ENGINEERING EMPHASIS ELECTIVES

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select two 3-credit M S \& E courses numbered 400 or above |  |  |
| Select 9 credits of science and engineering coursework in consultation with an M S \& E advisor ${ }^{1}$ |  |  |
| Total Credits |  | 15 |
| 1 Select, in consultation with an M S \& E advisor, 9 credits of science and engineering coursework from M S \& E courses numbered 400 or above, other engineering courses numbered 300 or above, science courses numbered 300 or above, or up to 3 credits of combined M S \& E 1 Cooperative Education Program and/or M S \& E 699 Independent Study research credit. M S \& E advisor approval of the set of selections is required. Course sets may be broad-based or concentrated in a subfield of materials science and engineering. See department for examples of focused, materialsemphasis elective course sets. |  |  |
| COMMUNICATION SKILLS |  |  |
| Code | Title | Credits |
| ENGL 100 | Introduction to College Composition | 3 |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or LSC 100 | Science and Storytelling |  |
| or ESL 118 | Academic Writing II |  |
| E P D 397 | Technical Communication | 3 |
| Total Credits |  |  |

## LIBERAL STUDIES

Complete 16 credits of liberal studies requirements (p. 229). ${ }^{2}$
2 Students must take 16 credits that carry H,S,L, or Z breadth designators. These credits must fulfill the following subrequirements:

1. A minimum of two courses from the same department or program. At least one of these two courses must be designated as above the elementary level (I, A, or D).
2. A minimum of 6 credits designated as humanities $(H, L$, or $Z$ in the course listing), and an additional minimum of 3 credits designated as social science (S or Z in the course listing). Foreign language courses count as H credits. Retroactive credits for language courses may not be used
to meet the Liberal Studies credit requirement (they can be used for subrequirement 1 above).
3. At least 3 credits in courses designated as ethnic studies (lower case "e" in the course listing). These courses may help satisfy subrequirements 1 and 2 above, but they count only once toward the total required. Note: Some courses may have "e" designation but not have $\mathrm{H}, \mathrm{S}, \mathrm{L}$, or Z designation; these courses do not count toward the Liberal Studies requirement.

## FREE ELECTIVES

Select 4 elective credits ${ }^{3}$.
3 The above subject requirements can be met with 124 credits of UW courses. Students must complete 128 credits of coursework to earn the B.S. in materials science and engineering. The 5 elective credits may be earned by choosing elective courses that carry more credits than the requirement's minimum credit load or by taking any additional coursework of the student's choice.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |

## LEARNING OUTCOMES

1. (a) Students shall be able to apply knowledge of mathematics, chemistry, physics, and materials science and engineering principles to materials and materials systems.
2. (b) Students shall be able to design and conduct experiments to study the microstructure, properties, processing and performance of materials and to analyze and interpret the experimental results.
3. (c) Students shall be able to design materials and processes to produce them to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and/or sustainability.
4. (d) Students shall be able to work in multi-disciplinary teams and provide leadership on materials related problems that arise in multidisciplinary work.
5. (e) Students shall be able to identify materials-\#related problems and formulate plans to solve such problems.
6. (f) Students shall have an understanding of professional and ethical responsibility.
7. (g) Students shall be able to communicate materials concepts effectively through written reports, oral presentations, and discussion.
8. (h) Students shall have the broad education necessary to understand the impact of materials science and engineering solutions in a global, economic, environmental, and societal context.
9. (i) Students shall have the materials science and engineering foundation needed to succeed in materials science and engineering graduate programs, to pursue other forms of continuing education in materials science and engineering, and to engage in life-long learning of materials science and engineering.
10. (j) Students shall have an awareness of contemporary and cultural issues.
11. (k) Students shall be able to use the techniques, skills, and modern materials science and engineering tools necessary to practice materials science and engineering as a professional.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

| First Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 221 | 5 MATH 222 | 4 |
| CHEM 109 | 5 PHYSICS 201, 207, or | 5 |
|  | 247 | 3 |
| Communications A | 3 Science Elective | 3 |
| M S \& E 250 | 1 Liberal Studies Elective | 3 |
| Liberal Studies Elective | 3 | 15 |


| Second Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 234 | 4 MATH 319 or 320 | 3 |
| PHYSICS 202, 208, or | 5 STAT 324 | 3 |
| 248 |  |  |
| M S \& E 330 | 4 M S \& E 352 | 3 |
| M S \& E 351 | 3 M S \& E 361 | 2 |
| M S \& E 360 | 1 Liberal Studies Elective | 4 |
|  | 17 | 15 |

## Third Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| CHEM 341 or 343 | 3 M S \& E 331 | 3 |
| M S \& E 332 | 3 M S \& E 333 | 3 |
| M S \& E 362 | 2 M S \& E/CHEM 421 | 3 |
| M S \& E 451 | 3 Engineering Foundations | 3 |
|  | Elective |  |
| Liberal Studies Elective | 3 Liberal Studies Elective | 3 |
| Free Elective | 3 |  |
|  | 17 | 15 |

## Fourth Year

Fall
Credits Spring
Credits
M S \& E 441
3 M S \& E 471

| M S \& E 456 | 3 Tech Emphasis Elective | 3 |
| :--- | :--- | :---: |
| M S \& E 470 | 1 Tech Emphasis Elective | 3 |
| Tech Emphasis Elective | 3 Materials Emphasis <br> Elective | 3 |
| Materials Emphasis 3 E P D 397 3 <br> Elective 3 Free elective credits (1) if  <br> Engineering and Society   <br> Elective   | 16 | 1 |

Total Credits 128

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

## Arnold

Babcock
Eom
Evans
Gopalan
Kou
Lagally
Morgan
Perepezko
Robertson
Stone
Szlufarska
Thoma
Voyles (chair)
Wang
ASSISTANT PROFESSORS
Hu
Kawasaki

## FACULTY ASSOCIATES <br> Haas <br> Saatchi <br> ACCREDITATION

## ACCREDITATION <br> ABET (http://www.abet.org)

Accreditation status: Accredited. Next accreditation review: 2018-2019.

## MECHANICAL ENGINEERING

Mechanical engineers are problem-solvers who make things work better, more efficiently, and more economically. They are innovators, coming up with original ideas to apply scientific knowledge in new ways. Mechanical engineers are builders, designing and developing machines and systems that make life easier. Mechanical engineers have strong science, mathematics, and technology backgrounds.

Manufacturing processes, design of mechanical equipment and systems, and energy generation and utilization are traditional mechanical engineering fields. Students receive basic preparation in all of these areas. Through choice of elective courses they may further specialize in areas such as automatic control systems, renewable energy systems, robotics, product design, biomedical engineering, computational mechanics, manufacturing systems engineering, etc. Mechanical engineering prepares students for entrance into industry, for independent business (e.g., consulting, contracting, or manufacturing), or for work in government agencies. A degree in mechanical engineering may be used as a background for medicine, law, or business, as well as for graduate work in engineering.

Work in these areas requires a solid background in mathematics, statistics, mechanics, physics, machine design, thermal sciences, materials, the use of computers, and manufacturing processes. Mechanical engineers must also possess good communication skills and be able to work in teams. Mechanical engineers should be aware of social and environmental consequences of their work.

With these skills, broad training, and an emphasis on systems design, mechanical engineers are in demand in practically every type of manufacturing, consulting, sales, and research organization. Mechanical engineers may work in automotive, materials processing, heavy equipment, paper, plastics, power, aerospace, chemical, electronics, or many other large and small industries. Their work may involve research and development of new products, design of equipment or systems, supervision of production, plant engineering, administration, sales engineering, or testing of individual components or complete assemblies.

Although many special areas exist in the profession, mechanical engineering can be subdivided into energy systems and mechanical systems.

The energy systems field has taken on special significance with the current awareness of the limited energy sources and the effects of energy use on the environment. In this field, mechanical engineers carry out work on the behavior of liquids, gases, and solids as they are used in all types of energy-conversion systems. Automotive engines, gas turbines, steam power plants, refrigeration systems, air pollution control, cryogenics and energy utilization require this type of background. To be proficient in this
the engineer must have a knowledge of thermodynamics, fluid dynamics, heat transfer, and related subjects.

The mechanical systems field covers the design and manufacturing of products and equipment. Mechanical engineers who focus on design conceive of new devices and machines and also refine and improve existing designs. The design engineer must be proficient in kinematics, machine elements, mechanics, strength and properties of materials, dynamics, vibrations, etc. Mechanical engineers who focus on manufacturing are involved with planning and selecting manufacturing methods, with designing and developing manufacturing equipment, and with increasing the efficiency and productivity of current manufacturing technologies for polymer, metal, and ceramic products. The manufacturing engineer uses chemistry, materials science, mechanics of materials, materials processing principles and practices, principles of computer control, engineering statistics, and other physical and thermal sciences to improve manufacturing operations and systems, and the products they produce. Increasingly, the systems that mechanical engineers work with incorporate biological and information technology components.

## DEGREES/MAJORS/CERTIFICATES

- Engineering Thermal Energy Systems, Certificate (p. 311)
- Manufacturing Engineering, Certificate (p. 312)
- Mechanical Engineering, B.S. (p. 314)


## PEOPLE

## PROFESSORS

Ghandhi (chair)
Lorenz
Negrut (also Electrical and Computer Engineering, and Materials Science and Engineering)
Nellis (also Engineering Physics)
Osswald (also Materials Science and Engineering)
Pfotenhauer (also Engineering Physics)
Qian
Rutland
Sanders (also Electrical and Computer Engineering)
Shapiro (also Computer Science)
Suresh
Thelen (also Biomedical Engineering)
Turng (also Biomedical Engineering and Materials Science and Engineering)

## ASSOCIATE PROFESSORS

Krupenkin
Miller (also Engineering Physics)
Pfefferkorn (also Materials Science and Engineering)
Ploeg (also Biomedical Engineering)
Rothamer
Trujillo (also Engineering Physics)
Zinn (also Biomedical Engineering)

## ASSISTANT PROFESSORS

Adamczyk (also Biomedical Engineering)
Eriten (also Materials Science and Engineering)
Henak (also Biomedical Engineering)
Kokjohn (also Engineering Physics)

Min
Pan
Peherstorfer
Roldan-Alzate (also Biomedical Engineering)
Rudraraju
Rudykh

## RESOURCES AND SCHOLARSHIPS

## FACILITIES

Facilities available for instruction and research include:
Automatic Controls Lab
Automotive Lab
Computer-Aided Design Lab (CADLAB)
Energy Lab
Engineering Graphics Labs
Fluid Power Lab
Instrumentation Lab
Mechatronics and Manufacturing Automation Lab
Motor Vehicle Lab
Polymer Processing Lab
Research Labs
Senior Design Studio
Student Shop
Motor Vehicle Lab
Polymer Processing Lab
Research Labs
Senior Design Studio
Student Shop

## ENGINEERING THERMAL ENERGY SYSTEMS, CERTIFICATE

Efficient use of thermal energy is an increasingly popular area of interest for UW-Madison engineering students and employers. The objective of the certificate in engineering thermal energy systems program is to provide students in the College of Engineering with an organized set of courses that will improve their capacity to analyze and design innovative thermal energy systems. These systems include, but are not limited to, energy conversion systems and their fuels, refrigeration, combustion, and solar energy. Thermal energy systems either employ thermal energy directly or convert thermal energy to other energy forms.

## HOW TO GET IN

Second- and third-year students who wish to apply for admission into this certificate program will need to complete a major/certificate declaration form obtained from the student services office. The student should have $a B$ or better average in the major to enter this program. Once approved by the student services office and the student's faculty advisor, the form will be forwarded to the registrar's office to be added to the student record. The student services office will, in conjunction with the student's advisor and curriculum committee chair, assist the student in selecting appropriate courses that fulfill certificate requirements. If a Special student does not have a home department in the College of Engineering, the Department of Mechanical Engineering will advise and sponsor the student in this program. To receive the certificate, the applicant must
achieve a GPA of 3.0 or higher in the proposed courses listed on the completed form.

Submit the completed Declaration of Intent Form (https:// www.engr.wisc.edu/app/uploads/2016/02/certificate-in-engineering-thermal-energy-systems-declaration-of-intent.pdf) to student services.

## REQUIREMENTS

The certificate, geared toward UW-Madison undergraduate students, requires a total of 18 completed credits. Up to 9 of the credits can be thermal-energy-related courses that are required in the student's undergraduate major. The additional 9 credits must be selected from an assortment of approved elective courses in the College of Engineering.

## COURSES

Courses not on this list must be specifically approved by the certificate curriculum committee.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mechanical Engineering |  |  |
| M E 460 | Applied Thermal / Structural Finite Element Analysis | 3 |
| M E 461 | Thermal Systems Modeling | 3 |
| M E 466 | Air Pollution Effects, Measurements and Control | 3 |
| M E 469 | Internal Combustion Engines | 3 |
| M E/N E 520 | Two-Phase Flow and Heat Transfer | 3 |
| M E 561 | Intermediate Thermodynamics | 3 |
| M E 563 | Intermediate Fluid Dynamics | 3 |
| M E 564 | Heat Transfer | 3 |
| M E/N E 565 | Power Plant Technology | 3 |
| M E/EP 566 | Cryogenics | 3 |
| M E/CBE 567 | Solar Energy Technology | 3 |
| M E 569 | Applied Combustion | 3 |
| M E 572 | Intermediate Gas Dynamics | 3 |
| M E 573 | Computational Fluid Dynamics | 3 |
| Chemical and Biological Engineering |  |  |
| CBE/B M E 320 | Introductory Transport Phenomena | 4 |
| CBE 430 | Chemical Kinetics and Reactor Design | 3 |
| CBE 440 | Chemical Engineering Materials | 3 |
| CBE/M E 567 | Solar Energy Technology | 3 |
| CBE 535 | Heterogeneous Catalysis: Principles and Applications | 3 |
| Civil and Environmental Engineering |  |  |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| Engineering Mechanics and Astronautics |  |  |
| E M A 521 | Aerodynamics | 3 |
| Nuclear Engineering |  |  |
| N E 411 | Nuclear Reactor Engineering | 3 |
| N E/M E 520 | Two-Phase Flow and Heat Transfer | 3 |
| N E 550 | Advanced Nuclear Power Engineering | 3 |


| N E/ME 565 | Power Plant Technology | 3 |
| :---: | :---: | :---: |
| EP/M E 566 | Cryogenics | 3 |
| Biological Systems Engineering |  |  |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| Materials Science and Engineering |  |  |
| M S \& E 463 | Materials for Elevated Temperature Service | 3 |

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Follow a directed sequence of technical elective courses specializing in thermal energy systems.
2. Synthesize knowledge gained from a curriculum that focuses on applying fundamentals of engineering to the analysis of thermal energy systems.
3. Be prepared for the job market with a solid background in the energy field.

## MANUFACTURING ENGINEERING, CERTIFICATE

## OVERVIEW

Are you a student interested in manufacturing? Do you like drawing on a variety of skills and knowledge to solve complex problems? If so, you may wish to consider this certificate.

Because manufacturing itself is complex and broad, manufacturing engineers apply many engineering principles and work in a multidisciplinary world. This certificate allows students to emphasize either manufacturing systems or manufacturing processes-or, they can choose to spread courses evenly across both. Through this certificate, students will gain an understanding of these two areas of manufacturing Undergraduates in industrial and systems engineering or mechanical engineering can pursue this certificate without adding time to the degree.

## HOW TO GET IN

## ENROLLMENT

This undergraduate certificate is open to all undergraduate students at the University of Wisconsin-Madison. Mechanical engineering and industrial and systems engineering students can complete this certificate without adding time to degree.

## ADMISSION

Admission into the undergraduate certificate in manufacturing engineering requires:

- Undergraduate standing at UW-Madison
- Cumulative GPA (at UW-Madison) greater than or equal to 3.0
- Green Shop Pass with CNC 1 upgrade (College of Engineering Student Shop)
- Completion of the admissions form
- Meeting with a faculty advisor

Students must complete an admissions form, obtain the required signatures, and bring the form to one of the student services coordinators for the Department of Mechanical Engineering. The form will be used to ensure that students have completed the Green Shop Pass and CNC 1 upgrade in the College of Engineering Student Shop, meet the GPA requirement for admission, meet the course grade requirement for courses already completed, and list courses that are planned in order to satisfy the certificate program. The form will contain fields for the following information:

- Study plan (courses that have been taken, are being taken, and plan to take)
- Core courses
- Elective courses
- Grades for any courses that have already been taken
- When future courses will be taken
- Cumulative GPA at time of admission
- Expected graduation date
- Major
- Signature from Student Shop indicating successful completion of the Green Shop Pass and CNC 1 upgrade
- Signature from a key program faculty member indicating that the student meets the admission requirements and has discussed the study plan with the faculty member


## COMPLETION

In order to successfully complete the undergraduate certificate in manufacturing engineering, students must:

- Have been admitted to the certificate
- Maintain a cumulative GPA of 3.0 or greater for the courses taken for the certificate. If a course is repeated, the average of the grades received in the course will be used in calculating the cumulative GPA.
- Have received a grade of BC or higher in all courses taken for the certificate. If a course is repeated, the highest grade received in the course is used for this criteria.


## REQUIREMENTS

The core courses were chosen to include two manufacturing processfocused courses as well as two manufacturing systems-focused courses. A manufacturing engineer must be multidisciplinary because of the complex and broad nature of manufacturing as an application of many engineering principles. The objective of the core course requirements is to provide students with basic understanding of manufacturing systems and basic understanding of manufacturing processes.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Three courses must be from the following Core Courses with a grade of $B C$ or better. |  | 9 |
| M E 313 | Manufacturing Processes |  |
| M E 314 | Manufacturing Fundamentals ${ }^{1}$ |  |
| I SY E 315 | Production Planning and Control |  |
| I SY E 415 | Introduction to Manufacturing Systems, Design and Analysis ${ }^{1}$ |  |
| An additional three cour following Elective Co with at least one cou | ourses must be from any of the urses with a grade of BC or better, se from each of the two categories: | 9 |
| 1. Mechanical and Materials Engineering Electives |  |  |
| M E 314 | Manufacturing Fundamentals ${ }^{1}$ |  |
| M E 417 | Transport Phenomena in Polymer Processing |  |
| M E 418 | Engineering Design with Polymers |  |
| M E 419 | Fundamentals of Injection Molding |  |
| M E 420 | Introduction to Polymer Composites Processing |  |
| M E 429 | Metal Cutting |  |
| M E/E C E 439 | Introduction to Robotics |  |
| M E 447 | Computer Control of Machines and Processes |  |
| M E 449 | Redesign and Prototype Fabrication |  |
| M E 514 | Additive Manufacturing |  |
| M S \& E/M E 435 | Joining of Materials: Structural, Electronic, Bio and Nano Materials |  |
| M S \& E 461 | Advanced Metal Casting |  |
| M S \& E/M E 462 | Welding Metallurgy |  |
| 2. Industrial \& Systems Engineering Electives |  |  |
| I SY E 415 | Introduction to Manufacturing Systems, Design and Analysis |  |
| I SY E/M E 510 | Facilities Planning |  |
| I SYE/M E 512 | Inspection, Quality Control and Reliability |  |
| I SY E/BME 564 | Occupational Ergonomics and Biomechanics |  |
| I SY E 575 | Introduction to Quality Engineering |  |
| I SY E 605 | Computer Integrated Manufacturing |  |
| I SY E 615 | Production Systems Control |  |
| I SYE/M E 641 | Design and Analysis of Manufacturing Systems |  |
| I SY E/M E 643 | Performance Analysis of Manufacturing Systems |  |
| If M E 314 and/or I SY E 415 are taken as part of the Core Course Requirement, then they cannot also count as an elective. |  |  |

No exceptions or substitutions to the core courses are allowed.
Elective courses not listed must be specifically approved by the curriculum committee of the department teaching the course. The request must include the course number, course name, name and contact information for the professor currently teaching or planning to teach the course; syllabus; and which category it should be listed under. Courses that are approved by the curriculum committee of the department
teaching the course must be sent to the certificate program director. Only formal courses will be considered.

Only courses taken for a letter grade count toward this certificate. Only courses in which a grade of BC or better is received count toward this certificate. Courses taken at other institutions may be counted toward this certificate if they have been identified as equivalent through the existing process. At least $50 \%$ of the courses (i.e., three courses) for this certificate must be earned in residence on the UW-Madison campus.

Students must maintain a cumulative GPA of 3.0 or better for the courses taken for this certificate. If a course is repeated, the average of the grades received in the course will be used in calculating the cumulative GPA.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Demonstrate knowledge of the fundamental concepts of manufacturing discrete parts.
2. Utilize skills related to manufacturing engineering.
3. Communicate effectively in the methods related to manufacturing engineering.
4. Generate solutions to problems that may arise in manufacturing engineering.

## PEOPLE

## KEY PROGRAM FACULTY (MAY SERVE AS ADVISORS FOR STUDENTS PURSUING THIS CERTIFICATE)

Department of Mechanical Engineering (ME)

- Tim Osswald, Professor

Frank E. Pfefferkorn, Associate Professor
Lih-Sheng (Tom) Turng, Professor
Department of Industrial \& Systems Engineering (ISyE)

- Ananth Krishnamurthy, Associate Professor

Jingshan Li, Professor
Kaibo Liu, Assistant Professor
Leyuan Shi, Professor
Shiyu Zhou, Professor

## MECHANICAL ENGINEERING, B.S.

Mechanical engineers are problem-solvers who make things work better, more efficiently, and more economically. They are innovators, coming up with original ideas to apply scientific knowledge in new ways. Mechanical engineers are builders, designing and developing machines and systems that make life easier. Mechanical engineers have strong science, mathematics, and technology backgrounds.

Manufacturing processes, design of mechanical equipment and systems, and energy generation and utilization are traditional mechanical
engineering fields. Students receive basic preparation in all of these areas. Through choice of elective courses they may further specialize in areas such as automatic control systems, renewable energy systems, robotics, product design, biomedical engineering, computational mechanics, manufacturing systems engineering, etc. Mechanical engineering prepares students for entrance into industry, for independent business (e.g., consulting, contracting, or manufacturing), or for work in government agencies. A degree in mechanical engineering may be used as a background for medicine, law, or business, as well as for graduate work in engineering.

Work in these areas requires a solid background in mathematics, statistics, mechanics, physics, machine design, thermal sciences, materials, the use of computers, and manufacturing processes. Mechanical engineers must also possess good communication skills and be able to work in teams. Mechanical engineers should be aware of social and environmental consequences of their work.

With these skills, broad training, and an emphasis on systems design, mechanical engineers are in demand in practically every type of manufacturing, consulting, sales, and research organization. Mechanical engineers may work in automotive, materials processing, heavy equipment, paper, plastics, power, aerospace, chemical, electronics, or many other large and small industries. Their work may involve research and development of new products, design of equipment or systems, supervision of production, plant engineering, administration, sales engineering, or testing of individual components or complete assemblies.

Although many special areas exist in the profession, mechanical engineering can be subdivided into energy systems and mechanical systems.

The energy systems field has taken on special significance with the current awareness of the limited energy sources and the effects of energy use on the environment. In this field, mechanical engineers carry out work on the behavior of liquids, gases, and solids as they are used in all types of energy-conversion systems. Automotive engines, gas turbines, steam power plants, refrigeration systems, air pollution control, cryogenics and energy utilization require this type of background. To be proficient in this the engineer must have a knowledge of thermodynamics, fluid dynamics, heat transfer, and related subjects.

The mechanical systems field covers the design and manufacturing of products and equipment. Mechanical engineers who focus on design conceive of new devices and machines and also refine and improve existing designs. The design engineer must be proficient in kinematics, machine elements, mechanics, strength and properties of materials, dynamics, vibrations, etc. Mechanical engineers who focus on manufacturing are involved with planning and selecting manufacturing methods, with designing and developing manufacturing equipment, and with increasing the efficiency and productivity of current manufacturing technologies for polymer, metal, and ceramic products. The manufacturing engineer uses chemistry, materials science, mechanics of materials, materials processing principles and practices, principles of computer control, engineering statistics, and other physical and thermal sciences to improve manufacturing operations and systems, and the products they produce. Increasingly, the systems that mechanical engineers work with incorporate biological and information technology components.

## MECHANICAL ENGINEERING PROGRAM EDUCATIONAL OBJECTIVES

Graduates from the undergraduate program in mechanical engineering will choose to use the knowledge and skills they have acquired during their undergraduate years to pursue a wide variety of career and life goals. We encourage this diversity of paths.

Independent of whether our graduates choose to pursue a professional career, postgraduate education, or volunteer service in engineering or a different field; we expect that our graduates will achieve the following objectives within three to five years after graduation:

1. They will exhibit a fundamental understanding of broader engineering disciplines with strong skills in mechanical engineering, problem solving, leadership, teamwork, and communication.
2. They will use these skills to contribute to their organizations and communities.
3. They will make thoughtful, well-informed decisions in their career and life.
4. They will demonstrate a continuing commitment to and interest in their own and other's education.

## HOW TO GET IN

## ADMISSION TO THE COLLEGE AS A FRESHMAN Students applying to UW-Madison (https://www.admissions.wisc.edu/ apply) need to indicate an engineering major (https://www.engr.wisc.edu/ academics/undergraduate-academics/choosing-a-major) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (https://www.engr.wisc.edu/academics/ student-services/academic-advising/first-year-undergraduate-students/ progression-requirements) at the end of the first year to guarantee advancement in that program.

## CROSS-CAMPUS TRANSFER TO ENGINEERING

UW-Madison students in other schools and colleges on campus must meet the course and credit requirements for admission to engineering degree granting classifications specified in the general college requirements (https://www.engr.wisc.edu/academics/student-services/academic-advising/cross-campus-students). The requirements are the minimum for admission consideration. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student's overall academic record at UW-Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers group information sessions (https://www.engr.wisc.edu/academics/ student-services/academic-advising/cross-campus-students) for students to learn about the cross-campus transfer process.

## OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW-Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (https://www.engr.wisc.edu/
academics/student-services/academic-advising/transfer-students) at the point of transfer or within their first two semesters at UW-Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to the College of Engineering is competitive and selective, and students who have earned more than 80 transferable semester credits at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select fouryear UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: ugtransfer@engr.wisc.edu or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (https:// www.engr.wisc.edu/admissions/undergraduate-admissions/returning-adults-second-degree-students) might explore the Biological Systems Engineering program at UW-Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :---: | :---: |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |
|  | * The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or |
|  | Part B, Ethnic Studies, or Quantitative Reasoning Part A or |
|  | Part B requirements. |

The following curriculum applies to undergraduate students admitted to the Mechanical Engineering degree program in Fall 2016 or later. Check with the department for any recent changes. Students admitted before Fall 2016 can locate their curriculum at this link (https://
www.engr.wisc.edu/department/mechanical-engineering/academics/ bachelor-of-science-in-mechanical-engineering).

## SUMMARY OF REQUIREMENTS



Total Credits

All transfer students must have the equivalent of the above courses. If the above requirement is fulfilled with fewer than 19 credits, the balance becomes free elective credits.
Transfer students may fulfill the statistics requirement with other statistics courses having a calculus prerequisite and the approval of the mechanical engineering department via a Course Substitution Form.

## BASIC SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | $5-9$ |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 | General Chemistry I |  |
| \& CHEM 104 | and General Chemistry II |  |
| COMP SCI 301 | Introduction to Data Programming | 3 |
| PHYSICS 202 | ${\text { General Physics }{ }^{1}}$1 |  |

## Total Credits

1 Students following the normal M E course sequence need not take PHYSICS 201 General Physics to satisfy the prerequisites for PHYSICS 202 General Physics.

## NON-MECHANICAL ENGINEERING

| Code | Title | Credits |
| :--- | :--- | ---: |
| E M A 201 | Statics | 3 |
| M S \& E 350 | Introduction to Materials Science | 3 |
| E C E 376 | Electrical and Electronic Circuits | 3 |

ECE 377 \begin{tabular}{lll}

\& | Fundamentals of Electrical |
| :--- |
| and Electro-mechanical Power |
| Conversion | \& 3 <br>

\hline
\end{tabular}

Total Credits

## MECHANICAL ENGINEERING CORE

| Code | Title | Credits |
| :--- | :--- | ---: |
| M E 201 | Introduction to Mechanical | 3 |
| M E 231 | Engineering | 2 |
| M E 240 | Introductory Engineering Graphics | 3 |
| M E 306 | Dynamics | 3 |
| M E/E M A 307 | Mechanics of Materials | 1 |
| M E 313 | Mechanics of Materials Lab | 1 |
| M E 314 | Manufacturing Fundamentals | 3 |
| M E 331 | Geometric Modeling for Engineering | 3 |
| M E 340 | Applications | 3 |
| M E 342 | Introduction to Dynamic Systems | 3 |
| M E 351 | Design of Machine Elements | 3 |
| \& M E 352 | Interdisciplinary Experiential Design | 6 |
|  | Projects I | 3 |
| M E 361 | and Interdisciplinary Experiential | 3 |
| M E 363 | Design Projects II | 3 |
| M E 364 | Thermodynamics | 3 |
| M E 368 | Fluid Dynamics | 3 |
| M E 370 | Elementary Heat Transfer | 3 |
| Total Credits | Engineering Measurements and | 3 |

## TECHNICAL ELECTIVES

Code

Title

Credits

The mechanical engineering curriculum requires a total of
9 credits of technical electives. A minimum of 3 of those 9 credits must be from formal M E courses numbered 400 and higher. A formal course is defined as a class that meets regularly in a lecture format to study a selected topic. The educational mission is assisted with homework and exams. Formal courses include online courses but do not include seminar, survey, independent study, research, or similar courses.
Technical electives include engineering, mathematics, physics, chemistry, statistics, and computer science courses numbered 400 and higher. INTEREGR and E P D courses are limited to those listed below. The following courses are also accepted as technical electives:
ANAT\&PHY 335 Physiology 5
BMOLCHEM 314 Introduction to Human 3

Biochemistry
BSE 351 Structural Design for Agricultural 3 Facilities
BSE 364 Engineering Properties of Food and 3 Biological Materials
BSE/ENVIR ST 367 Renewable Energy Systems 3
CBE/B M E 320 Introductory Transport Phenomena 4

| CBE 326 | Momentum and Heat Transfer Operations | 3 |
| :---: | :---: | :---: |
| CHEM 341 | Elementary Organic Chemistry | 3 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR/G LE 330 | Soil Mechanics | 4 |
| CIV ENGR 370 | Transportation Engineering | 3 |
| CIV ENGR 392 | Building Information Modeling (BIM) | 3 |
| CIV ENGR 415 | Hydrology | 3 |
| COMP SCI 300 | Programming II | 3 |
| COMP SCI/E C E 354 | Machine Organization and Programming | 3 |
| COMP SCI/ INFO SYS 371 | Technology of Computer-Based Business Systems | 3 |
| ECE320 | Electrodynamics II | 3 |
| E C E 330 | Signals and Systems | 3 |
| E C E 340 | Electronic Circuits I | 3 |
| E C E 342 | Electronic Circuits II | 3 |
| E C E/COMP SCI 352 | Digital System Fundamentals | 3 |
| E C E 353 | Introduction to Microprocessor Systems | 3 |
| ECE/COMP SCI 354 | Machine Organization and Programming | 3 |
| E C E 355 | Electromechanical Energy Conversion | 3 |
| E C E 356 | Electric Power Processing for Alternative Energy Systems | 3 |
| E P 272 | Engineering Problem Solving Using Maple | 1 |
| EP D/E ASIAN 374 | Intermediate Technical Japanese I | 3 |
| EP D/E ASIAN 375 | Intermediate Technical Japanese II | 3 |
| E P D 660 | Core Competencies of Sustainability | 3 |
| INTEREGR 301 | Engineering and Biology: <br> Technological Symbiosis | 1-4 |
| I SYE 315 | Production Planning and Control | 3 |
| I SY E 323 | Operations Research-Deterministic Modeling | 3 |
| I SYE/PSYCH 349 | Introduction to Human Factors | 3 |
| MATH 321 | Applied Mathematical Analysis | 3 |
| MATH 322 | Applied Mathematical Analysis | 3 |
| M E 273 | Engineering Problem Solving with EES | 1 |
| M S \& E 330 | Thermodynamics of Materials | 4 |
| M S \& E 332 | Macroprocessing of Materials | 3 |
| M S \& E 352 | Materials Science-Transformation of Solids | 3 |
| N E 305 | Fundamentals of Nuclear Engineering | 3 |
| PHYSICS 205 | Modern Physics for Engineers | 3 |
| PHYSICS 241 | Introduction to Modern Physics | 3 |


| PHYSICS 311 | Mechanics | 3 |
| :--- | :--- | :---: |
| PHYSICS 321 | Electric Circuits and Electronics | 4 |
| PHYSICS 322 | Electromagnetic Fields | 3 |
| PHYSICS 325 | Wave Motion and Optics | 3 |
| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I | 3 |
| STAT 312 | Introduction to Theory and Methods <br> of Mathematical Statistics II | 3 |
| STAT 333 | Applied Regression Analysis | 3 |
| STAT 349 | Introduction to Time Series | 3 |
| STAT 351 | Introductory Nonparametric | 3 |

Up to 3 technical elective credits may be obtained for non-formal courses such as independent study courses (M E 489, M E 491, M E 492, and other engineering independent study courses numbered 399 and higher); Cooperative Education (M E 1); and E P D 690, "Wisconsin Engineer Magazine."

## MATH/SCIENCE ELECTIVES

Code<br>Title<br>Credits

The mechanical engineering curriculum requires 3 credits of math/science electives. Any formal course listed as a biological science and numbered 100 or higher will satisfy this requirement. In addition, any formal course offered by an engineering department, or listed as a physical or natural science, and numbered 200 or higher, will also satisfy this requirement. INTEREGR and E P D courses will not satisfy the math/science elective requirement.
Total Credits

## COMMUNICATION SKILLS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENGL 100 | Introduction to College Composition | 3 |
| or LSC 100 | Science and Storytelling |  |
| or COM ARTS 100 | Introduction to Speech Composition |  |
| or ESL 118 | Academic Writing II |  |
| E P D 397 | Technical Communication | 3 |
| Total Credits |  | 6 |

## LIBERAL ELECTIVES

Code
Title
Credits
The Mechanical Engineering curriculum requires 15 credits of liberal elective courses. See College of Engineering Liberal Studies Requirements for details. Complete Requirements (p. 229) 15
Total Credits

## ADDITIONAL INFORMATION

Students fulfilling all course requirements with fewer than 127 credits must comply with the credit minimum by taking additional free elective credits. Students in good standing may take free elective courses pass/fail (see the College of Engineering Official Regulations (https:// www.engr.wisc.edu/academics/student-services/academic-advising/
undergraduate-engineering-students/rules-and-regulations) for details). Pass/fail courses do not count toward specific degree requirements.

Independent Studies and projects courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| M E 291 | Ungergraduate Mechanical | $1-3$ |
|  | Engineering Projects |  |
| M E 299 | Independent Study | $1-3$ |
| M E 489 | Honors in Research | $1-3$ |
| M E 491 | Mechanical Engineering Projects I | $1-3$ |
| M E 492 | Mechanical Engineering Projects II | $1-3$ |

Students must have a cumulative 2.5 GPA or a 3.0 GPA for their previous two semesters and file an Independent Study Application form with the Student Services Office before enrolling for the course.

For information on credit loads, adding or dropping courses, course substitutions, pass/fail, auditing courses, dean's honor list, repeating courses, probation, and graduation, see the College of Engineering Official Regulations (p. 223).

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
| UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |  |
|  | Abroad/Study Away programs. |
| Quality of | Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
| Students whose academic performance drops below |  |
| these minimum thresholds will be placed on academic |  |
| probation. |  |

## LEARNING OUTCOMES

1. (a) An ability to apply knowledge of mathematics, science, and engineering.
2. (b) An ability to design and conduct experiments, as well as to analyze and interpret data.
3. (c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. (d) An ability to function on multidisciplinary teams.
5. (e) An ability to identify, formulate, and solve engineering problems.
6. (f) An understanding of professional and ethical responsibility.
7. (g) An ability to communicate effectively.
8. (h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. (i) A recognition of the need for, and an ability to engage in life-long learning.
10. (j) A knowledge of contemporary issues.
11. (k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

## FOUR-YEAR PLAN

## SAMPLE FOUR-YEAR PLAN

First Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 221 | 5 MATH 222 | 4 |
| CHEM 103 | $^{1}$ | 4 CHEM 104 |

## Second Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 234 | 4 M E 361 | 3 |
| MATH 320 | 3 M E 306 | 3 |
| M E 240 | 3 M E/E M A 307 | 1 |
| M E 231 | 2 M S \& E 350 | 3 |
| COMP SCI 301 | 3 PHYSICS 202 | 5 |
|  | Liberal Elective | 3 |
|  | 15 | 18 |
| Third Year |  |  |
| Fall | Credits Spring | Credits |
| M E 363 | 3 M E 364 | 3 |
| M E 340 | 3 M E 368 | 4 |
| EC E 376 | 3 E C E 377 | 3 |
| EP D 397 | 3 M E 342 | 3 |
| M E 313 | 3 M E 331 | 3 |
| Liberal Elective | 3 |  |
|  | 18 | 16 |

Fourth Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| M E 351 | 3 M E 352 | 3 |
| M E 314 | 3 M E 370 | 3 |
| Technical Elective | 3 Technical Elective | 3 |
| Technical Elective | 3 Math/Science Elective | 3 |
| Liberal Elective | 3 Liberal Elective | 3 |
|  | 15 | 15 |

## Total Credits 130

1 CHEM 109 Advanced General Chemistry may be taken in place of CHEM 103 General Chemistry I and CHEM 104 General Chemistry II;
however, students may need to take additional free electives to meet the minimum number of credits required for the degree.

## ADVISING AND CAREERS

## ADVISING

Each College of Engineering program has academic advisors dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues and more. Students can find their assigned advisor on the homepage of their student center.

## ENGINEERING CAREER SERVICES

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website or call 608-262-3471.

## PEOPLE

## PROFESSORS

Ghandhi (chair)
Lorenz
Negrut (also Electrical and Computer Engineering, and Materials Science and Engineering)
Nellis (also Engineering Physics)
Osswald (also Materials Science and Engineering)
Pfotenhauer (also Engineering Physics)
Qian
Rutland
Sanders (also Electrical and Computer Engineering)
Shapiro (also Computer Science)
Suresh
Thelen (also Biomedical Engineering)
Turng (also Biomedical Engineering and Materials Science and Engineering)

## ASSOCIATE PROFESSORS

Krupenkin
Miller (also Engineering Physics)
Pfefferkorn (also Materials Science and Engineering)
Ploeg (also Biomedical Engineering)
Rothamer
Trujillo (also Engineering Physics)
Zinn (also Biomedical Engineering)

## ASSISTANT PROFESSORS

Adamczyk (also Biomedical Engineering)
Eriten (also Materials Science and Engineering)
Henak (also Biomedical Engineering)

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Kokjohn (also Engineering Physics)
Min
Pan
Peherstorfer
Roldan-Alzate (also Biomedical Engineering)
Rudraraju
Rudykh
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## ACCREDITATION

## ACCREDITATION

ABET (http://www.abet.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## COLLEGE OF LETTERS \& SCIENCE

## WHY CHOOSE THE COLLEGE OF LETTERS \& SCIENCE (L\&S)?

What's so great about a liberal arts education from UW-Madison?
For one thing, it makes for a college experience that is rich in discovery, exploration, personal growth, and new ideas.

But while your courses may be fascinating, liberating, eye-opening and mind-blowing, a liberal arts degree from UW-Madison keeps working for you long after you have graduated.

By pursuing a degree in the liberal arts-a bachelor of arts or a bachelor of science-you are preparing for long-term satisfaction in work and in life. A liberal arts degree is a journey of self-discovery, as you explore new topics and discuss ideas with a wide range of people. You delve deeply into a broad range of subjects beyond just your major. When you graduate, you aren't narrowly prepared for one field. You've developed writing, presentation, and analytical skills. You've been exposed to the scientific method, as well as literary analysis. A chemistry major, for example, will also graduate with knowledge of a language, history, social science, the arts, and more.

## WHY DOES THIS MATTER?

Because the more you know, the more curious you become. Curious people seek opportunities to enrich and expand their lives. Learning leads to conversation, dialogue, innovation, advancement. Employers value liberal arts majors because they are problem-solvers, out-of-the-box thinkers, and good communicators.

## CAN A 4-YEAR DEGREE FROM L\&S REALLY OPEN DOORS WITH

 EMPLOYERS?Yes, it can. Based on a recent L\&S alumni survey rigorously designed and administered by the university's nationally renowned survey center, our graduates' employment rates are on par with the School of Business and the College of Engineering, and out-perform the national average for university graduates. They work for an extremely wide range of fields, including technology, corporate management, education, and nonprofits.

L\&S alumni also report high job satisfaction and believe that their academic preparation gave them an advantage compared to employees from other colleges and universities.

Then there's our L\&S Career Initiative (http://ls.wisc.edu/lsci) (LSCI)unique among large public universities. Funded by alumni and sponsored
by key employers, the LSCI is designed to help each and every one of our students-not just the extra-motivated or well-connected few-define his or her path. We start where you are-and go from there. From the basics of resume-building, to connecting with alumni mentors, to landing an internship, the resources are at your fingertips.

## BUT WE VALUE LEARNING FOR ITS OWN SAKE, HERE.

You will never regret your liberal arts degree from UW-Madison, because it gives you the opportunity to explore subjects that fascinate you, as well as prepare you for a successful career. You will connect with wonderful faculty from 125 departments, programs, centers and institutes, whose mentoring and teaching will influence your goals and direction. And you will gain an appreciation for learning that will last a lifetime.

The University of Wisconsin-Madison is one of the great universities of the world, and the College of Letters \& Science (http://www.Is.wisc.edu) is at its center. Students who earn a bachelor of arts or bachelor of science degree in the College of Letters \& Science (L\&S) complement their broad study in the liberal arts and sciences with in-depth study of one or more particular fields, or "majors." Majors range from African languages and literature to philosophy in the humanities, from astronomy to zoology in the natural sciences, and from Afro-American studies to sociology in the social sciences.

In addition to the bachelor of arts and bachelor of science degrees available in L\&S, the college also offers a limited number of special degrees. These programs often have additional admission requirements and require completion of additional requirements in the major.

Finally, a wide array of certificate programs are also available for students who have special interests in such diverse topics as integrated liberal studies; international, global, and area studies; religious, ethnic, and gender studies; and more.

## DEGREES/MAJORS/CERTIFICATES

All students pursuing their undergraduate studies in the College of Letters \& Science must fulfill the following requirements:

- General Education Requirements (p. 22)
- Letters \& Science Requirements (p. 348)
- Major/Degree/Certificate Requirements (See below)

Certificates are not required for graduation from L\&S. With a few exceptions, students are expected to complete all requirements for a certificate program prior to graduating.

Although most certificates must be completed before students earn their undergraduate degrees, there are a few certificates that are available to students after they graduate. For students who have substantially completed a certificate at UW-Madison (at least 12 credits) and may need one or two courses to complete the certificate, they may do so immediately after completion of the bachelor's degree by enrolling in the course as a University Special (non-degree) student (https://acsss.wisc.edu/apply). A certificate must be completed within a year of completion of the bachelor's degree.

More information about L\&S certificates can be found at certificate programs (p. 323) under Courses and Enrollment. For general information about certificates and which ones can be earned/completed as a University Special, see undergraduate/
special student certificates (http://guide.wisc.edu/nondegree/ undergraduate-special-student-certificates).

NOTE: Major requirements are the same whether a student pursues a Bachelor of Arts (B.A.) or a Bachelor of Science (B.S.) degree.

- African Cultural Studies, B.A. (p. 362)
- African Cultural Studies, B.S. (p. 367)
- African Studies, Certificate (p. 793)
- Afro-American Studies, B.A. (p. 372)
- Afro-American Studies, B.S. (p. 376)
- Afro-American Studies, Certificate (p. 380)
- American Indian Studies, Certificate (p. 382)
- Anthropology, B.A. (p. 385)
- Anthropology, B.S. (p. 390)
- Applied Mathematics, Engineering, and Physics, B.S. AMEP (p. 1077)
- Archaeology, Certificate (p. 395)
- Art History, B.A. (p. 399)
- Art History, B.S. (p. 408)
- Art History, Certificate (p. 416)
- Asian American Studies, Certificate (p. 422)
- Asian Languages and Cultures, B.A. (p. 426)
- Asian Languages and Cultures, B.S. (p. 427)
- Asian Studies, B.A. (p. 797)
- Asian Studies, B.S. (p. 802)
- Astronomy-Physics, B.A. (p. 460)
- Astronomy-Physics, B.S. (p. 463)
- Atmospheric and Oceanic Sciences, B.A. (p. 466)
- Atmospheric and Oceanic Sciences, B.S. (p. 470)
- Biochemistry, B.A. (L\&S) (p. 1046)
- Biochemistry, B.S. (L\&S) (p. 1054)
- Biology Core Curriculum Honors, Certificate (p. 488)
- Biology, B.A. (L\&S) (p. 967)
- Biology, B.S. (L\&S) (p. 986)
- Botany, B.A. (p. 491)
- Botany, B.S. (p. 495)
- Cartography and Geographic Information Systems, B.A. (p. 695)
- Cartography and Geographic Information Systems, B.S. (p. 699)
- Chemistry, B.A. (p. 526)
- Chemistry, B.S. (p. 532)
- Chicana/o and Latina/o Studies, Certificate (p. 539)
- Chinese Professional Communications, Certificate (p. 429)
- Chinese, B.A. (p. 432)
- Chinese, B.S. (p. 438)
- Classical Humanities, B.A. (p. 542)
- Classical Humanities, B.S. (p. 547)
- Classical Studies, Certificate (p. 552)
- Classics, B.A. (p. 554)
- Classics, B.S. (p. 558)
- Communication Arts, B.A. (p. 569)
- Communication Arts, B.S. (p. 576)
- Communication Sciences and Disorders, B.A. (p. 587)
- Communication Sciences and Disorders, B.S. (p. 591)
- Comparative Literature and Folklore Studies, B.A. (p. 595)
- Comparative Literature and Folklore Studies, B.S. (p. 600)
- Computer Sciences, B.A. (p. 607)
- Computer Sciences, B.S. (p. 612)
- Computer Sciences, Certificate (p. 617)
- Conservation Biology, B.A. (p. 498)
- Conservation Biology, B.S. (p. 504)
- Criminal Justice, Certificate (p. 511)
- Digital Studies, Certificate (p. 583)
- East Asian Studies, Certificate (p. 807)
- East Central European Languages, Literatures, and Cultures, Certificate (p. 725)
- Economics, B.A. (p. 619)
- Economics, B.S. (p. 625)
- English, B.A. (p. 631)
- English, B.S. (p. 637)
- Environmental Sciences, B.A. (L\&S) (p. 473)
- Environmental Sciences, B.S. (L\&S) (p. 481)
- Environmental Studies Major (p. 646)
- European Studies, Certificate (p. 810)
- Folklore, Certificate (p. 605)
- French, B.A. (p. 653)
- French, B.S. (p. 659)
- French, Certificate (p. 664)
- Gender and Women's Studies, B.A. (p. 675)
- Gender and Women's Studies, B.S. (p. 682)
- Gender and Women's Studies, Certificate (p. 689)
- Geography, B.A. (p. 703)
- Geography, B.S. (p. 708)
- Geology and Geophysics, B.A. (p. 715)
- Geology and Geophysics, B.S. (p. 719)
- German, B.A. (p. 726)
- German, B.S. (p. 730)
- German, Certificate (p. 733)
- Health and the Humanities, Certificate (p. 643)
- History and History of Science, Medicine, and Technology, B.A. (p. 756)
- History and History of Science, Medicine, and Technology, B.S. (p. 761)
- History of Science, Medicine, and Technology, B.A. (p. 767)
- History of Science, Medicine, and Technology, B.S. (p. 769)
- History, B.A. (p. 772)
- History, B.S. (p. 781)
- Individual Major, B.A. (p. 1063)
- Individual Major, B.S. (p. 1066)
- Integrated Liberal Studies, Certificate (p. 964)
- Integrated Studies in Science, Engineering, and Society, Certificate (p. 1252)
- International Studies, B.A. (p. 822)
- International Studies, B.S. (p. 879)
- Italian, B.A. (p. 666)
- Italian, B.S. (p. 670)
- Italian, Certificate (p. 674)
- Japanese Professional Communication, Certificate (p. 444)
- Japanese, B.A. (p. 448)
- Japanese, B.S. (p. 454)
- Jewish Studies, B.A. (p. 1150)
- Jewish Studies, B.S. (p. 1156)
- Jewish Studies, Certificate (p. 1161)
- Journalism, JBA (p. 1223)
- Journalism, JBS (p. 1227)
- Landscape Architecture, BLA (p. 1188)
- Languages and Cultures of Asia, B.A. (p. 459)
- Languages and Cultures of Asia, B.S. (p. 459)
- Latin American, Caribbean, and Iberian Studies, B.A. (p. 936)
- Latin American, Caribbean, and Iberian Studies, B.S. (p. 943)
- Latin, B.A. (p. 561)
- Latin, B.S. (p. 565)
- Legal Studies, B.A. (p. 514)
- Legal Studies, B.S. (p. 519)
- LGBTQ+ Studies, Certificate (p. 692)
- Linguistics, B.A. (p. 1037)
- Linguistics, B.S. (p. 1041)
- Material Culture Studies, Certificate (p. 419)
- Mathematics, B.A. (p. 1080)
- Mathematics, B.S. (p. 1089)
- Mathematics, Certificate (p. 1099)
- Medieval Studies, Certificate (p. 790)
- Microbiology, B.A. (L\&S) (p. 1068)
- Microbiology, B.S. (L\&S) (p. 1072)
- Middle East Studies, Certificate (p. 950)
- Molecular Biology, B.A. (p. 1004)
- Molecular Biology, B.S. (p. 1009)
- Music, B.A. (p. 1102)
- Music, B.S. (p. 1112)
- Music: Education, B.M. (p. 1122)
- Music: Performance, B.M. (p. 1133)
- Neurobiology, B.A. (p. 1014)
- Neurobiology, B.S. (p. 1020)
- Philosophy, B.A. (p. 1165)
- Philosophy, B.S. (p. 1168)
- Physics, B.A. (p. 1173)
- Physics, B.S. (p. 1180)
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- Political Economy, Philosophy, and Politics, Certificate (p. 1191)
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- Political Science, B.S. (p. 1198)
- Portuguese, B.A. (p. 1269)
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- Psychology, B.A. (p. 1204)
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- Spanish, B.A. (p. 1276)
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- Statistics, B.A. (p. 1283)
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- Teaching English to Speakers of Other Languages, Certificate (p. 645)
- Zoology, B.A. (p. 1026)
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## ENTERING THE COLLEGE

## ADMISSIONS

Any student interested in earning an undergraduate degree in the College of Letters \& Science will need to apply for admission through the Office of Admissions and Recruitment at UW-Madison. Information on applying to the university as a freshman, transfer, or international student is available through the Office of Admissions and Recruitment (https:// www.admissions.wisc.edu/apply).

Prospective students with questions about study in the College of Letters \& Science may contact L\&S Academic Advising Services (http:// advising.Is.wisc.edu) at 608-262-5858 or Cross-College Advising Service (https://ccas.wisc.edu) at 608-265-5460. Students should also feel free to contact the major department (p. 320) directly if they have specific questions about a particular major.

## TRANSFER STUDENTS

Transfer students interested in earning an undergraduate degree in the College of Letters \& Science will need to apply for admission through the Office of Admissions and Recruitment at UW-Madison. Transfer students must complete all Letters \& Science degree requirements. Once admitted, transfer students should obtain a copy of their DARS (https://registrar.wisc.edu/dars-student) report which will explain how their transfer credits will apply toward L\&S requirements. Students can request and review their DARS in the Student Center via My UW (https://my.wisc.edu). Students can also request DARS for programs, majors, or certificates that they have not declared but are interested in declaring. These reports are called "what-if" reports. (Please note that some programs may not be available in DARS. For information about requirements in a program not available in DARS, contact the advisor for the particular program.)

Please note that the DARS audit serves as the document of record (DOR) for students in the College of Letters \& Science. The DOR is used to certify completion of degree requirements, and it is retained according to university record retention and archival polices.

Students can transfer only a limited number of credits from non-degreegranting accredited institutions and correspondence courses. See non-degree-granting accredited institutions' transfer credit limitation (p. 323) in the Guide under Credits.

Transfer students who have more than 30 degree credits are ineligible to earn retroactive credits in a foreign language on the UW-Madison campus. See credit by course examination/retroactive credits (p. 323) in the Guide under Credits.

Advisors for freshman and sophomore students are in the L\&S Academic Advising Services (608-262-5858) in 101 Ingraham Hall and the CrossCollege Advising Service (608-265-5460) in 10 Ingraham Hall. Junior and senior transfer students should meet with an advisor in the department in which they intend to major. All L\&S undergraduate students are expected to declare a major by the time they have 86 degree credits.

Transfer students should note that the L\&S degree requirements have changed as of summer 2007. Those students who matriculated before May 21, 2007 are eligible to complete the degree requirements in force at the time they began their college-level studies. (See previous catalogs under Archive (http://guide.wisc.edu/archive) for more information.)

Because some requirements in force before this edition of the Guide differ substantially from the requirements articulated here, transfer students are strongly encouraged to refer to the undergraduate catalog in force at the time of their first matriculation to college. (See past catalogs (http:// guide.wisc.edu/archive) to review the requirements that apply.) For some students, it may be to their benefit to consider transferring to the new degree requirements; they may consult with their academic advisor if they wish to consider this option.

## ON-CAMPUS TRANSFER

Continuing UW-Madison students must have a minimum 2.000 cumulative grade point average and a UW-Madison grade point average of at least 2.000 in their most recent semester of work in order to transfer into the College of Letters \& Science. First-semester and new transfer students without a UW-Madison grade point average may transfer into Letters \& Science provided they meet university admission requirements (three units of math and two units of a single foreign language). Students admitted to the university with admission deficiencies must remove those deficiencies before they are eligible to transfer into L\&S. For more information on transferring into L\&S or signing up for a Transfer Workshop, call 608-262-5858 or refer to request to transfer into L\&S (https://advising.ls.wisc.edu/transfer).

Students transferring into one of the general courses from a special course (AMEP, Music), or from another college/school of the university to the College of Letters \& Science will receive no more than 18 credits per semester toward graduation for work already completed, unless a 3.000 grade point average was earned the previous semester or the semester the overload was carried. Then a maximum of 20 credits from that term may be transferred. These transferring students will receive credit for studies in another college/school, but will be subject to the conditions of the Liberal Arts and Science Credits requirement. (See Liberal Arts and Science Credits (p. 348).)

## UNIVERSITY SPECIAL STUDENTS

If you are not currently enrolled in a UW-Madison degree program but wish to take courses within the College of Letters \& Science at UWMadison for credit or as an auditor, it may be best to consider becoming a University Special student. Information about becoming a non degreeseeking student at UW-Madison can be found at Adult Career and Special Student Services (https://acsss.wisc.edu/apply).

## WISCONSIN EXPERIENCE

## THE WISCONSIN EXPERIENCE: ESSENTIAL LEARNING IN THE COLLEGE OF LETTERS \& SCIENCE

The three elements of learning described below-tools, breadth, and depth-work together to create a broad and rich education in the liberal arts and sciences, and promote attainment of core areas of essential learning: knowledge of human cultures and the natural and physical world, intellectual and practical skills, personal and social responsibility, and integrative and applied learning. These and countless other experiences comprise the Letters \& Science approach to helping students obtain a distinctive Wisconsin Experience.

Additional information about the Wisconsin Experience (https:// students.wisc.edu/wisconsin-experience) can be found through the Office of Admissions and Recruitment/Why UW link (https:// www.admissions.wisc.edu/why/wisconsin_experience.php).

## POLICIES AND REGULATIONS

## ACADEMIC STATUS

ACADEMIC PROBATION
Every student is expected to maintain at least a C average ( 2.000 grade point average) on all work carried, whether passed or not, in each term (fall, spring, and summer). Failure to earn this minimum grade point average will result in a status of probation, strict probation, or dropped, as shown below.

Every student can determine their academic status at the end of each term (fall, spring, or summer) based on the probationary status when the term began and the grade point average earned during that term.

1. If a student is not on probation and:
a. earns a grade point average in the fall term, spring term, or summer term between 1.000-1.999: placed on probation.
b. earns a grade point average in the fall term, spring term, or summer term less than 1.000: placed on strict probation.
2. If a student is on probation and:
a. earns a grade point average in the fall term, spring term, or summer term between 1.500-1.999: placed on strict probation.
b. earns a grade point average in the fall term, spring term, or summer term less than 1.500: dropped for at least one year.
3. If a student is on strict probation and the grade point average is less than 2.000: dropped for at least one year.

If a student is dropped for one year, the student must stay out of school for a minimum of twelve (12) months. For more information on Academic Probation and Drop, refer to Probation (http://saa.ls.wisc.edu/probationoverview.htm) and What exactly is the L\&S Academic Probation System? (https://kb.wisc.edu/ls/page.php? id=21180)

## ACADEMIC SUSPENSION (DROPPED FOR ONE YEAR)

An L\&S undergraduate student on academic probation will be dropped (placed on academic suspension) for at least one year at the end of any term in which the student has had at least two terms below a 2.000 grade point average (GPA). The College of Letters \& Science undergraduate probation system is as follows:

- If a student is not on probation and earns a term GPA of 1.000-1.999, the student is placed on probation.
- If a student is not on probation and earns a term GPA of less than 1.000, the student is placed on strict probation.
- If a student is on probation and earns a term GPA of 1.500-1.999, the student is placed on strict probation.
- If a student is on probation and earns a term GPA of less than 1.500, the student is dropped for one (1) year.
- If a student is on strict probation and earns a term GPA below 2.000, the student is dropped on one (1) year.

Students have the opportunity to appeal the "dropped for one year status" from the University of Wisconsin-Madison by participating in the Appeals Process (also known as Faculty Appeals). It is important to note that appealing one's drop status does not guarantee a student will be immediately readmitted to the university to continue his/her undergraduate studies. For more information about appealing, see appeal dropped status (http://saa.Is.wisc.edu/probation-appealsprocess.htm) or contact L\&S Undergraduate Academic Deans' Services (https://saa.Is.wisc.edu/offices/academic-deansservices) for more assistance.

## APPEALS

## Exceptions for Students in Dropped Status

A student who has been dropped for academic reasons may appeal for readmission. More detailed information can be found at appeal dropped status (faculty appeals) (http:// saa.ls.wisc.edu/probation-appeals-process.htm).

- Students dropped at the end of fall term who wish to continue in school in the spring
term must appeal for readmission the week before spring term classes begin.
- Students dropped at the end of spring term who wish to continue in school for the summer or fall term must appeal for readmission the week before the beginning of the first threeweek summer term begins for students who wish to take summer classes, or before the eight-week summer term begins for students who do not wish to take summer courses.
- Students dropped at the end of a summer term who wish to continue in school for the fall term must appeal for readmission the week before fall term classes begin.

Additional information concerning appeals is available at Appeal Dropped Status (http://saa.Is.wisc.edu/probation-appeals-process.htm).

## Exceptions to Basic Degree Requirements

A student wishing to request an exception to a basic degree requirement must first confer with an academic dean (https:// saa.ls.wisc.edu/offices/academic-deans-services). Only in extremely rare and unusual circumstances will any exception be made.

## Exceptions to Major Requirements

A student wishing to request an exception to a requirement in the major must first confer with the advisor or chair of the department. If the department supports the request, a DARS exception is submitted on behalf of the student to Academic Information Management (AIM) in L\&S Student Academic Affairs.

## Exceptions to College Rules

A student wishing to request an exception to college rules should consult an academic dean in L\&S Undergraduate Academic Deans' Services (https://saa.Is.wisc.edu/offices/ academic-deans-services). The dean will consider the request on an individual basis and make a decision to grant or to deny the request.

## CLASS STANDING

Students are classified by year according to the number of degree credits they have earned:

Freshman: A student has fewer than 24 degree credits
Sophomore: A student has at least 24 degree credits
Junior: A student has at least 54 degree credits
Senior: A student has at least 86 credits
These credits must be in courses that count toward a Letters \& Science degree. Advanced Placement (AP), College-Level Examination Program (CLEP), International Baccalaureate (IB) credits, credit by department examination, and retroactive credits (retrocredits) will count toward a student's class standing (level).

Every L\&S undergraduate student is expected to maintain at least a C average ( 2.000 grade point average) on all work carried, whether passed or not, in each semester or summer term. Failure to earn this minimum grade point average will result in a status of probation, strict probation or dropped.

For more information, see the entries Academic Probation and Academic Suspension above.

## DEAN'S LIST

The College of Letters \& Science Dean's List is established at the end of each fall and spring terms. To be eligible for the Dean's List in a given term, students must:

- complete a minimum of 12 graded credits in that term with a minimum GPA of 3.600 for students who are classified as freshmen (fewer then 24 credits) and sophomores (at least 24 credits), or
- complete a minimum of 12 graded credits in that term with a minimum GPA of 3.850 for students who are classified as juniors (at least 54 credits) and seniors (at least 86 credits)
- Note: Advanced Placement (AP), College-Level Examination Program (CLEP), International Baccalaureate (IB) credits, credit by department examination, transfer credits, and retroactive credits (retrocredits) will count toward a student's class standing (level).
*The grades used to determine the dean's list eligibility are: $A, A B$, $B, B C, C, D$, and $F$. A student must have a minimum of 12 credits from this list of grades in order to qualify for the L\&S Dean's List.

An entry, "Dean's List," appears on the student's grade report and on the transcript.

- Students who have $P$ grades for their senior thesis (regardless of whether they have 12 other graded credits), as well as students with unresolved grades of NR, I, and Q are not eligible for the Dean's List until they get these outstanding temporary grades resolved.
- Once a student has resolved any outstanding grade issues and believes he/she qualifies to be on the Dean's List, the student should contact L\&S Undergraduate Academic Deans' Services (https://saa.ls.wisc.edu/offices/academic-deansservices) for more assistance.
- Please note that the College of Letters \& Science does not "round up" for the purpose of tabulating the GPA for the Dean's List.

More information can be found at Dean's List (https:// registrar.wisc.edu/deanslist) and How do I qualify for the Dean's List? (https://kb.wisc.edu/ls/page.php?id=21121) For information about class standing, see How can I determine my classification or class standing? (https://kb.wisc.edu/ls/ page.php?id=38197)

## DISTINCTION IN THE MAJOR

This award is granted at graduation, upon the recommendation of a department to the dean, to any student not earning the Honors Degree who has done superior work in the major and who has passed a comprehensive examination on that work. The comprehensive examination may be omitted for the student with a 3.500 grade point average in the major
who successfully completes special work prescribed by the department. The award is noted on the student's transcript.

## GOOD ACADEMIC STANDING

Students are considered in good academic standing if they have a cumulative GPA of at least a 2.000 and their most recent GPA is at least a 2.000 . Students in good academic standing are not on any form of academic probation and are not at risk of being dropped from the university.

## ADMISSIONS AND TRANSFERS

## ON-CAMPUS TRANSFERS

The College of Letters \& Science (L\&S) welcomes current UWMadison students with an established GPA to transfer into the college if they meet certain requirements:

- Continuing students must have a 2.000 cumulative GPA at UW-Madison and
- A 2.000 in their most recent semester/term at UW-Madison, including summer term.
- A student dropped for academic reasons must be readmitted by the original school or college on the UW-Madison campus before initiating an L\&S transfer.

Please note: Only new freshmen (first-year students) and transfer students who do not have an established UWMadison GPA may request to transfer into the College of Letters \& Science during their first term on campus without having an established GPA.

Students interested in transferring into L\&S must carefully review the L\&S Transfer Workshop presentation (https://Isaas.wiscweb.wisc.edu/wp-content/uploads/ sites/392/2018/01/Transfer-Workshop-Online-PPT_2017.pdf) and complete the online Transfer Request Form (https:// saa.Is.wisc.edu/policies-forms/Is-on-campus-transfer-request/transfer-to-Is-request-form). For more information on transferring into L\&S, please contact L\&S Academic Advising Service at 608-262-5858.

Students transferring into one of the general courses from a special course (AMEP, Music), or from another college/ school of the university to the College of Letters \& Science will receive no more than 18 credits per semester toward graduation for work already completed, unless a 3.000 grade point average was earned the previous semester or the semester the overload was carried. Then a maximum of 20 credits from that term may be transferred. These transferring students will receive credit for studies in another college/ school, but will be subject to the conditions of the Liberal Arts and Science Credits requirement. (See Liberal Arts and Science Credits (p. 348).)

## READMISSION

Students who have been required by the College of Letters \& Science to take off time from their undergraduate studies at UW-Madison due to past academic performance (dropped/ academic suspension) must apply for readmission with an academic dean in the College of Letters \& Science in order to be eligible for reentry through the Office of Admissions and

Recruitment. For more detailed information about apply for readmission, refer to readmission (http://saa.ls.wisc.edu/ readmission.htm) through L\&S Student Academic Affairs. More detailed information about the readmission process can be found by contacting L\&S Undergraduate Academic Deans Services (https://saa.Is.wisc.edu/offices/academic-deansservices) (Isdeans@saa.Is.wisc.edu or 608-262-0617).

## REENTRY

Students who previously attended the University of Wisconsin-Madison but have not been enrolled in courses for at least one term/semester (not including the summer term) are considered reeentry students. The primary admission consideration for a reentry student would be his/her academic record while previously enrolled at UW-Madison. For more information about this process, refer to reentry admissions (https://www.admissions.wisc.edu/apply/reentry) via the Office of Admissions and Recruitment website.

Note: Any L\&S undergraduate student who has been dropped (put on academic suspension) for at least one year due to their academic performance must also apply for readmissions through the College of Letters \& Science. For more information, please refer to readmission (http:// saa.ls.wisc.edu/readmission.htm).

## TRANSFER STUDENTS

Transfer students must complete all Letters \& Science degree requirements. Once admitted, transfer students should obtain a copy of their DARS (p. 338) report, which will explain how their transfer credits will apply toward L\&S requirements. DARS reports can be requested from the Degree Audit section of the registrar's office or accessed via My UW-Madison (http://my.wisc.edu).

Students can transfer only a limited number of credits from non-degree-granting accredited institutions and correspondence courses. See non-degree-granting accredited institutions' transfer credit limitation (p. 323) in the Guide under Credits.

Transfer students who have more than 30 degree credits are ineligible to earn retroactive credits in a foreign language on the UW-Madison campus. See credit by course examination/ retroactive credits (p. 323) in the Guide under Credits.

Advisors for freshman and sophomore students are in the L\&S Academic Advising Services (608-262-5858) in 101 Ingraham Hall and the Cross-College Advising Center (608-265-5460) in 10 Ingraham Hall. Junior and senior transfer students should meet with an advisor in the department in which they intend to major.

Transfer students should note that the L\&S degree requirements have changed as of summer 2007. Those students who matriculated before May 21, 2007, are eligible to complete the degree requirements in force at the time they began their college-level studies. (See previous catalogs under Archive (http://guide.wisc.edu/archive) for more information.)

Because some requirements in force before this edition of the Guide differ substantially from the requirements
articulated here, transfer students are strongly encouraged to refer to the undergraduate catalog in force at the time of their first matriculation to college. (See past catalogs (http://guide.wisc.edu/archive) to review the requirements that apply.) For some students, it may be to their benefit to consider transferring to the new degree requirements; they may consult with their academic advisor if they wish to consider this option.

## TRANSFER STUDENTS WITH AN ASSOCIATE DEGREE FROM A UW SYSTEM INSTITUTION OR WISCONSIN TECHNICAL COLLEGE SYSTEM SCHOOL

Effective summer/fall 2012, all new transfer students with an associate's degree from either a UW System (UWS) institution or one of the Wisconsin Technical College System (WTCS) schools that award a liberal arts associate's degree (i.e., Madison College, MATC-Milwaukee, Nicolet, Chippewa Valley, Western) will have their University General Education Requirement (UGER) (p. 22) breadth requirements satisfied in all undergraduate schools/colleges on the UW-Madison campus. L\&S undergraduates should be aware that they may need to complete additional coursework to satisfy L\&S breadth (p. 348) and other degree requirements. Students should consult their DARS and speak with their undergraduate advisors if they have additional questions regarding satisfying L\&S requirements.

WTCS transfer students should be aware that only liberal arts associate's degrees that are approved by both WTCS and UW System Administration are eligible for this provision. Students with associate degrees in technical fields will not have their UGER breadth requirements satisfied.

UWS and WTCS transfer students with a qualifying liberal arts associate's degree are EXEMPT from meeting the following University General Education Breadth requirements:

- Natural Science-two (2) courses for a total of 6 credits
- Humanities/Literature/Arts-6 credits
- Social Studies-3 credits

Students will still be required to meet other University General Education Requirements (p. 22).

Please note: Students in the College of Letters \& Science must meet the L\&S breadth requirements (p. 348) with specific transfer courses or courses taken in residence.

## COURSES AND ENROLLMENT <br> AUDIT

A student may enroll in a course (i.e., a lecture course) on an audit basis only with prior consent of the instructor of the course. As an auditor, the student is considered a passive learner and may not recite in class or take examinations. Courses with laboratory or performance skills may not be audited. Regular class attendance is expected. Courses audited carry no degree credit and are not graded. The credit value of courses carried on an audit basis is included in the semester program load for purposes of determining fees and
maximum credits carried. Courses carried on an audit basis may have an impact on students applying for scholarships or other forms of financial assistance. Students should contact the unit/agency administering the scholarship or Student Financial Services for more guidance. Students should also contact their insurance company to determine whether auditing a course (or courses) will have an impact on their coverage. See What does it mean to audit a course? (https:// kb. wisc.edu/ls/page.php?id=26734) for more details.

L\&S undergraduate students who wish to change their registration in a course from a credit basis to an audit basis must do so within the first four weeks of the semester by submitting a Course Change Form (available at Course Change Request (https://registrar.wisc.edu/ course_change_request.htm) ) to Suite 110 Ingraham Hall, 1155 Observatory Drive. (Course Change Requests can be accessed through an individual's Student Center in My UW (https://my.wisc.edu) under: Course Enrollment/Term Information/Course Change Request.) Students will not be able to submit or cancel a request to audit a course after the fourth (4th) week of the fall or spring term.

- For modular and summer session courses, audit requests must be submitted by the Friday of the week in which the session is one-fourth completed.
- Audits may affect a student's eligibility for financial aid (including Social Security and Veterans' benefits). Students should consult an advisor in the Office of Student Financial Aid (https:// financialaid. wisc.edu) for more detailed information.
- Students with questions about their Veteran benefits and taking courses on an audit basis should contact the Veteran Services \& Military Assistance Center (http://veterans.wisc.edu).


## CERTIFICATE PROGRAMS

Students who intend to complete a certificate program in Letters \& Science are encouraged to meet with the certificate advisor as soon as possible to determine eligibility requirements that may apply. Admission to a certificate program (http://guide.wisc.edu/explore-majors) requires meeting with the advisor to declare the specific certificate program. Students should use a degree audit (DARS (https:// registrar.wisc.edu/dars-student)) to monitor their progress in completing their certificate(s) since DARS is the official document used to certify completion of certificate programs. Students who decide not to complete the program after being admitted must cancel the certificate declaration with the certificate advisor. See DARS (https://registrar.wisc.edu/ dars_student.htm) for more information.

Although most L\&S certificates must be completed before students earn their undergraduate degrees, there are a few certificates that are available to L\&S undergraduate students after they graduate. For students who have substantially completed a certificate at UW-Madison (at least 12 credits) and may need one or two courses to complete the certificate, they may do so immediately after completion of the bachelor's degree by enrolling in the course as a University Special (nondegree) student (https://acsss.wisc.edu/apply).

The following certificates may be awarded only to students who were declared in the certificate program at the time of graduation from UW-Madison and who completed a substantial amount of the work in the program (at least 12 credits) while enrolled as an undergraduate here. Students must complete the requirements for the following certificates within 12 months of graduation.

- Archaeology (p. 395)
- East Asian Studies (p. 807)
- Mathematics (p. 1099)
- Criminal Justice (p. 511)
- Medieval Studies (p. 790)
- Religious Studies (p. 1221)

For the following certificates students must hold a baccalaureate degree (other conditions my apply as noted above) if they wish to earn these certificates after graduation:

- American Indian Studies (p. 382)
- Computer Sciences (p. 617) (may not have a major in computer sciences or a degree in electrical and computer engineering)
- Folklore (p. 605) (admission to program is suspended)
- German (p. 733)
- Gender and Women's Studies (p. 689)
- Teaching English to Speakers of Other Languages (p. 645)

Students are advised of the following details regarding certificate programs:

- Some certificate programs may require or encourage students to take courses that are not designated as Liberal Arts and Science courses. These courses do not count toward satisfaction of the requirement that students complete 108 credits in Liberal Arts and Sciences.
- Students may elect to count these credits among the allowed 12 free elective credits in the degree but should also be mindful of the fact that these courses will not count toward fulfilling breadth or level within L\&S.
- An exception will not be made to count non Liberal Arts and Science courses for breadth and level if a student is using these credits to fulfill a certificate program and/or trying to fulfill other major/degree requirements.
- Completion of some certificate programs may require students to take more than 12 non-Liberal Arts and Sciences credits. Students may not count more than 12 non-Liberal Arts and Sciences credits toward their L\&S degree under any circumstances.
- Certificate programs are optional and are not required for graduation. Because failure to complete a certificate program will not affect eligibility to graduate, students should understand that, unless the certificate program is allowed to grant awards to University Special students, they must complete all certificate requirements before graduation or they
will not be able to complete the certificate program at a later date.
- Course work being taken to satisfy certificate requirements should not be taken on a pass/ fail basis. Students should consult the advisor for the particular certificate program for more information about taking classes to satisfy certificate requirements.


## CLASS ATTENDANCE POLICY

It is expected that every student will be present at all classes. Students are required to be present at the opening of the term and to remain until the work of the term (which includes the final examination period) is completed. Note that any excused or unexcused absences may have a negative impact on a student's final grade in a course. See the faculty senate approved class attendance policy (https://secfac.wisc.edu/ governance/faculty-legislation/ii-108-class-attendancepolicy) and what is the class attendance policy for students at UW-Madison (https://kb.wisc.edu/ls/page.php?id=24628) for more details.

It is against university policy for student to attend classes without being enrolled. Student should be aware that instructors may require enrolled students to attend scheduled meetings of a class/and/or to participate in other courserelated activities, including online learning. Students are responsible for materials present in such meetings or activities. Because courses are designed and conducted in diverse ways, instructors are expected to inform students in writing at the beginning of each course if there are specific expectations for attendance/participation. This includes whether any component of the grade for the class is based on such attendance/participation.

## CONCURRENT REGISTRATION AND ENROLLMENT AT UW-MADISON AND ANOTHER INSTITUTION

The College of Letters \& Science recognizes that in some circumstances, courses offered by other institutions of higher learning (e.g., MATC-Madison, Edgewood College, etc.) can complement the course of study offered by the residence program at UW-Madison. Permission is required to be enrolled at UW-Madison while also taking a class at another institution. This permission must be obtained before enrolling in the course at the other institution.

Any student interested in being concurrently enrolled for the fall or spring semester must demonstrate that special circumstances are involved. Please note that simple preference or convenience is not considered a strong reason for getting permission to be concurrently enrolled. It is strongly recommended that students not use concurrent enrollment as a means by which particular degree or major requirements are taken entirely out of residence. Students who are granted permission to be concurrently enrolled are bound by the L\&S regulation that students cannot take more than 18 credits in either the fall or spring term (the maximum credit load for the summer session is 12).

To obtain special permission to be concurrently enrolled, refer to concurrent enrollment request form (https://
saa.ls.wisc.edu/policies-forms/concurrent-enrollment/ concurrent-enrollment-request-form).

- An L\&S undergraduate student requesting concurrent enrollment should be beyond the first year of college and have a UW-Madison cumulative GPA of at least 2.500
- Permission for concurrent enrollment should be obtained before enrolling in the outside institution's course and prior to the 3rd week of classes (fall or spring term).
- For the fall term, the deadline to request to be concurrently enrolled is Friday of the second week of the term.
- For the spring term, the deadline to request to be concurrently enrolled is Friday of the second week of the term.
- Students requesting permission to be concurrently enrolled should demonstrate that special circumstances are involved. Simple preference or convenience is not a valid reason for granting permission to take an outside course concurrently with a residence program at UW-Madison.
- Students who are given permission to be concurrently enrolled are bound by the College of Letters \& Science enrollment regulation of 18 credits maximum (which includes the total number of credits taken at both UW-Madison and the nonresidence institution). If a student will exceed 18 credits in either the fall or spring term, the student must fill out the credit overload form (https:// saa.ls.wisc.edu/policies-forms/credit-overload/ credit-overload-form).
- Students may never receive credit for more than 20 credits in either the fall or spring term. In addition, a student may never receive more than 12 ( 13 with dean's permission) during the summer term.
- Courses taken through the UW-Extension/UW Independent Learning program are considered concurrently enrolled when students enroll in one of these classes while also taking classes at UWMadison. When permission to take a course through Independent Learning is granted, the course(s) must be completed during the UW semester/term in which the course was authorized to be taken.
- For example, a student who receives permission in fall 2019 to take a course through Independent Learning while also enrolled at UW-Madison must complete this course by the end of the fall 2019 term.
- It might be possible to get a UW-Extension Independent Learning Tuition Waiver (https:// Issaa.wiscweb.wisc.edu/wp-content/uploads/ sites/144/2017/04/UW-Extension-Independent-Learning-Form.pdf) for a course taken through Independent Learning during the fall or spring term. Please refer to concurrent enrollment and guidelines for a tuition waiver (https://registrar.wisc.edu/ guidelines-for-tuition-waivers/\#guide) for more information about the criteria to qualify for a tuition
waiver for UW-Extension courses and the tuition waiver form.
- If the Independent Learning course being taken puts a student above 18 credits during the fall or spring term, the student will need to pay for the extra credits not covered by the tuition waiver.
- All students must pay an administrative fee to take an Independent Learning course, even if the student receives a tuition waiver. More information about fees and the tuition waive can be found at il.wisconsin.edu or by calling 1-877-UW-LEARN (895-3276)
- General questions about taking courses through Independent Learning can be directed to il@uwex.edu.

To request permission to be concurrently enrolled, a student must fill out the following concurrent enrollment request form (https://saa.Is.wisc.edu/policies-forms/concurrent-enrollment/concurrent-enrollment-request-form).

## COURSE LEVEL

Each L\&S course and each approved non-L\&S course that satisfies the L\&S liberal arts and science (LAS) requirement have been evaluated for level. Course levels are indicated with each course listed in this. Only courses that indicate level after the course designation category for a course will count toward level in L\&S for students.

## Elementary

Elementary-level courses are usually designed with firstyear students (freshmen) and second-year students (sophomores) in mind with either very little or no prior knowledge of the discipline. However, these courses may also be suitable for third-year students (juniors) and fourth-year students (seniors) with limited background in the discipline. Elementary-level courses may act as a stepping stone for more advanced-level work or may, or may also be an ends in themselves by providing breadth, enrichment, or general knowledge. Elementarylevel courses typically have one or more of the following characteristics:

> Breadth: Students gain some basic understanding of the extent of a field or disciple. Students may also have the opportunity to learn how one field fits into or relates to other fields.
> Foundation: Students become acquainted with principles, terms, methods, and perspectives of a discipline or professional field, as a basis for more advanced or specialized study.

## Intermediate

Intermediate-level courses may be best defined in relation to elementary and advanced-level work. They are a step beyond elementary-level courses that prepare students for more advanced work. Courses at this level are typically taken by second year students (sophomores) with some familiarity and knowledge of the discipline. Expectations of student performance may include making connections between basic terms
and concepts within the discipline, and developing written and oral communication skills specific to the discipline.

> - These courses typically require more preparation than elementary-level courses and less preparation than advanced-level coursework (and should have defined prerequisites).
> - Intermediate-level courses are beyond the introduction of the discipline and the entry level of more general liberal arts skills, but are not yet as highly specialized or in-depth as advance-level work.

## Advanced

Advanced-level courses are usually designed with juniors or seniors in mind, although these courses may also be appropriate for advanced-level students with lower class standing (i.e., freshmen and sophomores). They typically have one or more of the following characteristics:

- Depth/Focus: Students engage with indepth study of a discipline's theories and methods, developing an understanding of the applications and limitations of them. Courses typically require significant independent thinking on the part of the student or may offer opportunities for research.
- Specialization: Students develop specific intellectual and professional abilities that will enable them to be successful in a field or professional practice.
- Refinement of Liberal Arts Skills: Students build upon "entry study Liberal Arts skills" noted above, applying these skills more discerningly or in more challenging contexts.
- Integration: Students integrate knowledge gained form earlier studies such as a capstone experience.


## CREDIT AND NO CREDIT COURSES

Some courses are designated as being offered on a Credit/ No Credit basis. Credit/No Credit courses are designated in the Guide under Courses. The transcript for the course will indicate either CR (meaning the student earned credits for the course) or N (meaning the the student did not earn any credit for the class). Students may not take such courses on any other basis.

## CROSS-LISTED COURSES

Cross-listed courses are courses offered under more than one department heading. Cross-listed courses (i.e., courses offered by more than one department) will be assigned the same number in each department in which it is offered (e.g, African 277, which is cross-listed with approximately five majors/departments). The courses will carry identical L\&S course attributes (breadth and level), will have the identical Guide descriptions in each listing, and will have identical course prerequisites. All cross-listed courses:

1. Must be approved by the University Curriculum Committee (all departments must submit a letter of support)
2. Must have the same Course Guide number (e.g., Biology 151, Botany 151, and Zoology 151)

Students completing two majors may count cross-listed courses (i.e., courses listed in both major departments) in partial satisfaction of the requirements for both majors. For more information, see w (https://kb.wisc.edu/ls/page.php? id=21663)hat is a cross-listed course? How is it different from a "meets-with" course? (https://kb.wisc.edu/ls/page.php? id=21663)

## DIRECTED OR INDEPENDENT STUDY

Directed/Independent Study offers the student an opportunity to work with a faculty member on an individual study program. A student who is stimulated by a particular concept or problem encountered in a course can pursue and develop that interest in depth through a Directed Study project. Such individualized study can make a valuable contribution to a student's educational experience.

- Directed/Independent Study courses cannot be used to fulfill any UW-Madison General Education Requirements (GER) (http://www.ls.wisc.edu/ gened) or L\&S breadth requirements (p. 348) under any circumstances.
- Directed/Independent Study courses may not be taken on a pass/fail or audit basis.
- L\&S undergraduates are not permitted to take graduate level directed study (courses numbered 799,899 , and 999 ) under any circumstance.

Directed Study courses are made available by departments on the basis of a student's preparation and motivation and a faculty member's willingness to accept the student in such an endeavor. See L\&S Undergraduate Directed/Independent Study Course Guidelines (https://kb.wisc.edu/Is/page.php? id=20133) for more detailed information.

Departments may offer Directed Study at the elementary, intermediate, or advanced level under the following course numbers:

- 198 or 199. Directed Study courses numbered 198 or 199 have a credit range of 1 to 3 credits, are considered elementary level, and are intended for freshmen and sophomores, though, in exceptional cases, juniors and seniors may be appropriately admitted if the nature of the course so allows.
- 298 or 299. Directed Study courses numbered 298 or 299, including supervised reading in foreign languages and in subjects related to students' major fields, have a credit range of 1 to 3 credits and are considered intermediate level.
- 698 or 699. Directed Study courses numbered 698 or 699 (and other courses with numbers ending in 98/99, between 398 and 699) have a credit range of 1 to 6 credits, are considered advanced level, and are offered primarily for juniors and seniors. However, in unusual cases, freshmen and sophomores with
exceptional preparation and motivation may be admitted. At this level, it is a prerequisite to have had previous or concurrent exposure to the subject on an intermediate level.

Directed Study courses with a number ending in 98 (e.g., 198,698 ) are carried on a Credit/No Credit (Cr/N) basis. No grades are awarded for these courses. The student earns credit for the course if the instructor is satisfied with the work the student has performed. If not, there is no Failure; the student simply is not awarded any credit for the course. Not all departments offer Directed Study courses on a $\mathrm{Cr} / \mathrm{N}$ basis. Courses ending in 99 are graded. (See Grades and GPA (https://registrar.wisc.edu/grades_and_gpa.htm) for more information)

Prior to registration and before the end of the second week of classes, students are responsible for making all arrangements with the faculty member who agrees to direct their work. The student and faculty member should prepare a study plan, determine the time and place for regular meetings, the number of credits to be earned, and how to enroll in the course.

## Notes:

- Directed Study courses do not satisfy basic or breadth requirements. Thus, Directed Study courses cannot be used to fulfill any degree requirements such as B.A./B.S. Foreign Language, General Education Requirements (Comm A, Comm B, QR A, QR B, Ethnic Studies), or L\&S Breadth (Humanities, Natural Science, Social Science).
- Directed Study courses may generally be repeated for credit if course content is not duplicated.
- Undergraduate students cannot take or earn degree credit for graduate-level Directed Study, Independent Reading, Independent Study, or Individual Enrollment courses (e.g., 799, 899, 999).
- All Directed Study courses (graded or not) count toward the maximum number of credits that may be counted in the major if taken in the major department.
- Many majors strictly limit the number of Directed Study credits that can be earned in the major.
- Directed Study courses are not intended as placeholder credits for registration purposes, and students with special rules for full-time status should consult the undergraduate deans before enrolling in Directed Study courses after the enrollment period.

Directed Study courses taken in non-L\&S departments may be counted as Liberal Arts and Science (C) courses provided that they are offered at the 300-or-above level. Because these experiences are intended to provide intensive, one-on-one experiences with faculty, departments are not allowed to use Directed Study courses to teach group instruction courses.

## DROP NOTATION

The Drop (DR) notation appears on students' records if they drop a class or classes after the last day to drop courses or withdraw without a DR or W grade notation appearing on
students' transcripts. For the specific deadline for dropping classes so a DR will not appear on a student's records, see Deadlines at a Glance (http://www.registrar.wisc.edu/ spring_deadlines_at_a_glance.htm) on the Office of the Registrar website. Please note that L\&S does not backdate drops to erase them from a student's academic records or extend the drop deadline so that the DR will not appear.

The drop notation will only show that a student has dropped a course(s) before the official drop deadline. A "DR" on a student's academic record does not have any negative implications for students when they are applying to graduate schools or seeking employment. The "DR" was instituted as a means to document when a course was dropped after the first eight days in the fall and spring semesters (or the appropriate period during the summer session or module courses).

## FOREIGN LANGUAGE

The study of a foreign language contributes in an important way to a broad education for today's students, who live in a world where the overwhelming majority of people do not speak or read English and where much of the knowledge that is disseminated may never appear in English. Knowledge of a foreign language is important for an appreciation of the culture of the people using that language, and it also helps students to understand the structure and complexities of their own native language. Students with sufficient preparation may be able to use the foreign language for study in their chosen discipline.

To be admitted to the University of Wisconsin-Madison, students must have completed the second-year level of a single foreign language (or American Sign Language) in high school. On extremely rare occasions, students may be admitted with a foreign language deficiency, but they will be required to make up that deficiency by the time they earn their 60th degree credit, or they will not be allowed to continue.

All students working for a B.A. or B.S. degree in the College of Letters \& Science must fulfill the foreign language requirement. Students with certain disabilities may apply for a substitution to the foreign language requirement by submitting required documentation to the College Disabilities Curricular Accommodations Committee. (See foreign language substitution package (https://saa.ls.wisc.edu/ foreign-language-substitution-package). For more information, contact L\&S Undergraduate Academic Deans' Services, 608-262-0617, or the McBurney Disability Resource Center, 608-263-2741, TEXT: 608-225-7956.)

In meeting the foreign language requirement, students may combine high school and college work as appropriate. This will allow a student to make full use of high school work in more than one foreign language, or will facilitate the study of a second foreign language that may not have been available in high school. Students who have learned a foreign language in a nonacademic setting may meet the foreign language requirement by successfully completing the appropriate level language course at the university or by successfully completing an appropriate attainment examination.

## Foreign language requirements for the B.A. and B.S. degrees

 differ.For the B.S. degree, the foreign language requirement may be met by completion of the third level (unit) of a foreign language in high school, or the equivalent third-semesterlevel college work. For example, a student can satisfy the B.S. foreign language degree requirement if $\mathrm{s} / \mathrm{he}$ has:

- completed 3 units (years) of one high school language (e.g., French, Spanish, etc.), or
- completed the 3rd semester of one college-level language (e.g., Scan 201, Slavic 207, Spanish 203, etc.)

For the B.A. degree, the foreign language requirement may be met in one of two ways: (1) completion of the fourth level (unit) in one language, or (2) completion of the third level (unit) in one language and completion of the second level (unit) in another language. For example, a student can satisfy the B.A. foreign language degree requirement if $s / h e$ :

- completed 4 units (years) of one high school language (e.g., French, German, etc.), or
- completed 2 units (years) of one high school language (e.g., Spanish) and the 3rd semester/level of a second foreign language (e.g., Italian 203) at the college level, or
- completed 3 units (years) of one high school language (e.g., Chinese) and the 2nd semester/level of a second foreign language (e.g., German) at the college level

Students who intend to enroll in a foreign language in which they have had previous noncollege instruction must take the UW System placement test in that language.

## Notes:

- Students proficient in an American Indian language may be able to use this language to satisfy the foreign language requirement. The American Indian Language Committee will make arrangements to test and/or certify a student's level of proficiency. Students should contact an L\&S academic dean for further information.
- Students may take an examination to meet all, or part of, the college foreign language requirement in languages not taught on this campus only if there is a current UW-Madison faculty member qualified to administer and evaluate an examination to determine a student's competence in the language and level of proficiency. (The UW-Madison faculty member's department must also support and endorse the administering of this special examination.) No degree credits are earned for this examination, but level of proficiency established will be accepted toward the foreign language requirement.
- Some languages (e.g., American Sign Language) are taught only through the second semester at UW-Madison. Students may, however, count UWMadison approved transfer courses beyond this
level toward the foreign language requirement and/ or satisfy the foreign language requirement by examination in these languages. Substitutions to the foreign language requirement are available for L\&S students with certain disabilities that make a course substitution appropriate. Extensive and very specific documentation is required from students and disability specialists if individuals wish to be considered for an L\&S foreign language substitution package.


## GRADUATE COURSES

All courses numbered 700 and above are graduate courses and considered advanced (A). Enrollment in these courses is strictly limited to only graduate-level students. L\&S undergraduates who, on the rare occasion, are permitted to enroll in graduate level courses and receive passing grades in these classes will be awarded undergraduate degree credit.

- L\&S students who receive permission to enroll in L\&S graduate courses may count those credits toward completion of their Liberal Arts and Sciences credit requirement. These credits may be used to satisfy the requirements related to mastery of intermediate/advanced level work, but since these courses do not carry breadth designations, they do not satisfy breadth requirements.
- Graduate-level courses cannot be used as required coursework for a student's undergraduate major or degree requirements.
- L\&S students who enroll in non-L\&S graduate courses may count those credits as part of their free electives in the degree. These credits may not be used to satisfy breadth or level requirements.
- Grades earned by undergraduates who complete graduate courses will be included in all relevant grade point average calculations (see Quality of Work Requirements ( $p$. 347) for the list of areas in which these averages are calculated). Most graduate courses restrict enrollment to students who have graduate standing, or who have received the instructor's consent to enroll.
- Students can count up to seven (7) credits of graduate-level coursework earned as an undergraduate toward future graduate studies.
- Undergraduate students cannot take or earn degree credit for graduate-level Directed Study, Independent Reading, Independent Study, or Individual Enrollment courses (e.g., 799, 899, 999).

Provided that an instructor wishes to allow undergraduates to enroll in a graduate course, students who wish to enroll in the courses should meet with the instructor, who can evaluate whether or not the student should be allowed to register. This decision is made at the instructor's discretion, based on such considerations as whether or not the student has met course prerequisites, is prepared to perform graduatelevel work in the course, and is likely to successfully complete the course. Instructors are not obligated to accommodate undergraduate student requests to enroll in graduate-level courses. Furthermore, it should be noted that all students in graduate-level courses are expected to be held to a similar
performance standard with respect to quality, quantity, and type of work performed.

## HISTORICAL COURSE DESIGNATIONS AND BREADTH REQUIREMENTS

All L\&S undergraduate students are required to fulfill the L\&S Breadth of Exploration in the Liberal Arts and Sciences. The L\&S Breadth includes:

- Humanities: 12 credits (of which 6 credits must be Literature credit)
- Social Science: 12 credits
- Natural Science: 12 credits

NOTE: Although all L\&S undergraduates must complete a minimum of 12 natural science credits in order to graduate, there are differences between the B.A. and B.S. natural science breadth requirement.

Bachelor of Arts (B.A.) candidates must complete a minimum of one (1) 3-credit Biological Science course and one (1) 3-credit Physical Science course. The additional 6 credits can be any combination of natural, biological or physical science credits to bring the total to 12 credits.

Bachelor of Science (B.S.) candidates must complete a minimum of 6 credits of Physical Science and 6 credits of Biological Science.

Only those courses that have both a specific Breadth designation and "C" in the "L\&S Credit Type" section of the former Course Guide (http://public.my.wisc.edu) under Additional Info or in the current Guide (http:// guide.wisc.edu/courses) with breadth in the course designation section count toward the breadth requirement. The following types of courses do not count toward the breadth requirement:

- elementary-level courses in mathematics
- elementary- and intermediate-level courses in foreign language or courses in conversation and composition in a foreign language
- English composition
- directed study/independent study courses
- practical and skill courses such as elementarylevel courses in journalism, public speaking, acting, and theater production; courses in art; and courses in music performance
- free elective coursework

The following types of courses are inappropriate for satisfying the breadth requirement, and so lack breadth designation:

- courses that are highly specialized or narrowly pre-professional in nature; and
- internships, practicums, directed study, tutorials, senior theses, and other courses whose content is negotiated between students and faculty on an individual basis.

Courses designated as Natural Science ( N ) partially satisfy the natural science requirement but not the specific physical or biological sciences course requirements. If a course can meet more than one breadth designation, students may select the division in which they want that course to count for purposes of the breadth requirement; however, the course may be counted only once and in only one division.

The following is a list of symbols located in the "geBLC" column of the former Timetable, the UWMadison Transfer Equivalency Database (TED) (http:// www.admissions.wisc.edu/transfer/ted), and the Transfer Information System (TIS) (http://tis.uwsa.edu). These symbols are still used to designate course attributes in L\&S. The symbols are as follows:

Letters in the " $\mathbf{g}$ " column (or the Gen Ed designation in the "Gen-Ed" section of the Course Guide under Additional Info) identify a course which counts toward either the Communication requirement or the Quantitative Reasoning requirement for general education as follows:
a-course counts toward the Communication Part A requirement.
b-course counts toward the Communication Part B requirement.
q -course counts toward the Quantitative Reasoning Part A requirement.
$r$-course counts toward the Quantitative Reasoning Part $B$ requirement.

The symbol "e" in the "e" column (or "yes" in the "Ethnic" section of the Course Guide under Additional Info) identifies a course that counts toward the L\&S Ethnic Studies requirement.

Symbols in the "B" column (or the breadth designation in the "Breadth"section of the Course Guide under Additional Info) show how courses count in meeting the breadth requirement for the L\&S B.A./B.S. degrees.
B-Biological Science. Counts toward the Natural
Science requirement.
H-Humanities
I-Interdivisional. Does not satisfy any breadth
requirement
L-Literature. Counts toward the Humanities requirement
N-Natural Science. Satisfies the Natural Science
requirement but not the Biological or Physical Science
requirements
P-Physical Science. Counts toward the Natural Science
requirement
S-Social Science
W-Either Social Science or Natural Science
X-Either Humanities or Natural Science
Y-Either Biological Sciences or Social Science
Z-Either Humanities or Social Science

Symbols in the "L" column (or the level designation in the "Level" section of the Course Guide under Additional Info) show course level. Sixty credits of advanced and intermediate level courses are required for the L\&S B.A./B.S. degrees.

E-Elementary

$$
\begin{aligned}
& \text { I-Intermediate } \\
& \text { A-Advanced } \\
& \text { D-Intermediate or Advanced }
\end{aligned}
$$

Symbols in the "C" column are:
C-courses which count for degree credit in L\&S and which count as part of the 100 credits in L\&S for students under the 1971 degree requirements or for the 108 Liberal Arts and Science (LAS) credits for students under BABS07.

## Course Level

Each L\&S course and each approved non-L\&S course have been evaluated for level:

- Elementary (E),
- Intermediate (I),
- Advanced (A), or
- Intermediate/Advanced (D).

Course levels are indicated with each course listed in the Guide (http://guide.wisc.edu/courses) that also count for L\&S Liberal Arts and Science credit. Only courses that are designated as counting as Liberal Arts and Science credit in the Guide are able to count toward level in L\&S for students.

## INTERNATIONAL STUDENTS AND NON-NATIVE SPEAKERS OF ENGLISH TAKING ENGLISH AS A SECOND LANGUAGE COURSES ( ESL)

## English as a Second Language

Students for whom English is a second language must have a facility in English adequate for university work. Results of the ESL assessment test may require students to take one or more English as a Second Language courses. English language proficiency is met by completing ESL 118. Students who are placed into ESL courses and who also need to take a course in residence to complete the General Education Communication Part A requirement may only take ESL 118 to meet that requirement. An exempt score on the MSN-ESLAT will satisfy both the English language proficiency requirement and the Communication A requirement. Because students who take ESL courses are frequently retested, it is possible to earn an exempt score upon completion of any of ESL 114, ESL 115, ESL 116, or ESL 117.

Effective fall 2018, all ESL courses completed in residence, and all credit earned in those courses, will appear on students' transcripts. ESL courses numbered below 118 are not considered Liberal Arts and Science courses, but may be counted among L\&S students' free electives in the degree. To learn more about the 108 Liberal Arts and Science credits L\&S students are required to take, see the College of Letters \& Science Requirements information (p. 348).

## Degree Requirements

In general, international students must complete the same degree requirements as any other entering student. The College of Letters \& Science makes some exceptions to this policy. For instance the College may waive the foreign language requirement for the B.A. and B.S. degrees for students who are native speakers of a foreign language.

For the purpose of exemption from the foreign language requirement, a "native speaker" is a student who graduates from or completes a major portion (the equivalent of at least five semesters) of a secondary school in a non-English-speaking school system. Exemption is not automatic. Students who believe they may qualify for an exemption should contact the Office of Admissions and Recruitment or an L\&S academic dean to determine how their language background may be applicable toward the foreign language requirement.

Students whose native language is not English may not receive degree credit for work in their native language through Credit by Examination except for literature credit.

## Special Advisor

International students can receive advising information from their department advisors. The Office of International Student Services (http:// iss.wisc.edu) ( 716 Langdon Street, Room 217 Red Gym, 608-262-2044; iss@studentlife.wisc.edu) can also offer assistance and advising in non-curricular matters such as visa-related issues.

## LIBERAL ARTS AND SCIENCE COURSES

Courses that have been approved as Liberal Arts and Science (LAS) classes are expected to encourage students in one or more of the three "habits of the mind" of liberal arts education, as specified by the College of Letters \& Science. These include:

1. Skilled written and verbal communication, excelling in formulating and expressing a point of view, reflecting and questioning current knowledge through reading, research and consideration of the views of others.
2. The ability to draw flexibly upon and apply the modes of thought of the major areas of knowledge.
3. Knowledge of our basic cultural heritage as a multifaceted and often contested history.

For more detailed information, refer to criteria for Liberal Arts and Science Courses (https://kb.wisc.edu/ls/page.php? $i d=43819$ ).

The College of Letters \& Science has long recognized that courses offered by other units of the university provide valuable and appropriate learning experiences for students pursuing a degree offered by the college. The college has approved many of these courses for L\&S students to take for degree credit, and after careful review, has determined that these courses are Liberal Arts and Sciences courses. These courses are so designated within the Guide (http:// guide.wisc.edu/courses) and count toward the L\&S degree requirements, including requirements related to breadth and level.

## PASS/FAIL

Any L\&S undergraduate student in good academic standing is eligible to take one (1) course per term/semester on a pass/ fail (S/U)basis. For the College of Letters \& Science, good

## academic standing means that a student does not have one of the following statuses:

```
- probation
- strict probation
- continued probation
- continued strict probation
- dropped status
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For information about probation, see probation rules (https:// saa.ls.wisc.edu/policies-forms/probation/probation-rules).

- Undergraduates may carry only one course on a pass/fail basis per term (fall, spring, summer) and a maximum of sixteen (16) credits during their entire undergraduate career.
- First-semester freshmen and transfer students without an established UW-Madison GPA are eligible to take one (1) course for pass/fail in their first term at UW-Madison.
- Summer sessions collectively count as a single term. Thus, a student can only take one (1) course on a pass/fail basis during the summer.

Any student who takes a pass/fail course must earn at least a C to receive credit for the course. Final grades for these courses will be indicated as satisfactory ( S ) or unsatisfactory $(U)$ without any computation of grade points for those courses into the semester or cumulative grade point average. The grade of $S$ shall be recorded by the registrar in place of instructors' grades of $A, A B, B, B C$, or $C$. The grade of $U$ will be recorded by the Registrar's Office in place of instructors' grades of $D$ or $F$. Neither the $S$ nor the $U$ is used in computing the grade point average. The pass/fail option is the student's choice and the instructor reports the grade without knowing whether or not the student is taking the course on a pass/fail basis.

For more information, see What does it mean to take a course pass/fail? (https://kb.wisc.edu/ls/page.php?id=21102)

## Notes:

- Students must submit (or cancel) pass/fail requests via their Student Center link (https://login.wisc.edu/? appurl=my.wisc.edu/portal) by the end of the fourth week of fall and spring semesters. (For modular and summer session courses, pass/fail requests must be submitted by the Friday of the week in which the session is one-fourth completed).
- Students may not cancel or add the pass/fail option after the deadline for submitting Pass/Fail Option Forms.
- All requests to add or cancel pass/fail must be submitted via the Course Change request in the Student Center by the appropriate deadline.
- For more information about the pass/fail process, refer to what does it mean to take a course pass/fail (http://kb.wisc.edu/ls/ page.php?id=21102) and Pass/Fail Option (http:// registrar.wisc.edu/pass_fail_option.htm).
- Students cannot cancel a pass/fail request after the deadline if they need the course to fulfill a major or degree requirement at a later date. It is the student's responsibility to determine whether or not s/he can take a course on a pass/fail basis.
- Pass/Fail and Course Change Requests can be accessed through a student's Student Center in My UW (http://my.wisc.edu) by clicking Course Change Request via Course Enrollment, Term Information. For more information about requesting the pass/fail option, refer to Pass/Fail Option (http:// registrar.wisc.edu/pass_fail_option.htm) on the Registrar's website.
- Only elective work may be carried on a pass/fail basis. Thus, pass/fail cannot be declared or used to fulfill the following requirements:
- Breadth (humanities, literature, social science, natural science)
- Foreign language (prior to fulfilling the B.A. or B.S. foreign language requirement)
- Math
- Ethnic Studies
- General Education Requirements (Comm A, Comm B, QR A, QR B)
- Major requirements
- L\&S undergraduates may take courses in their major or major department for pass/fail after fulfilling their major requirements. However, any coursework taken for pass/fail in the major or major department will not count toward fulfilling any requirements. Students are strongly encouraged not to take coursework in their major program without first consulting with their undergraduate advisor.
- Courses carried on a pass/fail basis cannot fulfill any other college requirements except for the 60 intermediate/advanced level credits and 108 Liberal Arts and Science (LAS) credits needed to graduate.
- Directed Study courses may not be taken on a pass/ fail basis.
- Pass/fail work may not be used as part of the coursework offered in satisfaction of the individual major.
- Students may not take foreign language courses on a pass/fail basis until the foreign language requirement for their degree program has been satisfied.
- Students pursuing certificate programs should check with the certificate advisor(s) about policies concerning pass/fail for certificate program courses since many certificate programs do not allow coursework to be taken for pass/fail.

For further information, deadline dates, and instructions for registration stop by the College of Letters \& Science Academic Deans' Services in Suite 110 Ingraham Hall, 1155 Observatory Drive, or call 608-262-0617 for more assistance.

## PRE-PROFESSIONAL COURSES

## Pre-Medicine is not a major

College of Letters \& Science students who wish to prepare for a career in medicine should enroll in courses which lead to completion of degree requirements in any major and simultaneously fulfill the pre-medical requirements of the medical school of their choice. Students considering a pre-medical program should go to the Center for Pre-Health Advising where they will receive information and advice as needed. See Center for Pre-Health Advising (http://www.prehealth.wisc.edu) for more information.

See coursework (https://prehealth.wisc.edu/ coursework-medicine) for information about courses that support the required and suggested coursework for medical school. Students should keep in mind that this is a general guideline and requirements differ among medical schools.

- UW-Madison School of Medicine and Public Health (SMPH), prerequisites can be found at MD Program Admissions (http://www.med.wisc.edu/education/ $\mathrm{md} /$ admissions/premedical-requirements/110).
- For students planning to take the MCAT, see frequently asked questions (FAQ) (http://www.med.wisc.edu/ education/md/admissions/frequently-asked-questions-faqs/108) at MD Program Admissions for an academic planning guide.


## Pre-Law

Pre-law is not a major at UW-Madison. For more information for students who are considering, preparing for, or applying to law school, please refer to the Center for Pre-Law Advising (https://prelaw.wisc.edu) for more information.

## Pre-Veterinary Medicine

Pre-veterinary medicine is not a major at UW-Madison. Students interested in pursuing a career in veterinary medicine are encouraged to choose a major of interest that can be pursued simultaneously while completing the 60 credits of required coursework. Students may select an academic major in any school or college to be eligible for admission. One major does not have an advantage over another with respect to admission to veterinary school. For more information about preveterinary medicine and planning coursework, contact the Academic Affairs Office, School of Veterinary Medicine, Room 2268, 2015 Linden Drive, 263-2525, or the College of Agricultural and Life Sciences, Room 116 Agricultural Hall.

## PREREQUISITE COURSEWORK BACKGROUND

The College of Letters \& Science recognizes that some courses that meet general degree requirements (e.g., language, math, ESL) require prior knowledge in that subject. For purposes of distinguishing between necessary prerequisites and electives, coursework that is regarded as prerequisite to courses meeting general degree requirements is considered "necessary" and not purely elective.

## REGISTRATION CHANGES

Students may make changes in their registration (add and/or drop courses, change sections in a course, or change the number of credits in a course) via their Student Center in My UW according to the deadlines published by the Office of the Registrar (http://www.registrar.wisc.edu/ schedule_of_classes.htm) each semester and summer session. For more specific information about this process, please refer to Course Change Request (http:// registrar.wisc.edu/course_change_request.htm). Students are strongly encouraged to check their current registration and verify they are properly enrolled in the correct courses using My UW (http://my.wisc.edu). For general questions about this process, contact your undergraduate advisor or L\&S Undergraduate Academic Deans' Services at 608-262-0617.

Students who enroll for a course must either complete the course or drop it by the deadline for dropping courses.

## REPEAT OF COLLEGE COURSES NOT FOR CREDIT (RETAKING PASSED COLLEGE-LEVEL COURSES ON A REFRESHER BASIS)

Credit will not be granted for the same course twice. Students who wish to refresh their knowledge may repeat courses, but not for credit. All instances of that course will calculate in the semester GPA and in the university cumulative GPA. Repeated courses do not calculate in L\&S requirements for quality of work (p. 347) (GPA minimums for Intermediate/Advanced work and GPA requirements in the major).

Credits carried on a refresher basis count toward the maximum credits permitted each term. Grades in refresherbasis courses count only in the university grade point average, which may be significant in determining a student's probationary status and eligibility to continue. Repeating a course will not remove the prior grade(s) earned for that course from the student's record. Please refer to is it possible to retake a course that I have already passed or received degree credit for (https://kb.wisc.edu/ls/page.php?id=21934).

Transfer students must be particularly careful to avoid taking courses on the Madison campus that duplicate courses taken at another institution. Credit will not be given twice for the same or similar courses, nor will credit be given for a lower level course in a sequence if students have already received credit for a higher level course in that sequence (e.g., a student who has received credit for Math 221 could not take Math 112 for credit). Students should carefully check the Evaluation of Transfer Credits prepared by the Office of Admissions and Recruitment and should consult an advisor or academic dean before enrolling.

First-year students (freshmen) should also be mindful of the fact that they will not receive credit again for any course(s) they have already received credit for via AP or college courses they took during high school and transferred to UW-Madison.

## REPEAT OF HIGH SCHOOL OR COLLEGE COURSEWORK FOR CREDIT

Students who enter the College of Letters \& Science with degree credit for academic work will not receive additional degree credit for repeating that course, for taking an
equivalent course, or for taking a lower-level course in a sequence after completing a higher course in that sequence (e.g., a student who has received credit for Math 221 could not take Math 112 for credit). See i (https://kb.wisc.edu/ls/ page.php?id=21934)s it possible to retake a course that I have already passed or received degree credit (https://kb.wisc.edu/ Is/page.php?id=21934) for more information.

## WITHDRAWAL

Withdrawal from school means dropping all courses currently in progress for the term in which the withdrawal is processed. Before the first day of classes in a term, students may remove themselves from classes by dropping all of their courses via My UW-Madison. Detailed information about the withdrawal process for L\&S undergraduates can be found at withdrawing from semester/term (http://saa.ls.wisc.edu/ policies-withdrawal.htm).

After the first day of classes and through the withdrawal deadline published in the Deadlines at a Glance section on the registrar's website (Office of the Registrar (http:// registrar.wisc.edu)), L\&S undergraduate students may cancel their enrollment (withdraw from the term) by going to their Student Center in My UW and accessing the Term Withdrawal tab under Course Enrollment. For more detailed information, refer to canceling your enrollment -withdrawals (https://registrar.wisc.edu/ canceling_your_enrollment_withdrawal_info.htm). Additional information about the withdrawal process can be found at what does it mean if I withdraw from the term (https:// kb. wisc.edu/ls/page.php?id=21703).

Students who find it necessary may withdraw at any time during the first 12 weeks of a semester without needing special permission to return for a later term. Summer deadlines for withdrawal are published in the summer by the Office of the Registrar (http://registrar.wisc.edu). Students are encouraged to confer with a dean regarding the possible effects of withdrawal upon their academic work.

Students who have neglected their classes, or who have earned unsatisfactory grades, or who have a pattern of withdrawals may need permission of an academic dean to return at a later date.

Letters \& Science undergraduate students wishing to withdraw after the deadline must obtain permission from an academic dean by setting up an individual appointment through L\&S Undergraduate Academic Deans' Services (608-262-0617). Failure to obtain this permission results in the recording of Failures for all courses.

## CREDITS

## CREDIT LOAD

Full-time student status (12-18 credits). The usual study load of a student is about 15 credits per semester/term, with an ordinary range of 12 to 18 credits. Please note that international students and athletes must be enrolled for a minimum of 12 credits in the fall and spring semesters/terms. For more information, please contact International Student Services (http:// www.iss.wisc.edu) (608-262-2044) or the Fetzer Student

Athlete Academic Center (http://www.uwbadgers.com/ facilities/fetzer-center.html)(608-262-1787).

- For students receiving financial aid, federal regulations require any student receiving financial assistance to maintain academic progress and be working toward a degree. See satisfactory academic progress (SAP) (http:// www.finaid.wisc.edu/259.htm) for more details.

Light load (fewer than 12 credits). A program of fewer than 12 credits may be carried without the specific authorization of an academic dean. However, students are encouraged to consult their undergraduate advisor or an academic dean regarding the decision to carry a light load. A light load may affect a student's eligibility for financial aid (including Social Security and Veterans' benefits), dependent health insurance, international student visa status, University Housing accommodations, or athletic eligibility. Several terms with a courseload of fewer than 12 credits will also have an impact on a student's graduation progress.

Heavy load (19 or 20 credits). Students who have a cumulative GPA of 3.000 or better at the University of Wisconsin-Madison may enroll for 19 or 20 credits during the fall or spring term with permission from an academic dean in L\&S Undergraduate Academic Deans' Services (http:// saa.ls.wisc.edu/credit-overload.htm). Additional fees per credit are assessed for all credits above 18. Under no circumstances may a student carry more than $\mathbf{2 0}$ credits in one semester.

- See credit overload/heavy program (https:// kb.wisc.edu/ls/page.php?id=21177) for more information.
- L\&S students who wish to take an overload and qualify to take 19 or 20 credits should fill out the Credit Overload Request (http://saa.ls.wisc.edu/ credit-overload.htm). For more assistance, please stop by 110 Ingraham Hall, or call 608-262-0617 during regular business hours.

Summer Sessions Credit Load (a maximum of 12 credits). In general a student may carry one (1) credit per week of instruction during the summer session. The overall limit for summer work is 12 credits (or 13 with special permission). The credit limit per summer session is the number of weeks of the session. Thus, a student can earn only 3 credits in a 3-week summer session. A student needs permission from an academic dean to carry one (1) additional credit per weeks in a session (e.g., four (4) credits in a 3-week session). An academic dean's permission usually requires a 3.000 cumulative GPA.

Students must carry courses for the number of credits assigned to the courses in the Guide (http://guide.wisc.edu/ courses).

For more information regarding credit load, see what is the common credit load for L\&S undergraduate students during the semester (https://kb.wisc.edu/ls/page.php?id=26734).

## CREDIT BY COURSE EXAMINATION/RETROACTIVE CREDITS ( RETROCREDITS)

The College of Letters \& Science will award degree credit for foreign language work successfully completed in high school under certain circumstances and if an additional foreign language course is taken at UW-Madison. In no case can a student earn retroactive credits simply by taking a placement test or other exam. A student must take the appropriate UWMadison language class at UW-Madison to earn retroactive credits.

Students who qualify for retrocredits after completing the appropriate language course on the UW-Madison campus will automatically receive retrocredits approximately two to three months after all grades have been posted for all students. This benefit is available to freshmen (first-year students), and can be exercised when the following conditions are met:

- The course must be a student's first course at the college level in the language. This does not include college-level coursework taken during high school, but does include courses transferred from another institution where a student was working towards an undergraduate degree or coursework a student completed after graduating from high school.
- The course must be designated appropriate for earning retroactive credits. These courses are designated with the Foreign Language Level attribute of $2,3,4$, and 5 .
- A student must take the course before he/she has earned $\mathbf{3 0}$ degree credits. This does not include AP, CLEP, IB, or other college credit earned in high school, nor does it include retroactive credits earned in another language. It does include courses transferred from another institution where you were working toward a degree.


## - A student must earn a B or better in the class.

If a student meets all of the conditions listed above, retroactive credits should appear automatically on a student's transcript by the beginning of the following semester (e.g., if the language was completed in the fall term, the retroactive credits should appear on a student's record by the beginning of the spring term). If retroactive credits do not appear on a qualified student's records by the end of the fourth week of the following term, the student should fill out a Retroactive Language Request Form (http://languages.wisc.edu/sites/ default/files/docs/RETROACTIVE\%20LANGUAGE\%20CREDIT \%20REQUEST\%20FORM.pdf) and submit that form to the office of the academic dean at the student's particular school or college. For students earning an undergraduate degree in the College of Letters \& Science, the form should be delivered to L\&S Undergraduate Academic Deans' Services (http:// saa.ls.wisc.edu/deans-services.htm). Non-L\&S degreeseeking candidates should speak with the undergraduate academic service unit in the school or college for more guidance.

- Retroactive credits (retrocredits) will not automatically be posted for students who have already earned retrocredits. If a student is still eligible to earn retrocredits and wishes to receive retrocredits for another language(s), the student
will need to fill out the Retroactive Language Request Form (http://languages.wisc.edu/sites/default/files/docs/ RETROACTIVE\%20LANGUAGE\%20CREDIT\%20REQUEST \%20FORM.pdf) and deliver it to the L\&S Academic Deans' Services Office in 110 Ingraham Hall if the student is an L\&S undergraduate. For further information, contact L\&S Academic Deans' Services at 608-262-0617.


## Please note:

- Native speakers of a language are not eligible to earn retroactive credits in that language.
- Students can earn retrocredits in more than one language as long as they are within the 29-credit limit and meet the other requirements listed above to earn retrocredits.
- Retroactive credits (retrocredits) will not be posted automatically for students who have already earned retrocredits. If students are still eligible to earn retrocredits and wishes to receive retrocredits for another language(s), they will need to fill out the Retroactive Language Credit Request Form (http:// languages.wisc.edu/sites/default/files/ docs/RETROACTIVE\%20LANGUAGE \%20CREDIT\%20REQUEST\%20FORM.pdf) and deliver it to L\&S Undergraduate Academic Deans' Services in 110 Ingraham Hall to be reviewed if they are an L\&S undergraduate student.
- Retrocredits can only be earned for the first four semesters/terms of a language sequence. For example, a student who tests into SPANISH 311 can earn a maximum of sixteen retrocredits (SPANISH 101, SPANISH 102, SPANISH 203, and SPANISH 204). The maximum number of credits earned will be impacted if the student already has AP credits for a particular course.
- The maximum number of credits a student can earn for retrocredits may vary based on the language sequence and the number of credits offered in that particular language sequence for the first four semesters.
- UW-Madison will honor retroactive credits earned at another institution provided that these credits were earned according to UW-Madison policy. Student will need to work with the Office of Admissions and Recruitment (https://www.admissions.wisc.edu/ apply/freshman/apib.php) at UW-Madison to make sure the retrocredits from the other institution get posted to their official UW-Madison records.

For more information about retroactive credits, refer to Retroactive Credits (http://languages.wisc.edu/advising/ retro) and is it possible for an L\&S undergraduate to earn retrocredits (https://kb.wisc.edu/ls/page.php?id=23736).

## CREDIT BY DEPARTMENTAL EXAMINATION

The College of Letters \& Science allows degree credit, as well as placement credit, for the mastery of some L\&S coursework as demonstrated by appropriate achievement tests. The
intent of these examinations is to increase opportunities for obtaining degree credit for college-level work done in high school or elsewhere.

Credit may be earned on the basis of an examination given by a department when a student has demonstrated possession of knowledge equivalent to what would be learned in a specific course taught in that department. The credit given is for knowledge possessed by the student regardless of where they have gained that knowledge. Examinations for credit must be administered as soon as possible, but in any case before the end of the student's first semester in residence following the experience that provided the knowledge to be tested.

Any department wishing to do so may give degree credit by examination for any of its elementary- or intermediate-level courses other than Honors courses and Directed Study.

Students who wish to establish credit by department examination must take a separate examination for each course in which credit is sought.

Departments will indicate which, if any, of their courses covering work that may have been taken in high school may permit degree credit on the basis of appropriate national tests taken in high school. In addition, general degree and specific subject credit may be obtained by examination under the College Level Examination Program (CLEP). (See College-Level Examination Program (p. 9).)

In no case may students receive degree credit more than once for the same college-level work. If degree credit is obtained for a given course by taking an examination, the student may not enroll in the course for degree credit, and vice versa.

Credits earned by examination do not count toward the residence requirement. Students are encouraged to take departmental examinations for credit prior to earning 90 degree credits (including the semester in which the 90th credit is earned) in order to avoid complications with the residence requirement. It is possible for students to fulfill all or part of the college foreign language requirement without receiving credit.

The provision for credits by examination offers students an opportunity to complete the baccalaureate degree requirements in less than four years should they so desire. Students wishing to take examinations to earn credit should contact the department office.

## FREE ELECTIVES

If a student so chooses, he or she may count for degree credit up to 12 credits "freely chosen" from many non-L\&S, UW-Madison-approved courses. These courses are referred to as "free electives in the degree." These courses may be selected from any UW-Madison subject listing in the Guide (http:// guide.wisc.edu/courses), and are not designated as courses in the Liberal Arts and Sciences. Thus, these courses do not carry breadth or level in L\&S.

Credit earned in these courses apply to the degree requirements in the following ways:

- Courses taken as free electives in the degree may be carried and will appear on the transcript showing credits, grade, and grade points.
- These credits will count as part of the semester load and will count toward satisfaction of the minimum progress requirements.
- These credits and grade points will be included in calculating a student's semester and cumulative grade point average.
- Free electives in the degree cannot be used to satisfy the L\&S requirement that students complete a substantial portion of their degree credits in intermediate and advanced work.
- Courses that are taught in L\&S departments but not designated as Liberal Arts and Science courses (e.g., Music and Music Performance courses numbered 099 and below) may be counted for credit as free electives in the degree. (For B.A./B.S. Music majors, Music and Music Performance courses numbered 099 and below that are not required for the major may be counted as free electives.) Students with questions regarding a particular course offered by a school or college outside L\&S as it relates to the requirement to complete 108 Liberal Arts and Science credits should consult an academic dean before registration.


## NON-DEGREE-GRANTING ACCREDITED INSTITUTIONS' TRANSFER CREDIT LIMITATION

Of the credits required for graduation, not more than 72 may be carried at non-degree-granting accredited institutions. However, of the last 60 credits earned before graduation, not more than 12 may be carried at these non-degree-granting accredited institutions.

## NON-L\&S COURSES AND L\&S DEGREE CREDIT

## Liberal Arts and Science Courses

The College of Letters \& Science has long recognized that courses offered by other units of the university provide valuable and appropriate learning experiences for students pursuing a degree offered by the college. The college has approved many of these courses for L\&S students to take for degree credit, and after careful review, has determined that these courses are Liberal Arts and Sciences (LAS) courses. These courses are designated as such in the Guide (http://guide.wisc.edu/ courses)). LAS courses count toward the L\&S degree requirements, including requirements related to breadth and level.

## Non-L\&S Courses Cross-listed with L\&S Departments

A course offered in the College of Letters \& Science that carries the $C$ designation and which is crosslisted with a department in another school or college is considered a Liberal Arts and Science course. Such courses are designated as counting for Liberal Arts and Science (LAS) credit in L\&S within the Guide (http:// guide.wisc.edu/courses). As LAS courses, they may be counted as part of the major and count as part of the

108 Liberal Arts and Science credits required for an L\&S degree.

## Non-L\&S Courses Required for L\&S Majors

Courses taught in departments located in schools or colleges other than L\&S, but which are required for completion of an L\&S major, are considered Liberal Arts and Science courses. Such courses will either designated as Liberal Arts and Science courses in the Guide (http://guide.wisc.edu/courses), or their Liberal Arts and Sciences status will appear in the DARS degree audit. In both cases, these courses count as part of the 108 L\&S credits required for a degree.

## Free Electives in the Degree

If a student so chooses, he or she may count for degree credit up to 12 credits "freely chosen" from many nonL\&S, UW-Madison-approved courses. These courses are referred to as "free electives in the degree." These courses may be selected from any UW-Madison subject listing in the Guide (http://guide.wisc.edu/courses), and are not designated as courses in the Liberal Arts and Sciences. Also refer to free electives (https:// kb.wisc.edu/ls/page.php?id=23921).

## DEGREES

## ASSOCIATE DEGREE POLICY

Effective summer/fall 2012, all new transfer students with an associate's degree from either a UW System (UWS) institution or one of the Wisconsin Technical College System (WTCS) schools that award a liberal arts associate's degree (i.e., Madison College, MATC-Milwaukee, Nicolet, Chippewa Valley, Western) will have their University General Education (UGER) (p. 22) breadth requirements satisfied in all undergraduate schools/colleges on the UW-Madison campus. Students pursuing their undergraduate degrees in the College of Letters \& Science may need to take additional coursework to fulfill the L\&S breadth requirements (p. 348). Students should consult with their undergraduate advisor(s) if they have additional questions.

WTCS transfer students should be aware that only liberal arts associate's degrees that are approved by both WTCS and UW System Administration are eligible for this provision. Students with associate degrees in technical fields will not have their UGER breadth requirements satisfied.

UWS and WTCS transfer students with a qualifying liberal arts associate's degree are EXEMPT from meeting the following University General Education Breadth requirements:

- Natural Science-two (2) courses for a total of 6 credits
- Humanities/Literature/Arts-6 credits
- Social Studies-3 credits

Students will still be required to meet other University General Education Requirements (p. 22).

## Please note:

- Students in the College of Letters \& Science must meet the L\&S breadth requirements (p. 348) with specific transfer courses or courses taken in residence.


## DEGREE AND DIPLOMA INFORMATION

The College of Letters \& Science offers the following degrees:

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Landscape Architecture*
- Bachelor of Music*
- Bachelor of Arts-Journalism*
- Bachelor of Science-Journalism*
- Bachelor of Social Work
- Bachelor of Science-Applied Mathematics, Engineering and Physics*
*These specialized degree programs have requirements for completion distinct from the L\&S BA/BS requirements. Students who complete these requirements are awarded these degrees in lieu of the general Bachelor of Arts or Bachelor of Science. More L\&S degree information is available at Degrees/Majors/Certificate (p. 320).

A UW-Madison undergraduate diploma lists only the degree title. Diplomas do not list major(s) or certificate(s) students complete as undergraduates. Major and certificate information is located on a student's official UW-Madison transcript.

> - If a student is completing a bachelor of science degree with majors in history and economics, the degree on the student's diploma will be Bachelor of Science.
> - If a student is completing a bachelor of arts degree, majoring in psychology and journalism, the degree on the student's diploma will be Bachelor of Arts-Journalism.

## SECOND UNDERGRADUATE DEGREE

Students are not permitted to earn two undergraduate liberal arts degrees. Students interested in earning a second undergraduate degree must consult an academic dean in the College of Letters \& Science Undergraduate Academic Deans' Services (608-262-0617; Suite 110 Ingraham Hall, 1155 Observatory Drive).

Please note that students who already have a Bachelor of Arts or Bachelor of Science degree in general are not able to earn another B.A. or B.S. since two-thirds of their coursework for the second degree will be the same. Thus, a student who has a liberal arts degree with a science major is usually not considered a likely candidate for a second degree in the College of Letters \& Science if the student wants to come back to do a second liberal arts degree in another humanities, social science, or natural science major. Students who have earned a music degree (MUS), for example, might be able to earn a B.A. or B.S..

Students admitted as candidates for a second undergraduate degree are subject to the L\&S Academic Probation and Drop
system. Requirements for admission to candidacy for a second degree are:

1. An undergraduate degree earned at UW-Madison or elsewhere. The second degree must be substantially different from the first degree. In other words, a student who has a Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) degree would not be able to earn another B.A. or B.S. degree. Thus a student who already has a liberal arts degree with a liberal arts major such as Chemistry or History is not considered a likely candidate for a second liberal arts degree in the College of Letters \& Science (L\&S) if the student wants to come back to do a second liberal arts degree with another major offered within L\&S such as Computer Science, Economics, Mathematics, or Spanish. (Also, students who started an additional major but did not declare it prior to graduating are not eligible to return as a second-degree student to finish up coursework for the 2nd or additional major.)
2. Satisfaction of all basic admissions requirements to UW-Madison, including geometry.
3. Submission of transcripts from all schools attended (especially if the first degree was not earned a UWMadison). One set of transcripts must be sent to the Office of Admissions and Recruitment at UWMadison and a second set of transcripts must be brought to the meeting with the academic dean in L\&S Undergraduate Academic Services.
4. Minimum of 3.000 GPA on first undergraduate degree program. Coursework at all colleges attended (including UW-Madison, if applicable) is used to calculate this GPA.
5. An L\&S academic dean will check for math and foreign language deficiencies.
6. Admission to the proposed major (a letter of support from the department confirming a student has met all basic entrance requirements to the major and is eligible to declare if admitted for a second undergraduate degree). Please note that obtaining an endorsement from the department does not guarantee acceptance for a second undergraduate degree if the student does not meet the other criteria listed above. If a student is lacking admission to or recommendation from the major department, the student could register as a University Special student but may not register in the College of Letters \& Science.
7. Written permission from an L\&S academic dean.

To earn a second undergraduate degree from UW-Madison, students must:

1. Satisfy all Letters \& Science degree requirements.
2. Satisfy all Quality of Work requirements.
3. Complete at least 30 credits in Letters \& Science at UW-Madison after the first degree has been awarded, regardless of whether or not the first degree was an L\&S degree. Note that the second degree must be significantly different from the first.
4. Complete a minimum of 108 Liberal Arts and Science credits which may include courses completed during the student's first degree program.

## SENIOR THESIS

Any senior who so desires may write a senior thesis. A thesis may not carry less than 4 or more than 8 credits and must be carried over a two-semester period. A senior thesis must represent treatment of some phase of the student's work in the major; the subject requires approval by the student's advisor and the faculty member in charge of the field of concentration (usually the department chair). Thesis students enroll for thesis course numbers 691 and 692 (students in the Honors Program enroll in 681 and 682 for a minimum of 6 credits and a maximum of 8 credits in total).

- Students must complete both 691 and 692 or 681 and 682 of the two-semester course sequence. A student cannot substitute one of the sequence courses with a directed study or other course.
- The two-semester course sequence must be in the same department (e.g., Anthro 691 and 692).
- Students cannot take the two-semester course sequence in one semester or term.

Students enrolled in a 691/692 or 681/682 senior thesis sequence will receive a grade of "P" (Progress) for the first half of the senior sequence (691 or 681) until they complete both semesters. This designation of "Progress" is a temporary grade used only for courses that span more than one semester/term (typically a senior thesis). When the course is completed, a final grade replaces the $P$ for each term. The "P" does not count in any GPA computation. In addition, the "P" grade does not count for credit until it is replaced by a final grade.

## EXAMS

## COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

The College-Level Examination Program (CLEP) enables those students who have attained college-level competency outside the classroom to take examinations for college credit or placement. The General Examinations measure undergraduate achievement in five basic areas of liberal arts education:

- English composition
- Humanities
- Mathematics
- Natural Sciences
- Social Sciences/History

The Subject Examinations measure achievement in undergraduate courses. Both sets of examinations are aimed at the public-at-large, returning service personnel, and entering freshmen. Credit will be granted for the General Examination according to the criteria established ONLY to freshmen before they have earned more than 15 degree credits in a residence program or elsewhere. Only a limited number of departments accept CLEP Subject Examination credits. A continuing student with no more than 15 completed degree credits may register for the General or Subject Examination(s) by contacting the Office of Testing and

Evaluation Services, 608-262-5863. For further information, consult L\&S Undergraduate Academic Deans' Services at 608-262-0617 or the Office of Admissions and Recruitment (https://www.admissions.wisc.edu/apply/freshman/ apib.php), 608-262-3961.

## EXAMINATIONS FOR PLACEMENT

## English

All students must take English placement tests to determine level of competence unless competence has been successfully demonstrated prior to enrollment through coursework (including AP and IB credits). On the basis of their test scores, most students will be required to enroll in and successfully complete a Communication Part A course. This course should be completed within a student's first 30 credits after enrollment.

Non-native speakers of English assigned to courses in English as a Second Language on the basis of their English as a Second Language (ESL) assessment test should see International Students and Non-Native Speakers of English (p. 333).

## Foreign Language

Students at UW-Madison who plan to resume the study of a foreign language begun in high school must take the UW System placement examination in that language and consult the foreign language department advisor for appropriate course placement.

Before enrolling in a level either higher or lower than the level of placement indicated by the examination, students should consult the foreign language department advisor. Without regard to any work taken in high school, students may enroll for degree credit in any course offered for degree credit by the college, provided they meet its prerequisites and provided they have not already received college credit for this course or an equivalent course or a higher level course in the same subject by course completion or examination.

This placement procedure permits students who are not confident about their high school foreign language work to retake that work in college before proceeding to more advanced study of that language. Students who feel they are ready to work at a higher level than that indicated by the placement test may do so. In no case may students receive degree credit more than once for the same level college work.

## Mathematics

Entering freshmen are required to complete the appropriate placement test in mathematics. This test determines minimum math competency and placement. Students who do not demonstrate minimum competency in math will be required to complete additional non-degree-credit math courses within the first 30 credits after enrollment.

The results of the placement test in mathematics are binding. Students continuing in mathematics must enroll in the level of mathematics course that is indicated by the examination. However, students who
feel their placement examination results are not valid or appropriate may appeal the placement by conferring with the undergraduate advisor in the mathematics department. If the advisor agrees, the student may carry a course below or above the placement indicated for degree credit provided previous college credit has not been granted by course completion or examination.

## FINAL EXAMINATIONS (ACADEMIC SUMMARY PERIOD)

Following the regularly scheduled instructional period each semester is an eight-day summary period. Usually the first day of the summary period is for individual study and review, and no classes or exams are to be scheduled during this designated period. The last seven days are prescheduled to include one two-hour summary block for each course of two or more credits. This two-hour block shall be used for an examination or for other instructional activities as deemed appropriate by the instructional unit offering the course. During the two weeks preceding the summary period, examinations covering the content of the entire course cannot be given. Take-home examinations are due at the scheduled two-hour block.

Faculty policy prohibits giving or taking final examinations earlier than the time assigned in the Course Guide. Students may arrange a make-up examination at a later date only if the professor is willing and if there is a valid reason for missing a final examination. (See the Guide entry "Incompletes (p. 342)" below.)

Students are required to attend all of their final exams. Leaving prior to the final examination period and not taking finals will have a negative impact on a student's final grade in a course or courses. See class attendance policy (https:// kb.wisc.edu/ls/page.php?id=24628) for more information.

## MID-TERM EXAM POLICY INFORMATION

Information about mid-term evening exam policy along with fall, spring, and summer term final exam policy can be found at mid-term and final exam policy information (https://registrar.wisc.edu/documents/ exam_policy.pdf) on the Registrar's website. Additional information can also be located at midterm grades (https://registrar.wisc.edu/mid_term_grades.htm) and upcoming final exam periods (https://registrar.wisc.edu/ midterm_and_final_exam_information_faculty.htm).

- It is implicitly understood that no exams, papers, or assignments will be required during any break period (e.g., spring break) or major holiday.


## GRADES

## AUDIT

A student may enroll in a course on an audit (AU) basis only with prior consent of the instructor of the course. As an auditor, the student is considered a passive learner and may not recite in class or take examinations. Courses with laboratory or performance skills may not be audited. Regular class attendance is expected. Courses audited carry no degree credit and are not graded. The credit value of courses
carried on an audit basis is included in the semester program load for purposes of determining fees and maximum credits carried.

Courses carried on an audit basis may have an impact on students applying for scholarships or other forms of financial assistance. Students should contact the unit/agency administering the scholarship or Student Financial Services for more guidance. Students should also contact their insurance company to determine whether auditing a course (or courses) will have an impact on their coverage. See w (https://kb.wisc.edu/ls/page.php?id=26734)hat does it mean to audit a course (https://kb.wisc.edu/ls/page.php? id=26734) for more details.

L\&S undergraduate students who wish to change their registration in a course from a credit basis to an audit basis must do so within the first four weeks of the semester by submitting a Course Change Form (available at Course Change Request (https://registrar.wisc.edu/ course_change_request.htm) ) to Suite 110 Ingraham Hall, 1155 Observatory Drive. (Course Change Requests can be accessed through an individual's Student Center in My UW (https://my.wisc.edu) under: Course Enrollment/Term Information/Course Change Request.) Students will not be able to submit or cancel a request to audit a course after the fourth week of the fall or spring term.

- For modular and summer session courses, audit requests must be submitted by the Friday of the week in which the session is one-fourth completed.
- Audits may affect a student's eligibility for financial aid (including Social Security and Veterans' benefits). Students should consult an advisor in the Office of Student Financial Aid (http:// www.finaid.wisc.edu) for more detailed information.
- Students with questions about their Veteran benefits and taking courses on an audit basis should contact the Veteran Services \& Military Assistance Center (http://veterans.wisc.edu).


## FAILURES

Students who have earned a grade of F may repeat the failed course in residence. The original grade of $F$ remains permanently on a student's record and is averaged into the semester and overall grade point average (GPA). The failure will be counted as zero grade points per credit in computing the GPA. If a student repeats the failed course, the course will appear on the student's transcript twice with the original grade of F recorded and the new grade also recorded. Both grades will be counted in determining all applicable quality of work requirements. Multiple failures in the same course all count in the GPA and will appear on a student's permanent records. See can I retake a course that I have failed (https:// kb.wisc.edu/ls/page.php?id=21933) for more details.

A course failed in residence at UW-Madison may be repeated for credit at any other educational institution. However the new grade earned out of residence will not have an impact on the student's UW-Madison GPA.

## GRADE CHANGE AND APPEAL

In accordance to current faculty policy and in an effort to main both equity and consistency, final term grades can be changed only because of "clerical error". Students cannot petition to improve a course grade by offering to rewrite a paper, turn in additional work, or retake a final exam (or exams). The only exception wold be if:

1. the option to improve a grade is available to all students in a given course, AND
2. this option is stated explicitly in the course syllabus

A change of grade is allowed only if there has been a clerical error. If an L\&S undergraduate student believes a clerical error has been made in the awarding of the final grade for a course, the student should first meet with the instructor of the course to determine whether such an error has occurred. Requests for a change of grade must be signed by both the instructor of the course and the chair of the department. Students who believe they have been unfairly graded in a course should follow the appeal procedure established by the department in which the course grade was given.

The appeal procedure typically requires the student to first meet with the instructor of the course to discuss the issue, followed by a meeting with the department chair or department committee. If the issue is still unresolved after the department appeal procedure is completed, the student's last recourse would be to appeal to one of the Associate Deans in the College of Letters \& Science based on the discipline of the course in question. Appeals of final grades must be initiated within the semester immediately following the term in which the course is taken. For more information, see What is the process for appealing a grade for an L\&S undergraduate student? (https://kb.wisc.edu/ls/page.php?id=28334)

## GRADING SYSTEM

The general quality of a student's work is expressed in terms of a grade point average (GPA). It is based on the total number of credits carried, whether passed or not. Semester/term grades are reported by letter only (A, AB, B, BC, C, D, F); plus and minus signs are not authorized. The highest possible GPA is 4.000, representing A grades in every course; the lowest possible is 0.000 .

For more detailed information, see valid instructor assigned grades (http://registrar.wisc.edu/ valid_instructor_assigned_grades.htm).

For more information on the grading system, also see the section on undergraduate grades and grade point average (GPA) (http://registrar.wisc.edu/grades_and_gpa.htm) on the registrar's website.

## INCOMPLETES

An Incomplete (I) may be reported for a student who has been enrolled in a course with a passing grade until near the end of the semester/term and then, due to illness or some other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination (or to complete some limited amount of term work). An Incomplete is not given to a student who
stays away from a final examination unless the student proves to the instructor that he or she was prevented from attending as indicated above. In the absence of such proof the grade reported will be an F. Even when a student can provide verifiable documentation, a student may still earn a grade of $F$ if the quality of the student's work convinces the instructor that the student cannot successfully pass the course.

Any subject taken by an L\&S undergraduate student marked Incomplete must be completed by the end of the fourth week of classes of the student's next semester in residence at the University (exclusive of summer sessions) or it will lapse into a Failure. If an instructor grants an extended incomplete (EI), a grade change will need to be filed by the instructor, approved by the chairperson of the department, and forwarded to L\&S Undergraduate Academic Deans' Services in 110 Ingraham Hall. In such cases the grade of $I$ is replaced with the grade of extended incomplete (EI).

NOTE: Extended Incompletes (EI) must be removed and replaced with the final grade by the last day of classes prior to the start of final exams or they will lapse into Failures.

Incompletes incurred in the last semester in residence at UW-Madison may not be removed after five years of absence from the University without special advance permission from L\&S Undergraduate Academic Deans' Services. Such Incompletes must remain on the record with grades of permanent incomplete (PI) and do not lapse into failures.

If a student enrolls with an Incomplete grade from a previous semester and is dropped later in the term because the Incomplete has lapsed to an F or has been changed to a low grade, the student will be withdrawn with an effective date within the refund period closest to the time of the student's actual withdrawal if the student has not been granted permission to continue by an L\&S academic dean.

For further information, see What does it mean if my instructor gives me a grade of incomplete? (https://kb.wisc.edu/ls/ page.php?id=21330) on the L\&S website and Incompletes (http://registrar.wisc.edu/incompletes.htm) on the registrar's website.

## NO WORK GRADE

Students will receive a grade of No Work (NW) on their official records if they enrolled in a course and then never attended. Instructors may award this grade only when the instructor has no evidence that the student ever attended or submitted any work. Any student who does attend for part of the semester/ term and then stops participating is not eligible to receive a grade of NW. The No Work notation does not have an impact on a student's semester/term or cumulative GPA. For more information, see Valid Instructor Assigned Grades (http:// registrar.wisc.edu/valid_instructor_assigned_grades.htm).

A course failed in residence at UW-Madison may be repeated for credit at any other educational institution; however the new grade earned out of residence will not have an impact on the student's UW-Madison grade point average (GPA).

## PASS/FAIL

Any L\&S undergraduate student in good academic standing is eligible to take one course per term/semester on a pass/fail (S/U) basis. For the College of Letters \& Science, good academic standing means that a student does not have one of the following statuses:

> - probation
> - strict probation
> - continued probation
> - continued strict probation
> - dropped status

For information about probation, see academic probation and drop (p. 25).

- Undergraduates may carry only one course on a pass/ fail basis per term (fall, spring, summer) and a maximum of sixteen (16) credits during their entire undergraduate career.
- First-semester freshmen and transfer students without an established UW-Madison GPA are eligible to take one (1) course for pass/fail in their first term at UW-Madison.
- Summer sessions collectively count as a single term. Thus, a student can only take one (1) course on a pass/fail basis during the summer.

Any student who takes a pass/fail course must earn at least a $C$ to receive credit for the course. Final grades for these courses will be indicated as satisfactory (S) or unsatisfactory (U) without any computation of grade points for those courses into the semester or cumulative grade point average. The grade of $S$ shall be recorded by the registrar in place of instructors' grades of $A, A B, B, B C$, or $C$. The grade of $U$ will be recorded by the Registrar's Office in place of instructors' grades of $D$ or $F$. Neither the $S$ nor the $U$ is used in computing the grade point average. The pass/fail option is the student's choice and the instructor reports the grade without knowing whether or not the student is taking the course on a pass/fail basis.

For more information, see What does it mean to take a course pass/fail? (https://kb.wisc.edu/ls/page.php?id=21102)

## Notes:

- Students must submit (or cancel) pass/fail requests via their Student Center link (https://my.wisc.edu) by the end of the fourth (4th) week of fall and spring terms. (For modular and summer session courses, pass/fail requests must be submitted by the Friday of the week in which the session is one-fourth completed).
- Students may not cancel or add the pass/fail option after the deadline for submitting Pass/Fail Option Forms.
- All requests to add or cancel pass/fail must be submitted via the Course Change request in the Student Center by the appropriate deadline.
- For more information about the pass/fail process, refer to what does it mean to take a course pass/fail (http://kb.wisc.edu/ls/
page.php?id=21102) and Pass/Fail Option (http:// registrar.wisc.edu/pass_fail_option.htm).
- Students cannot cancel a Pass/Fail request after the deadline if s/he needs the course to fulfill a major or degree requirement at a later date. It is the student's responsibility to determine whether or not s/he can take a course on a pass/fail basis.
- Pass/Fail and Course Change Requests can be accessed through a student's Student Center in My UW-Madison (http://my.wisc.edu) by clicking Course Change Request via Course Enrollment, Term Information. For more information about requesting the pass/fail option, refer to the registrar's website (http://registrar.wisc.edu/pass_fail_option.htm).
- Only elective work may be carried on a pass/fail basis. Thus, pass/fail cannot be declared or used to fulfill the following requirements:
- Breadth (humanities, literature, social science, natural science)
- Foreign language (prior to fulfilling the B.A. or B.S. foreign language requirement)
- Math
- Ethnic Studies
- General Education Requirements (Comm A, Comm B, QR A, QR B)
- Major requirements
- L\&S undergraduates may take courses in their major or major department for pass/fail. However, any coursework taken for pass/fail in the major or major department will not count toward fulfilling any requirements. Students are strongly encouraged not to take coursework in their major program without first consulting with their undergraduate advisor.
- Courses carried on a pass/fail basis cannot fulfill any other college requirements except for the 60 intermediate/advanced level credits and 108 Liberal Arts and Science (LAS) credits needed to graduate.
- Directed Study courses may not be taken on a pass/ fail basis.
- Pass/fail work may not be used as part of the coursework offered in satisfaction of the individual major.
- Students may not take foreign language courses on a pass/fail basis until the foreign language requirement for their degree program has been satisfied.
- Students pursuing certificate programs should check with the certificate advisor(s) about policies concerning pass/fail for certificate program courses since many certificate programs do not allow coursework to be taken for pass/fail.

For further information, deadline dates, and instructions for registration stop by the College of Letters \& Science Academic Deans' Services in Suite 110 Ingraham Hall, 1155 Observatory Drive, or call 608-262-0617 for more assistance.

## Q GRADE

A "Q" grade is assigned by an instructor when there is a discrepancy between the work completed by a student and the student's official registration. The Office of the Registrar will post the temporary Q grade/mark to a student's record until the discrepancy is resolved. A student will receive a $Q$ in one of three situations:

1. a student registers for a variable-credit course and completes the work that is appropriate for a different number of credits;
2. a student registers for Honors credit and does not complete the Honors portion of the work; and
3. a student does not register for Honors but completes the Honors work appropriate for an Honors designation.

In each of the three cases listed above, students will need to work with the instructor to correct the situation before a grade can be reported. The correct grade will need to be forwarded by the instructor to L\&S Undergraduate Academic Deans' Services (https://saa.ls.wisc.edu/offices/ academic-deans-services). For more information, see Valid Instructor Assigned Grades (http://registrar.wisc.edu/ valid_instructor_assigned_grades.htm).

## GRADUATION

## DIPLOMA AND DEGREE INFORMATION

## A UW-Madison undergraduate diploma lists only the

 degree title. Diplomas do not list major(s) or certificate(s) students complete as undergraduates. Major and certificate information is located on a student's official UW-Madison transcript.> - If a student is completing a bachelor of science degree with majors in history and economics, the degree on the student's diploma will be Bachelor of Science.
> - If a student is completing a bachelor of arts degree, majoring in psychology and journalism, the degree on the student's diploma will be Bachelor of ArtsJournalism.

The College of Letters \& Science offers the following degrees which will appear on an L\&S undergraduate student's diploma:

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Landscape Architecture*
- Bachelor of Music*
- Bachelor of Arts-Journalism*
- Bachelor of Science-Journalism*
- Bachelor of Social Work
- Bachelor of Science-Applied Mathematics, Engineering and Physics*
*These specialized degree programs have requirements for completion distinct from the L\&S BA/BS requirements. Students who complete these requirements are awarded these degrees in lieu of the general Bachelor of Arts or

Bachelor of Science. More L\&S degree information is available at Degrees/Majors/Certificate (p. 320).

## GENERAL EDUCATION REQUIREMENTS

The University of Wisconsin-Madison General Education Requirements (GER) (http://guide.wisc.edu/undergraduate/ \#requirementsforundergraduatestudytext) are courses that provide for breadth across the humanities and arts, social studies, and natural sciences. All students except those who matriculated at a college or university prior to May 20, 1996, must satisfy the university-wide General Education Requirements. The requirements consist of:

## Breath (University Breadth)

All students must complete 13-15 credits of course work intended to provide a breadth of experience across the major modes of intellectual inquiry. Breadth course work is intended to give students a broad intellectual perspective on their undergraduate education and their world by encouraging them to look at and understand subjects through the various modes of inquiry used in the natural, physical and social sciences, arts, and humanities.

Students are required to complete the following breadth requirements:

- Natural Science, 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Humanities/Literature/Arts, 6 credits
- Social Studies, 3 credits

This requirement challenges students to understand that there are many ways to research and explore, and ultimately understand, the world around us. These many "ways of knowing" are intended to enrich the undergraduate experience and complement intensive study in students' majors. Through these courses, many students discover subjects and ideas that will become lifetime interests, or that offer the creative stimulus to see their favorite subjects from new perspectives. Note that the College of Letters \& Science undergraduate breadth requirements exceed campus General Education requirements. Students who transfer to another UW-Madison school or college before completing the L\&S breadth and ethnic studies may need to complete additional General Education requirements.
For more information, about L\&S breadth, please refer to College of Letters \& Science (http://gened.wisc.edu/ ReqAdditional/\#LnS).

The natural sciences (which include studies in the physical and biological sciences) involve knowing the world through scientific inquiry-assembling objective information that can be used to explain observed natural phenomena in a way that is thorough and verifiable. Laboratory components give students firsthand experience in methods of scientific research. These courses help students see both the explanatory and
creative processes in science that are transforming our world.

The humanities, literature, and the arts examine the world through many different lenses that help students interpret and think critically about creative and cultural expressions of what it means to be human. Some courses focus on the production and analysis of artistic, literary, and scholarly works; others help students learn about and compare religious and philosophical conceptions of humankind; still others study history and the peoples and regions of the world. All of these courses encourage students to analyze the range of creativity, cultural expressions, and ideas about and patterns in human existence-history, literature, art, culture, folklore-and to use that information to better understand humanity.

In the social sciences, students learn other ways to understand humanity. Courses in this area are found in a wide range of fields that share a common focus on the systematic study of personal interactions, and the interactions of society and institutions. These fields use quantitative and qualitative research strategies to look at the variety and scale of these interactions, and in these courses, students learn how to formulate research questions and determine what techniques are best used to answer those questions.

These "ways of knowing" the world around us intersect and overlap, and the ideas presented in one area will often inform and transform what we know or think about what we know about the others. Taken as a whole, the breadth requirement is intended to help UW-Madison graduates appreciate the many and complex ways to understand the world around us. By these means, students develop skills that help them make informed decisions in a wide range of political, economic, and social contexts, to think critically about the world, to better understand humanity, and to behave in socially responsible ways

## Communication

## Communication, 3 to 5/6 credits

Communication A (http://gened.wisc.edu/ sites/gened.wisc.edu/files/documents/ CommACriteria-2012.pdf). Literacy Proficiency. 2-3 credits at first-year level dedicated to reading, listening, and discussion, with emphasis on writing. While most incoming freshmen are required to complete course work to fulfill this requirement, students may be exempted from Communication A by approved college course work while in high school, AP test scores, or placement testing. Students are expected to satisfy this requirement by the end of their first year.

Communication B (http://gened.wisc.edu/sites/ gened.wisc.edu/files/documents/CommB\ Fall \%202016\%20Criteria.pdf). Enhancing Literacy Proficiency. 2-3 credits of more advanced course work for students who have completed or been exempted from Communication A. Students should consult with the appropriate undergraduate advisor about when
this requirement should be completed. Courses that satisfy this requirement are offered in many fields of study; although a wide variety of courses fulfill this requirement, students are encouraged to select a course most in keeping with their interests or other requirements of their intended field(s) of study.

## Ethnic Studies

## Ethnic Studies, 3 credits

All students must take one course of at least 3 credits which is designated as an Ethnic Studies course. The ethnic studies requirement is intended to increase understanding of the culture and contributions of persistently marginalized racial or ethnic groups in the United States, and to equip students to respond constructively to issues connected with our pluralistic society and global community. Because this increased understanding is expected to have a positive effect on campus climate, students are encouraged to complete this requirement by the end of their second year. Please note that many ethnic studies courses may also fulfill breadth and other requirements.

Information about criteria and leaning outcomes for ethnic studies courses (http://gened.wisc.edu/ sites/gened.wisc.edu/files/documents/ Criteria_and_Learning_Outcomes_2015.3.15.pdf) can be found on the General Education website (http:// gened.wisc.edu/CoursesNew).

## Quantitative Reasoning <br> Quantitative Reasoning, 3 to 6 credits

Quantitative Reasoning A (http://gened.wisc.edu/ sites/gened.wisc.edu/files/documents/QRCriteria.pdf). Quantitative Reasoning Proficiency. Three (3) credits of mathematics or formal logic. Students may be exempted from Quantitative Reasoning A by approved college work while in high school, AP test scores, or placement testing. Some students, however, may need to complete a prerequisite before enrolling in a Quantitative Reasoning A course. To ensure timely progress to completion of the undergraduate degree, students should complete this requirement by the end of their first year.

Quantitative Reasoning B (http://gened.wisc.edu/ sites/gened.wisc.edu/files/documents/QRCriteria.pdf). Enhancing Quantitative Reasoning Proficiency. Three (3) credits of more advanced course work for students who have completed or been exempted from Quantitative Reasoning A. (Students must satisfy Quantitative Reasoning A before they may go on to Quantitative Reasoning B.) Courses that satisfy this requirement are offered in a variety of fields of study. Students are encouraged to select a course in keeping with their interests or other requirements of their intended field(s) of study.

For more information regarding the UW-Madison General Education Requirements, see General Education Requirements (p. 22).

## GRADUATION AWARDS

## Graduation with Distinction

The award of "Graduation with Distinction" will be noted on the transcript of students who have earned a grade point average that places them within the top $20 \%$ of the students graduating that term in their college/ school provided 60 or more credits have been earned at UW-Madison. The Office of the Registrar performs a preliminary calculation for students declaring intent to graduate and then makes a temporary posting that is included in the program for commencement. However, the final notation of Graduation with Distinction depends upon last term grades, as calculated by the registrar and relative to the performance of all students in that particular graduating class. For more detailed information, see how do I know if I qualify for graduation with distinction or distinction in the major (https:// kb. wisc.edu/ls/page.php?id=22260).

## Distinction in the Major

This award is granted at graduation, upon the recommendation of a department to the dean, to any student not earning the Honors Degree who has done superior work in the major and who has passed a comprehensive examination on that work. The comprehensive examination may be omitted for the student with a 3.500 grade point average in the major who successfully completes special work prescribed by the department. The award is noted on the student's transcript.

## Thesis of Distinction

This award is granted at graduation, upon recommendation of a department to the dean, to any student not earning the Honors Degree who has written an exceptionally good or original thesis, without consideration of the student's record in other work. The chair of the department appoints a committee of at least two members, including the thesis advisor, to read the thesis and make an appropriate recommendation. These theses are retained in the department. The award is noted on the student's transcript.

## LETTERS \& SCIENCE BREADTH

All L\&S undergraduate students are required to fulfill the L\&S Breadth of Exploration in the Liberal Arts and Sciences. The L\&S Breadth includes:

- Humanities : 12 credits (of which 6 credits must be Literature credit)
- Social Science: 12 credits
- Natural Science: 12 credits
- Bachelor of Arts (B.A.) candidates must complete a minimum of one (1) $3+$ credit Biological Science course and one (1) 3+ credit Physical Science course. The additional six (6) credits can be any combination of natural, biological or physical science credits to bring the total to twelve (12) credits.
- Bachelor of Science (B.S.) candidates must complete a minimum of six (6) credits of

Physical Science and six (6) credits of Biological Science.

## LIBERAL ARTS AND SCIENCE CREDITS

Of the minimum 120 credits required for graduation for a B.A. or B.S. degree (General Course) at least 108 credits must be in courses designated as Liberal Arts and Science (LAS) courses. These courses are designated in the Guide (http://guide.wisc.edu/courses) as satisfying this particular requirement. Nearly every course taught in L\&S is designated in this way.

## QUALITY OF WORK REQUIREMENTS

A total of 120 degree credits is required for graduation, with a minimum 2.000 grade point average on all courses taken, whether or not each course is passed.

The quality of work requirements establish a minimum grade point average in four specific areas that must be met to receive a Letters \& Science degree. In order to satisfy these requirements, the student must earn a minimum 2.000 grade point average on all courses carried at UW-Madison, whether passed or not, in these four areas:

1. All courses in the major (or majors);
2. All upper-level courses in the major, as designated by the major department for the 15-credit residence requirement;
3. All courses designated intermediate or advanced;
4. All courses carried for a grade at UW-Madison (cumulative grade point average, as reported by the Registrar Office). Courses carried on a refresher basis (see Repeat of College Courses Not for Credit) are excluded from the grade point average as determined for categories 1, 2, and 3 above. Repeating a failed course will not remove the failure from the student's record or from GPA calculations. This summary of college grade point requirements does not include those for admission to certain majors and special courses within the college or to other colleges and schools within the university, or to honors courses.

## RESIDENCE REQUIREMENTS

## The UW-Madison Experience

In order to receive an undergraduate degree from the College of Letters \& Science, all L\&S students must earn a minimum of 30 degree credits in residence at the University of WisconsinMadison. Credits are considered in residence if they are earned for UW-Madison course work, including courses taken on a UW-Madison-administered study abroad program. Retroactive credits, AP credits, and credits granted by examination are not considered in residence. Courses that do not count as in residence include:

- UW-Extension and other transfer credit
- Courses completed at other UW system schools
- Courses taken abroad through another institution
- AP (Advanced Placement) credit
- Credit by examination
- Retroactive credit

There are no exceptions to the requirement that 30 overall degree credits be taken in residence.

## Senior Residence

The 30 minimum credits a student must earn in residence should be completed in the senior year (after a student has completed 86 degree credits). This requirement intends to ensure that the student's depth of study -- which should occur in more advanced-level courses, within the major, with faculty instruction, and in areas of research -- are uniquely UW-Madison experiences. These credits do not have to be contiguous for the requirement to be met. Because the requirement begins with the 87th credit, students have the flexibility to take four (4) credits out of residence in the senior year without needing to obtain special permission. Exceptions to the senior residence requirement may be granted in cases where a student is in good academic standing (http://guide.wisc.edu/undergraduate/lettersscience/\#policiesandregulationstext) and has a specific need to take fewer than 30 credits in their senior year. Consult an L\&S academic dean (https://saa.ls.wisc.edu/offices/ academic-deans-services) for more information.

L\&S undergraduate students must also complete at least 15 credits in upper-level courses in their major(s) at UWMadison. Refer to major requirements for a specific major to get more information about major residence requirements.

## TOTAL DEGREE CREDITS

To receive an undergraduate degree, students must earn a minimum of 120 degree credits (which includes AP, IB and other test credit, transfer credit, and retroactive credit) for most baccalaureate degrees granted by the College of Letters \& Science. The total credits for the degree includes the University General Education Requirements, L\&S Breadth, major requirements, and also elective credits not associated with any specific requirement, that allow students to explore other areas of academic interest. The requirements for some programs may exceed 120 degree credits. Students should consult with their academic/major advisor and DARS for information on specific credit requirements.

## MAJOR INFORMATION

## ACCEPTANCE INTO A MAJOR

A department, program, or school may specify prerequisites for acceptance into a major, such as a minimum grade point average or completion of particular courses with a minimum grade. Students are responsible for reviewing the quality requirements for a particular major or school, as outlined in the degrees/majors/certificates (p. 320) section of this Guide. Students should consult the department advisor for information. Only the department can make an exception. Students not accepted in a major or special degree program must select a different major.

## COMPLETING A MAJOR OUTSIDE L\&S

L\&S undergraduate students must complete at least one major in the College of Letters \& Science. Students interested in completing an additional major outside the College of

Letters \& Science must first consult the dean's office for the other school or college. If the other school or college approves the additional major, students must consult with an L\&S academic dean to see if this is possible or if they will need to transfer to the other school/college to complete their degree. Students in other schools/colleges on the UWMadison campus (e.g., CALS, Education, etc.) are eligible to complete a major in L\&S without having to complete L\&S degree requirements if they receive permission from an academic dean in their home school/college.

## HOW TO DECLARE AND CANCEL A MAJOR

Students must declare a major through the department or unit administering that program. Students should speak with the advisor for the major/certificate/special degree program to determine their eligibility to declare and the process for declaring the major. If a student does not plan on completing the requirements for a declared major, the student must return to that department or unit office to cancel the major. Currently L\&S undergraduate students may have as many majors as they wish, but they must go to the academic department/ unit administering the major in order to declare each major or cancel any major they do not plan to complete. Additional information can be found at declaring a major (https:// advising.wisc.edu/content/declaring-major).

## MAJOR DECLARATION POLICY

All L\&S undergraduate students are required to declare a major or be admitted into a program before or upon the completion of 86 degree credits (which includes credits from transfer, AP, test, study abroad, or retroactive credits). Students who have not declared by the time they have reached 86 degree credits will have an enrollment hold placed on their records preventing them from registering for future terms. Students who are having difficulty declaring a major should speak with their assigned academic advisor as soon as possible to discuss options available to them.

Major declaration has benefits that are critical to student success. Students with majors:

- Can plan for timely graduation, which uses their resources wisely. Graduating on time lowers the overall cost of education and allows students to pursue their next life goals.
- Connect to the major department, gaining access to departmental advising resources, faculty contacts, and courses limited to majors.
- Connect with other students who are pursuing similar academic interests.
- Get timely and important information about the major (advising hours and workshops, upcoming courses, social events, student groups, speakers, opportunities, etc.).
- "Lock in" major requirements, so if those requirements change, students are held to the rules in place whey they declared.

Declaring a major is an essential part of a student's academic career, and is integral to timely graduation; the great majority of students do declare their majors by the time they earn 86 credits. This policy is intended to help undeclared students
reach out to advisors so they find majors that suit their talents and interests. This policy is also intended to make the best use of both student and university resources, and to help students and their advisors create a plan for academic success and timely graduation.

## RESIDENCE REQUIREMENT IN THE MAJOR

All students, especially those students who participate in UWMadison sponsored Study Abroad programs, must complete a minimum of 15 credits, at any level, in their major or major department, in courses taken on the UW-Madison campus. These credits may not include retroactive credit (retrocredits) or credit earned by department examination.

## UPPER-LEVEL WORK IN THE MAJOR

All students must complete in residence a minimum of 15 credits of major course work defined as "upper-level" by the major department or program. (Please see the section on Residence Requirements (https://saa.ls.wisc.edu/policies-forms/residence-requirement-30-credit-rule) for additional information about credits taken "in residence.") Furthermore, students must earn a minimum 2.000 grade point average on all upper-level work taken in the major, in residence.

## REQUIREMENTS

Students pursuing an undergraduate degree in Letters \& Science must complete the University General Education Requirements (GER) (p. 22) and the following L\&S requirements:

| Code Title Credits |
| :--- |
| Foreign Language |
| Mathematics |
| Breadth |
| Depth |
| Major Study |
| Requirements that apply to all majors |
| Acceptance as a major |
| Mastery of intermediate/advanced work |
| Residence requirement in the major |
| Residence requirements |
| Quality of work requirements |

## FOREIGN LANGUAGE

The study of a foreign language contributes in an important way to a broad education for today's students, who live in a world where the overwhelming majority of people do not speak or read English and where much of the knowledge that is disseminated may never appear in English. Knowledge of a foreign language is important for an appreciation of the culture of the people using that language, and it also helps students to understand the structure and complexities of their own native language. Students with sufficient preparation may be able to use the foreign language for study in their chosen discipline.

To be admitted to the University of Wisconsin-Madison, students must have completed the second-year level of a single foreign language (or American Sign Language) in high school. On extremely rare occasions, students may be admitted with a foreign language
deficiency, but they will be required to make up that deficiency by the time they earn their 60th degree credit, or they will not be allowed to continue.

## All students working for a B.A. or B.S. degree in the College of Letters \& Science must fulfill the foreign language

 requirement. Students with certain disabilities may apply for a substitution to the foreign language requirement by submitting required documentation to the L\&S Disabilities Curricular Accommodations Committee (DCAC) for review.
## B.A. Degree

For the B.A. degree, the foreign language requirement may be met in one of two ways: (1) completion of the fourth unit (level) in one language, or (2) completion of the third unit (level) in one language and completion of the second unit (level) in another language. For example, a student can satisfy the B.A. foreign language degree requirement if $s / h e$ :

- completed 4 units (years) of one high school language (e.g., French, German, etc.), OR
- completed the 4th unit of a college language course (e.g., AFRICAN 334, GERMAN 204, SLAVIC 208, etc.), OR
- completed 2 units (years) of one high school language (e.g., Spanish) and the 3rd unit/ semester of a second foreign language (e.g., GERMAN 213, ITALIAN 203, etc.) at the college level, OR
- completed 3 units (years) of one high school language (e.g., Chinese) and the 2nd unit/ semester of a second foreign language (e.g., E ASIAN 106, GERMAN 102, SLAVIC 112, etc.) at the college level


## B.S. Degree

For the B.S. degree, the foreign language requirement may be met by completion of the third level (unit) of a foreign language in high school, or the equivalent third-semesterlevel college work. For example, a student can satisfy the B.S. foreign language degree requirement if $s /$ he has:

> - completed 3 units (years) of one high school language (e.g., French, Spanish, etc.), or
> - completed the 3rd unit/semester of one college-level language (e.g., AFRICAN 333, FRENCH 203, SPANISH 203, etc.)

## Foreign Language Substitution

The Foreign Language Substitution package (FLSP) is for degree-seeking candidates in the College of Letters \& Science (L\&S) only who are seeking to fulfill the L\&S foreign language requirement and also have a documented disability in foreign language acquisition.

## What is a Foreign Language Substitution?

The Foreign Language Substitution Package is designed to fulfill the College of Letters \& Science faculty's intention in requiring foreign language as a part of the college curriculum. Specifically, the Foreign Language Substitution Package, like the foreign language requirement, provides students with information about language in general as well as the literature
and culture of the people using a particular language. Courses used to meet the substitution must be approved by the designated academic dean in L\&S Undergraduate Academic Deans' Services (http://saa.Is.wisc.edu/deansservices.htm) (110 Ingraham Hall (http://www.map.wisc.edu/? initObj=0056\&wing=)). Classes used for the substitution package cannot be used to fulfill any of the following requirements:

- Major requirements
- Breadth (humanities, literature, social science, science)
- Ethnic studies
- General Education Requirements (Comm A, Comm B, QR-A, QR-B)


## How do I qualify for a Foreign Language Substitution?

The Disabilities Curricular Accommodations Committee (DCAC) of the College of Letters \& Science can approve a substitution to the foreign language requirement for students in Letters \& Science only with certain disabilities that make a course substitution appropriate. Extensive and very specific documentation is required from students and disability specialists. Further information may be obtained from the L\&S Undergraduate Academic Deans' Services (http://saa.ls.wisc.edu/foreign-language-substitution-package.htm) (Room 110, Ingraham Hall, at 1155 Observatory Drive; 608-262-0617) or the McBurney Disability Resource Center (https:// mcburney.wisc.edu)(702 West Johnson Street; 608-2632741).

Note that an appointment at the McBurney Center is required before submitting the application. This appointment should be made no less than one semester/term prior to applying for the substitution package. McBurney Center staff will help you determine what documentation is necessary for the application, as well as assess whether additional testing is required.

After meeting with a McBurney Center staff member, a student should fill out and complete an application for the substitution package. The deadline to submit a completed copy is at the end of the fourth week of the fall and spring terms. Applications are not accepted during the summer term. All students who submitted a completed application by the deadline should hear back from the Disabilities Curricular Accommodations Committee (DCAC) regarding the status of their application within six to eight weeks after the deadline.

## Please make sure you submit your original completed

 application and also four (4) additional copies of your completed application to Suite 110 Ingraham Hall at 1155 Observatory Drive before 4:00 p.m. on Friday of the deadline. (The deadline to submit a completed application for consideration is the end of the 4 th week of the fall and spring terms.) A completed application must include five (5) copies of each of the five items below:1. High school transcript and transcripts from other post-secondary institutions you may have attended prior to UWMadison (you will need to contact original high school or other institution of higher learning for these records if you do not have copies)
2. UW-Madison transcript
3. Copy of your most recent DARS (Please go to your My UW and access the Student Center to request a DARS.)
4. Student application form (see p. 7 of Foreign Language Substitution Package application located at Foreign Language Substitution Package (http:// saa.ls.wisc.edu/foreign-language-substitution-package.htm))
5. Copy of McBurney Center VISA (Verified Individual Services and Accommodations) plan if student has one
6. Other relevant and current disability documentation assembled in consultation with McBurney Center staff

## What are the requirements for a Foreign Language Substitution?

1. General Language: If approved for an L\&S foreign language substitution package, both B.A. and B.S. degree candidates must complete one (1) course having to do with language in general (selected from an approved list of classes). If a student's official UWMadison records has at least one unit (year) of a high school foreign language, this requirement is fulfilled. If a student has not taken a foreign language in high school, please select one (1) course from either $a, b$, or c listed below:
a. LINGUIS 101 (Linguistics)
b. CS\&D 240 (Communication Sciences \& Disorders)
c. ENGL 201, ENGL 207, ENGL 304, ENGL 307, ENGL 400, ENGL 407, ENGL 408, ENGL 409 (English)
2. Cultural Context:
B.A. students must complete the following:

Three (3) courses related to a country, region, or a group of countries sharing a common language in the following areas:
a. Literature
b. History or Culture
c. General elective

- If a student has a second unit (year) in the same high school foreign language, it can fulfill the History or Culture (b) requirement for the B.A. degree. Students must then also take a Literature course and General elective in the same language area to complete the requirement. If a student has not taken a foreign language in high school, please must complete items $\mathrm{a}, \mathrm{b}$, and c above. All coursework
taken for the foreign language substitution package must be approved by an academic dean in L\&S Undergraduate Academic Deans' Services (http:// saa.Is.wisc.edu/deans-services.htm).
B.S. students must complete the following:

Two (2) courses related to a country, region, or a group of countries sharing a common language in the following areas:
a. Literature
b. History or Culture

- If a student has a second unit (year) in the same high school foreign language, it can fulfill the History or Culture (b) requirement for the B.S. degree. Students pursuing a B.S. must also take a Literature course in the same language area to complete the requirement. If a student has not taken a foreign language in high school, please must complete items $a$ and $b$ above. All coursework taken for the foreign language substitution package must be approved by an academic dean in L\&S Undergraduate Academic Deans' Services (http:// saa.Is.wisc.edu/deans-services.htm).


## What are my responsibilities as a student to complete the Foreign Language Substitution?

Students must submit five (5) copies of all required materials to the Disabilities Curricular Accommodations Committee in L\&S Academic Deans' Services (Suite 110 Ingraham Hall, 1155 Observatory Drive, 608-262-0617) by the end of the fourth (4th) week of the semester (fall or spring semester) in which they would like to present their case for review. Applications are not accepted or reviewed during the summer.

Completed applications will be reviewed approximately six (6) weeks after the official deadline. Students will then be notified shortly after the Disabilities Curricular Accommodations Committee meets regarding the results. Students who are approved for a foreign language substitution package must make an appointment to speak with an academic dean in L\&S Undergraduate Academic Deans' Services (110 Ingraham Hall; 608-262-0617) to talk about the next steps they will need to take in order to complete their substitution package. Students will not be able to complete their approved foreign language substitution package until they have met with an academic dean to select the appropriate courses they need to fulfill this requirement.

Students who have not been previously diagnosed as learning-disabled or hearing-impaired should plan three to four months to schedule required testing and to receive results and interpretation of the testing.

Contact the McBurney Disability Resource Center (http://www.mcburney.wisc.edu) for current information about the tests required. Results of the specified tests taken within the previous four years are acceptable; retesting is required if test results are not at least this current.

For persons with a hearing loss, certain criteria must be met to apply for a substitution to the foreign language requirement. Contact the McBurney Disability Resource Center for details.

## MATHEMATICS

Mathematics is a principal tool of knowledge. Algebra and geometry provide the minimum of mathematics skills that an educated person needs in today's world, and competence in these areas is required for admission to the university. Since mathematics underlies quantitative work in all sciences, and the level of mathematical background required has been steadily increasing in most areas of science, the L\&S math requirements should be viewed as minimums. Please note that some majors require additional work in mathematics.

New freshmen (first-year students) and transfer students who do not meet satisfactory minimal competencies in mathematics upon admission or whose mathematics placement test scores place them in MATH 96 must begin to take remedial course work in mathematics during their first or second semester and continue each semester thereafter, if necessary, until they have satisfactorily completed the mathematics proficiency requirement. Students who do not accomplish this will need to obtain permission to continue in the College of Letters \& Science.

Both B.A. and B.S. degrees require that students satisfy minimum math competency by having completed the three units of math required for admission. A unit is one year of high school work or one semester of college work. This will ordinarily include one unit each of high school algebra, geometry, and an additional unit of mathematics. High school courses in general mathematics or business mathematics will not satisfy the minimum math competency.

## B.A. Degree

For the B.A. degree, no additional math is required beyond completion of the university's General Education Quantitative Reasoning $A$ and $B$ requirements. However, certain L\&S majors may require students to do additional math coursework even though students are pursuing a B.A. degree.

## B.S. Degree

The B.S. degree requires an additional two courses at the intermediate level in mathematics, computer sciences, or statistics. If this work is taken on the college level, it must be at least a 3-credit course and must be taken in the departments of Mathematics (http://guide.wisc.edu/courses/ math), Computer Sciences (http://guide.wisc.edu/courses/ comp_sci), or Statistics (http://guide.wisc.edu/courses/ stat) only. Courses in sociometrics (e.g., SOC/C\&E SOC 360, SOC/C\&E SOC 361, etc.), econometrics (e.g., ECON 310), psychometrics (PSYCH 210), etc. do not count toward the B.S. degree mathematics requirement. Only one (1) course in Computer Science (COMP SCI) and only one (1) course in Statistics (STAT) may be counted toward the BS mathematics requirement.

## BREADTH

## Ways of Knowing

At the heart of any degree in the liberal arts and sciences is an active understanding of the variety and breadth of the many scholarly approaches to knowing the world. Every student in the College of Letters \& Science experiences significant exposure to
three principal fields of knowledge: the arts and humanities, the social sciences, and the natural sciences. These broad fields of knowledge are not the same as the areas of depth that we call "majors." In fact, any particular major-or even a particular course within a major-might well involve more than one of these fields of knowledge. (For example, imagine a seminar on "people and the environment" that combines historical background, research on social patterns of energy use, and scientific understandings of climate.) Working together, each of these three fields of knowledge represents a particular "way of knowing" about the world around us.

## Arts and Humanities

Courses in the arts and humanities involve knowing the world through the production and analysis of artistic, literary, and scholarly work. Some courses examine the fine and performing arts, or literature, presenting students with opportunities to interpret and think critically about these creative expressions of the human condition. Other courses help students to understand and compare religious and philosophical conceptions of humankind. Still other courses take on historical subjects, focusing on moments of change and periods of continuity for the peoples and regions of the world. These courses all encourage students to analyze the range of creative and cultural artifacts, expressions, and ideas of human existence-history, literature, art, culture, folklore-and to use that information to better understand humanity and to cultivate civic and social responsibility.

## Social Sciences

Courses in the social sciences involve knowing the world through the systematic study of human society, interactions, and institutions. The social sciences explore these issues from a wide range of perspectives and research techniques, both quantitative and qualitative. Through these courses students learn how to formulate research questions and determine what techniques are best used to answer those questions-for example, exploring ideas and developing theories, conducting surveys and building models, or observing and participating in social life itself. Developing such analytical skills assists students as they approach complex problems and seek to solve them in both the workplace and the community.

## Natural Sciences

Courses in the natural sciences involve knowing the world through scientific inquiry-assembling objective information that can be used to explain observed natural phenomena in a way that is thorough and verifiable. The natural sciences are often divided into the physical sciences (dealing with matter and energy, or the study of the earth, atmosphere, and oceans) and the biological sciences (dealing with life and living systems, like plants, animals, and environments). These courses often contain laboratory components that allow students to gain firsthand experience in scientific research methods. By completing this requirement, science and non-science majors alike will gain an appreciation for science as a way of systematically looking at the natural world, understanding how this process can be used to inform decision-making in a wide range of political, economic, and social contexts.

Together, these broad "ways of knowing" give students a complementary set of tools for seeing, imagining, and asking questions about the world-tools that enhance creative problem solving no matter what the field. And, because twenty-first-century knowledge is not neatly compartmentalized, it is worth noting that these areas of study intersect and overlap; courses in some
areas draw upon strategies used in the others. Experiences in "breadth" courses can be life-changing: we frequently hear that a course taken to fulfill a breadth requirement introduced someone to a subject that became a new major, a new way of looking at a current major, or a lifelong interest. For more information, visit the KnowledgeBase help document (https://kb.wisc.edu/ls/page.php? id=27031).

A liberal education involves not only the nature and kinds of knowledge but also the purpose for which knowledge should be used. These considerations are embodied in the breadth or distribution requirement and call for knowledge in several fields of learning. The purpose of this breadth requirement is to ensure that a degree candidate will obtain an understanding of approaches in the humanities, social sciences, biological sciences, and physical sciences adequate for use both as a citizen and as a specialist.

## Breadth Requirements

The L\&S breadth requirement is met with 36 credits in the three broad areas of knowledge: humanities, social sciences, and natural sciences. (This may include courses beyond the elementary level in mathematics, computer sciences, and statistics.)

Courses that carry L\&S breadth credit are expected to broaden significantly a student's understanding of the world and a general disciplinary approach to problems studied, questions asked, modes of inquiry undertaken to answer those questions, analysis of research findings, communication about results, and implications for further study and/or action. Many courses in L\&S carry a breadth designation; however, some types of courses may not convey breadth.

## B.A. Degree

Humanities: Students are required to complete 12 credits in the humanities, 6 of which must be in literature. Look in the courses (http://guide.wisc.edu/courses) section of the Guide under Course Designation for course qualifications.

Social Sciences: Students are required to complete 12 credits in social sciences. Look in the courses (http:// guide.wisc.edu/courses) section of the Guide under Course Designation for course qualifications.

Natural Sciences: Students are required to complete 12 credits in natural sciences. Students must take at least one 3+ credit course in physical science AND one 3+ credit course in biological science. The additional six (6) credits can be any combination of natural, biological or physical science credits to bring the total to twelve (12) credits. Look in the courses (http://guide.wisc.edu/courses) section of the Guide under Course Designation for course qualifications.

## B.S. Degree

Humanities: Students are required to complete $\mathbf{1 2}$ credits in the humanities, 6 of which must be in literature. Look in the courses (http://guide.wisc.edu/courses) section of the Guide under Course Designation for course qualifications.

Social Sciences: Students are required to complete 12 credits in social sciences. Look in the courses (http:// guide.wisc.edu/courses) section of the Guide under Course Designation for course qualifications.

Natural Sciences: Students are required to complete 12 credits in natural sciences. Students must complete 6 credits in physical science AND 6 credits in biological science. Look in the courses (http:// guide.wisc.edu/courses) section of the Guide under Course Designation for course qualifications.

## DEPTH: UNDERSTANDING A FIELD OF STUDY (MAJOR)

The process of declaring and completing a major-often, but not always, attached to a particular university department-provides students with an opportunity to concentrate on an in-depth investigation of at least one subject or issue, putting their tools for learning and ways of knowing to focused use. This intensive understanding of one topic helps students to appreciate the potential depth of the others. A student's work in the major reflects a continuing progression of skills, knowledge, and values, where advanced learning opportunities in upper-level coursework grow from and expand upon earlier experiences, helping students build additional depth in writing, speaking, information literacy, and critical thinking skills from the perspective of a particular discipline. In senior capstone or independent research projects, students are frequently asked to synthesize what they have learned and apply it in a variety of new situations. By the conclusion of their studies, students in the major are better able to understand themselves and their society, to develop their intellectual powers outside of a University setting, and to make productive contributions to the world around them. (See list of L\&S majors (p. 320).)

## MAJOR STUDY

Every candidate for an L\&S baccalaureate degree must satisfy a depth requirement encompassing a specified and approved major field of study. Students may elect a department major, a major in a recognized interdisciplinary program, or may develop an individual major if approved by a faculty review committee. Students in Letters \& Science may not complete the depth requirement with any department or program outside the college, except for the departments of Biochemistry, Environmental Sciences, and Microbiology. These departments are the only exceptions.

All L\&S undergraduate students are required to declare a major by the time they have earned 86 degree credits. Students who do not declare a major by the appropriate time will have an enrollment hold placed on their records so they cannot enroll in future terms.

1 All L\&S undergraduate students are required to declare a major or be admitted into an L\&S special degree program upon the completion of 86 credits (including credits from transfer, AP, test, study abroad, or retroactive credits).

Students have three choices in meeting the depth requirement in the College of Letters \& Science:

1. Single Major
2. Multiple Majors
3. Individual Major

## Single Major

Students may fulfill the requirements of a single major as outlined in the descriptions of the various L\&S majors (p. 320).

## Multiple Majors

All students may satisfy the requirements for more than one major, either department and/or interdisciplinary major, and have this fact noted on the transcript and other university records.

Students may complete one or more established majors and one individual major if approved by a faculty review committee. No student may earn more than one individual major. Students completing two or more majors may count courses crosslisted in each major department in partial satisfaction of the requirements for each major.

Individual Major (p. 1063)

## REQUIREMENTS THAT APPLY TO ALL MAJORS

## Major Declaration Policy

Policy
All L\&S undergraduate students are required to declare a major or be admitted into a program before or upon the completion of 86 credits (including transfer credits, AP, test credits, study abroad, or retroactive credits). Any student pursuing undergraduate studies in Letters \& Science must declare at least one (1) major in L\&S in order to graduate.

Major declaration has benefits that are critical to student success. Students with majors:

- Can plan for timely graduation, which uses their resources wisely. Graduating on time lowers the overall cost of education and allows students to pursue their next life goals.
- Connect to the major department, gaining access to departmental advising resources, faculty contacts, and courses limited to majors.
- Connect with other students who are pursuing similar academic interests.
- Get timely and important information about the major (advising hours and workshops, upcoming courses, social events, student groups, speakers, opportunities, etc.).
- "Lock in" major requirements, so if those requirements change, students are held to the rules in place whey they declared.

Declaring a major is an essential part of a student's academic career, and is integral to timely graduation; the great majority of students do declare their majors by the time they earn 86 credits. This policy is intended to help undeclared students reach out to advisors so they find majors that suit their talents and interests. This policy is also intended to make the best use of both student and university resources, and to help students and their advisors create a plan for academic success and timely graduation.

## How to Declare and Cancel a Major

Students must declare a major through the department administering that program. Students should request a Major/Certificate Declaration form from the academic department/unit administering the major. This form should be completed by the student and left at the department office administering the major. If a student decides to change his/ her major later, the student should return to that department office and cancel his/her major. Students may have as many majors as they wish, but they must complete the Major/

Certificate Declaration form for each major and cancel any major they feel they cannot complete.

## Mastery of Upper-Level Work in the Major

All students must complete in residence a minimum of 15 credits of major course work defined as "upper-level" by the major department or program. (Please see the section on Residence Requirements below for additional information about credits taken "in residence.") Furthermore, students must earn a minimum 2.000 grade point average on all upperlevel work taken in the major, in residence.

## Residence Requirement in the Major (also known as the "Study Abroad Stipulation")

All students, especially those students who participate in UW-
Madison sponsored Study Abroad programs, must complete a minimum of 15 credits, at any level, in their major or major department, in courses taken on the UW-Madison campus. These credits may not include retroactive credit or credit earned by department examination.

## Advising

Questions about choosing a major can be discussed with department advisors and faculty, academic deans, members of L\&S Undergraduate Academic Services and the L\&S Honors Program office, and with the Cross-College Advising Service staff. For additional information about advising, see the description of L\&S advising programs (p. 355).

## Completing a Major Outside L\&S

L\&S students must complete at least one major in the College of Letters \& Science to satisfy the depth requirement. Students interested in completing an additional major outside the College of Letters \& Science must first consult the dean's office for the other school or college. If the other school or college approves the additional major, students must consult with an L\&S academic dean to get permission to pursue a second major outside L\&S.

## Total Degree Credits: 120

A minimum of 120 degree credits is required for most baccalaureate degrees granted by the College of Letters \& Science. The total credits for the degree encompass the requirements detailed above, but also include elective credits not associated with any specific requirement, that allow students to explore other areas of academic interest. The total credit requirement for some special programs is more than 120 degree credits. The college allows degree credit, as well as placement credit, for the mastery of some L\&S course work as demonstrated by successfully completing appropriate tests. (See Credit by Departmental Examination (p. 9)).

## Liberal Arts and Science Credits: 108

Of the minimum 120 credits required for graduation for a B.A. or B.S. degree (General Course) at least 108 credits must be in courses designated as Liberal Arts and Science (LAS) courses. These courses appear in the Guide as L\&S credit and can be identified by looking at the course designation section for a course in the Guide (http://guide.wisc.edu/courses). Nearly every course taught in L\&S is designated in this way.

## Non-L\&S Courses and L\&S Degree Credit

Liberal Arts and Science ("C") Courses. The College of Letters
\& Science has long recognized that courses offered by other
units of the university provide valuable and appropriate learning experiences for students pursuing a degree offered by the college. The college has approved many of these courses for L\&S students to take for degree credit, and after careful review, has determined that these courses are Liberal Arts and Sciences (LAS) courses. These courses appear in the Guide as L\&S credit and can be identified by looking at the course designation section for a course in the Guide (http://guide.wisc.edu/courses). Courses designated as liberal arts and science courses count toward the L\&S degree requirements, including requirements related to breadth and level.

Non-L\&S Courses Crosslisted with L\&S Departments. A course offered in the College of Letters \& Science that counts as L\&S credit and which is crosslisted with a department in another school or college is considered a Liberal Arts and Science course. These courses appear in the Guide as L\&S credit and can be identified by looking at the course designation section for a course in the Guide (http://guide.wisc.edu/courses). As L\&S credits, they may be counted as part of the major and count as part of the 108 Liberal Arts and Science credits required for an L\&S degree.

Non-L\&S Courses Required for L\&S Majors. Courses taught in departments located in schools or colleges other than L\&S, but which are required for completion of an L\&S major, are considered Liberal Arts and Science courses. Such courses will either carry the L\&S credit designation in the Guide (http://guide.wisc.edu/courses), or their Liberal Arts and Sciences status will appear in the DARS degree audit. In both cases, these courses count as part of the 108 L\&S credits required for a degree.

Free Electives in the Degree. If a student so chooses, he or she may count for degree credit up to twelve (12) credits "freely chosen" from many non-L\&S, UW-Madison-approved courses. These courses are referred to as "free electives in the degree." These courses may be selected from any UW-Madison subject listing in the Guide (http:// guide.wisc.edu/courses), and are not designated as courses in the Liberal Arts and Sciences, or L\&S credit courses.

## Credit earned in these courses apply to the degree requirements in the following ways:

- Courses taken as free electives in the degree may be carried and will appear on the transcript showing credits, grade, and grade points.
- These credits will count as part of the semester load and will count toward satisfaction of the minimum progress requirements.
- These credits and grade points will be included in calculating a student's semester and cumulative grade point average.
- Free electives in the degree cannot be used to satisfy the L\&S requirement that students complete a substantial portion of their degree credits in intermediate and advanced work (see the section Mastery of Intermediate/Advanced Work below).
- Courses that are taught in L\&S departments but not designated as Liberal Arts and Science courses (e.g., Music and Music Performance courses numbered 099 and below) may be counted for credit as free electives in the degree. (For B.A./B.S. Music majors,

Music and Music Performance courses numbered 099 and below that are not required for the major may be counted as free electives.) Students with questions regarding a particular course offered by a school or college outside L\&S as it relates to the requirement to complete 108 Liberal Arts and Science credits should consult an academic dean before registration.

## ACCEPTANCE AS A MAJOR

A department, program, or school may specify prerequisites for acceptance into a major, such as a minimum grade point average or completion of particular courses with a minimum grade. Students are responsible for reviewing the quality requirements for a particular major or school as outlined under the L\&S majors (p. 320) section of the Guide. Students should consult the department advisor or the school or college dean's office for information. Only the department or school can make an exception. Students not accepted in a major or school must select a different major.

## MASTERY OF INTERMEDIATE/ADVANCED WORK

All L\&S courses and those taught outside L\&S and approved for L\&S degree credit are designated by departments as elementary, intermediate, or advanced. A minimum of 60 credits must be earned in courses designated by the departments as intermediate or advanced, with a grade point average of 2.000 on all courses carried whether passed or not. The purpose of this requirement is to encourage students to undertake advanced work to the greatest possible extent and to insure that they will achieve greater sophistication and a deeper mastery of subject matter as they advance through the baccalaureate curriculum. Credits earned in courses taken as free electives in the degree cannot be used to meet this requirement.

## RESIDENCE REQUIREMENT IN THE MAJOR

All L\&S undergraduate students must complete 15 degree credits of upper-level work in their major in residence. Credits are considered in residence if earned in a UW-Madison degree credit course, including those taken on a UW-Madison study abroad program. Transfer credit, courses completed at other UW System schools, UW Extension courses, or courses taken abroad through a nonresidence program are not considered in residence. Upper-level courses are classes determined by the major program/department to be in-depth within the context of that particular major.

## RESIDENCE REQUIREMENTS

The UW-Madison Experience. In order to receive an undergraduate degree from the College of Letters \& Science, all L\&S students must earn a minimum of 30 degree credits in residence at the University of Wisconsin-Madison. Credits are considered in residence if they are earned for UW-Madison course work, including courses taken on a UW-Madison-administered study abroad program. Retroactive credits, AP credits, and credits granted by examination are not considered in residence. Courses that do not count as in residence include:

- UW-Extension and other transfer credit
- Courses completed at other UW system schools
- Courses taken abroad through another institution
- AP (Advanced Placement) credit


## - Credit by examination <br> - Retroactive credit

There are no exceptions to the requirement that 30 overall degree credits be taken in residence.

Senior Residence Rule. The 30 minimum credits a student must earn in residence should be completed in the senior year (after a student has completed 86 degree credits). This requirement intends to ensure that the student's depth of study -- which should occur in more advanced-level courses, within the major, with faculty instruction, and in areas of research -- are uniquely UWMadison experiences. These credits do not have to be contiguous for the requirement to be met. Because the requirement begins with the 87 th credits, students have the flexibility to take four (4) credits out of residence in the senior year without needing to obtain special permission. Exceptions to the senior residence requirement may be granted in cases where a student is in good academic standing (http://guide.wisc.edu/undergraduate/letters-science/ \#policiesandregulationstext) and has a specific need to take fewer than 30 credits in their senior year. Consult an L\&S academic dean (https://saa.ls.wisc.edu/offices/academic-deans-services) for more information.

L\&S undergraduate students must also complete at least 15 credits in upper-level courses in their major(s) at UWMadison. Refer to major requirements for a specific major to get more information about major residence requirements.

## QUALITY OF WORK REQUIREMENTS

A total of 120 degree credits is required for graduation, with a minimum 2.000 grade point average on all courses taken, whether or not each course is passed.

The quality of work requirements establish a minimum grade point average in four specific areas that must be met to receive a Letters \& Science degree. In order to satisfy these requirements, the student must earn a minimum 2.000 grade point average on all courses carried at UW-Madison, whether passed or not, in these four areas:

1. All courses in the major (or majors);
2. All upper-level courses in the major, as designated by the major department for the 15 -credit residence requirement;
3. All courses designated intermediate (I) or advanced (A);
4. All courses carried for a grade at UW-Madison (cumulative grade point average, as reported by the registrar). Courses carried on a refresher basis (see Is it possible to retake a course that I have already passed or received degree credit (https:// kb.wisc.edu/ls/page.php?id=21934)) are excluded from the grade point average as determined for categories 1,2 , and 3 above. Repeating a failed course will not remove the failure from the student's record or from GPA calculations. This summary of college grade point requirements does not include those for admission to certain majors and special courses within the college or to other colleges and schools within the university, or to honors courses.

## FOUNDATIONS: TOOLS FOR LEARNING

For all UW-Madison undergraduates, these learning experiences begin with students satisfying the university's General Education Requirements-usually by taking courses taught within the College of Letters \& Science. These common foundations cover key topics which are necessary for any undergraduate major and any prospective career. oral and written communication; mathematical and logical reasoning; and the diversity of cultures within global society.

In addition to these university-wide requirements, all L\&S students must attain knowledge of a foreign language, in work that combines training in both communication and culture, so students may better understand and participate in the global community of the twenty-first century. Together, these "tools for learning" may be acquired through many different courses taught by many different departments. The key is that they are never taught in isolation, but always considered together with broad exposure to various "ways of knowing" from the arts and humanities, the natural sciences, and the social sciences. (For more on the General Education Requirements, see Requirements for Undergraduate Study (p. 22); (http://www.ls.wisc.edu/gened) for more on the L\&S requirements, see Letters \& Science Degrees (p. 348).)

## LETTERS \& SCIENCE DEGREES

The College of Letters \& Science offers two basic degrees for students in the General Course and five other degrees for students in special programs. Students in the General Course, regardless of major, may earn either a Bachelor of Arts or a Bachelor of Science degree. The special degrees are: Bachelor of Science-Applied Mathematics, Engineering, and Physics (AMEP); Bachelor of Arts-Journalism or Bachelor of ScienceJournalism; Bachelor of Landscape Architecture; Bachelor of Music; and Bachelor of Social Work. (For details, see sections for AMEP (p. 1077), Journalism (p. 1222), Landscape Architecture (p. 1188), Music (p. 1100), and Social Work (p. 1230) in the L\&S section of this Guide.) Students who have multiple majors in L\&S earn only one undergraduate degree.

Honors degrees may be earned in all of the above (except for Landscape Architecture) upon completion of the L\&S Honors Program. See L\&S Honors Program (p. 358) for more information. Majors completed in the General Course and for the Bachelor of Music degree will be posted on the transcript.

## RESOURCES

## ADVISING IN LETTERS \& SCIENCE

Academic advising is an essential component of undergraduate education, and the college's commitment to providing quality advising for undergraduates is reflected in the many advising programs it offers. Students who have not yet declared a major are assigned an advisor in L\&S Academic Advising Services Services or the Cross-College Advising Service (see below). Students who have declared a major are assigned an advisor in their department or program.

All of the advising programs share the goal of assisting students in making responsible, informed decisions as they develop educational plans compatible with their potential, their interests, and their career and life ambitions. Advisors provide much more than information about course selection and academic programs; they encourage students to ask questions about the nature and direction of their learning, and they work with students to find meaningful answers to those questions. Advising involves a process in which students learn to think critically
about the variety of options available to them and develop decisionmaking skills that will enable them to choose wisely. As adults, students themselves, however, must assume primary responsibility for choosing their academic program and making progress toward their degree.

## ACADEMIC ADVISING SERVICES (AAS)

Letters \& Science Academic Advising Services provides advising to predeclared Letters \& Science (L\&S) undergraduate students who intend to complete a specific L\&S degree and major.

We assist and support students in exploring their educational goals, learning about academic requirements, navigating the university structure, and progressing toward degree completion.

Contact Information<br>Academic Advising Services (http://advising.Is.wisc.edu)<br>101 Ingraham Hall<br>1155 Observatory Drive<br>Madison, WI 53706-1319<br>Send us an email (acac@saa.ls.wisc.edu)<br>Tel: 608-262-5858

## CROSS-COLLEGE ADVISING SERVICES (CCAS)

Advisors at the Cross-College Advising Service (CCAS) provide personalized advising to help you develop a plan for choosing your major and exploring careers. We are here to help you make decisions about what to major in and also answer your general questions about academics and life on campus.

We'll meet you at SOAR, and after that help you plan your future courses, talk about your academic interests and options, and refer you to other helpful campus resources. We're also here to encourage you when things are going well, as well as support you when times are difficult.

## Contact Information

Cross-College Advising Services (https://ccas.wisc.edu)
10 Ingraham Hall
1155 Observatory Drive
Madison, WI 53706
Send us an email (ccas@ccas.wisc.edu)
Tel: 608-265-5460

## CENTER FOR ACADEMIC EXCELLENCE (CAE)

The College of Letters \& Science Center for Academic Excellence (CAE) provides an enriching, inclusive community and academic support for L\&S students who have been historically underrepresented in higher education, including first-generation and low-income students, and students of color. CAE offers a variety of engagement opportunities, including high-touch advising, tutoring programs, health and wellness events, social events, graduate school preparation, and connections with High Impact Practices. CAE also assists in campus-wide efforts to fully integrate diverse voices into the university community to facilitate a welcoming, responsive, and validating campus climate for our students.

## Contact Information

Center for Academic Excellence (https://cae.Is.wisc.edu)
B47 Bascom Hall
Madison, WI 53706
Send us an email ( cae@saa.Is.wisc.edu)
Tel: 608-263-5068

## HONORS

The L\&S Honors Program (p. 358) attracts some of UW-Madison's most talented undergraduates who challenge and learn from each other while working closely with faculty members. By bringing students and professors closer together in small classes and individual research settings, the Honors Program fosters a feeling of community even as students push themselves to explore the very frontiers of knowledge. In addition to traditional course work, most Honors students pursue research projects of their own, and many find this experience so exciting that they go on to earn advanced degrees in the nation's best graduate and professional schools.

Contact information<br>L\&S Honors Program (https://honors.Is.wisc.edu)<br>Washburn Observatory<br>1401 Observatory Drive<br>Madison, WI 53706-7116<br>Send us an email (honors@honors.Is.wisc.edu)<br>Tel: 608-262-2984

## MAJOR ADVISING

Students who are eligible to declare their major should do so as soon as possible. All L\&S undergraduate students are expected to declare their major(s) by the time they have earned 86 degree credits. All declared students will be advised by the advisor connect with their particular major/program. For more information about advising in the major, refer to the advising and careers tab for each major/special degree program under the L\&S Degrees/Majors/Certificates (p. 320) section of the Guide.

## OTHER ACADEMIC RESOURCES <br> L\&S UNDERGRADUATE ACADEMIC DEANS' SERVICES

Academic deans provide up-to-date information on college policies, procedures, and deadlines; campus resources; and degree requirements. Academic deans also offer limited academic advising and make decisions regarding exceptions to college policy. They work closely with advising staff in L\&S Academic Advising Services, department advisors, and other student service personnel on the UW-Madison campus. In an institution as diverse as the University of Wisconsin-Madison, students have a wide range of values, interests, and skills.
Moreover, as they progress through an academic program, their questions and concerns often change. Therefore, students are encouraged to seek the help of several different types of academic advisors during their years on campus. The university provides a system of staff and faculty advisors to address these ongoing and changing concerns.

## Contact Information

L\&S Undergraduate Academic Deans' Services (https:// saa.ls.wisc.edu/offices/academic-deans-services)
110 Ingraham Hall (http://www.map.wisc.edu/?
initObj=0056\&wing=)
1155 Observatory Drive
Madison, WI 53706-1319
Send us an email ( Isdeans@saa.Is.wisc.edu)
Tel: 608-262-0617

## ADVISING IN THE MAJOR

Juniors, seniors, and any other students who are preparing for, or have declared, a major or are contemplating a major in the College of Letters and Science, are encouraged to meet with an advisor in that major department. Each department has a faculty or staff member who serves as a department advisor. This person knows about prerequisites to courses, program planning for students majoring in the department, major requirements, and in some cases, general career information related to the field. A department advisor can help students make satisfactory progress toward completing requirements in the major, and can suggest courses that address students' interests and help them achieve their goals.

Juniors and seniors are encouraged to seek advice from these department advisors as soon as possible. Please note that the assignment of a departmental advisor and declaring a major in a particular department(s) are not automatic. Students must go to the department office to declare their major and to be assigned a departmental advisor for the major. Students are also advised to meet with departmental advisors early in their academic career since some majors require students to fulfill prerequisite classes and earn a minimum GPA in the designated coursework before they are eligible to declare the specific major. It is very important that students contact the major department(s) as early as possible so they aware of any prerequisites.

Transfer students often come to the campus knowing their intended major. These students may go directly to the department advisors for any help they need in pursuing/declaring the major.

Students classified in any of the special degree programs (Applied Mathematics, Engineering and Physics, Journalism, Landscape Architecture, Music, Social Work) may refer to the specific special degree under Degree/Majors/Certificate (p. 320) tab within this Guide for names of professors associated with the various programs, then consult with the appropriate advisor.

Students pursuing Honors in the Major (HM) are encouraged to work closely with the honors coordinator in their major department regarding course and research opportunities within the department or field of interest. Special departmental advisors are available to help any students, primarily sophomores, juniors, and seniors, who have decided on their major. These advisors are located in department offices throughout the campus. Office hours vary among departments. Consult a staff telephone directory for a list of department offices and locations, or see the department descriptions in this catalog.

## INTERNATIONAL INTERNSHIP PROGRAM (IIP)

The International Internship Program (IIP) (http:// internships.international.wisc.edu) at UW-Madison is a resource for undergraduate students from all disciplines seeking to gain handson international experience. IIP's mission is to identify, cultivate and promote high quality internships that advance the professional training of UW-Madison undergraduate students; foster global competency; and reinforce academic learning through practical application.

IIP cultivates internship opportunities around the world specifically for Badgers. IIP also identifies and promotes existing international internship and research opportunities offered by other campus offices or international organizations. Both types of opportunities can be found via the IIP database and other search resources are also listed on the
website. IIP offers advising for any undergraduates who are exploring internships abroad whether they are just getting started, applying to an IIP-cultivated position, or finding their own. IIP can help with questions related to the many questions that come up with international internships including visas, agreements, academic credit, and scholarships.

The Worldwide Internship Program (WIP), a partnership with International Academic Programs (IAP), is a program for students interning outside their home countries to earn academic credit through an online course via which they engage with other UW-Madison students interning around the world. WIP offers students interning abroad structure through academic reflection, insurance and emergency support and may help with eligibility for visas or scholarships. IIP works with students doing internships for credit or not and offers advising, pre-departure and reentry programming for any student interning abroad.

An international internship is often located outside the United States, but IIP also promotes internship opportunities to apply international skills and interests domestically. There are many variables in international internships (compensation, duration, location, fees, credit and more) that IIP can help navigate.

For more information on interning abroad visit International Internship Program(IIP) (http://internships.international.wisc.edu) or call or e-mail ( internships@international.wisc.edu) to discuss how IIP can support departments or students.

## Contact Information

International Internship Program (IIP) (http://
internships.international.wisc.edu)
261 Bascom Hall
500 Lincoln Drive
Madison, WI 53706-1314
Tel: 608-262-2851
Send us an email (internships@international.wisc.edu)

## PRE-PROFESSIONAL STUDY

General information about Pre-Law and Pre-Health is located at preprofessional (p. 22) study.

## SCHOLARSHIPS

The College of Letters \& Science welcomes incoming and continuing students to apply for scholarship opportunities created by the support of our donor friends. The undergraduate scholarships program provides support to students who intend to receive a degree from the College of Letters \& Science. With over 63 majors and special degree programs which include journalism, music, social work, and applied mathematics, engineering, and physics (p. 320), the College of Letters \& Science (L\&S) strongly supports the role of a broad and deeply educated citizenry. Letters \& Science graduates use this strong foundation to flourish in their chosen careers (http://ls.wisc.edu/about/ Isci?p=careerinitiative.html). For more information, see overview of scholarships (http://scholarships.Is.wisc.edu).

## STUDENT ACADEMIC AFFAIRS (SAA) ADVISING \& ACADEMIC PROGRAMS AND SERVICES <br> General academic questions: Academic Help Line, 608-262-5858

Academic Information Management (AIM)
13 Ingraham Hall, 608-262-2007

Provides several services such as accurate curriculum audit and degree progress information to students, advisors, and other stakeholders

Center for Academic Excellence (http://cae.Is.wisc.edu)
B47 Bascom Hall, 608-263-5068
Advising, academic support, advocacy, and community connections for first-generation, low-income, and culticultural underrepresented students within the College of Letters \& Science

College of Letters \& Science Academic Advising Services (AAS) (http:// advising.Is.wisc.edu)
101 Ingraham Hall, 1155 Observatory Drive, 608-262-5858
Provides comprehensive advising services for students investigating and preparing for majors in the College of Letters \& Science

Cross-College Advising Service (CCAS) (http://www.ccas.wisc.edu) [a part of the Office of Undergraduate Advising under the Provost Office] 10 Ingraham Hall, 608-265-5460
Undecided students exploring options
L\&S Academic Deans' Services (https://saa.Is.wisc.edu/offices/ academic-deans-services)
110 Ingraham Hall, 1155 Observatory Drive, 608-262-0617
Provides up-to-date information on college policies, procedures, and deadlines; campus resources; and degree requirements

L\&S Honors Program (http://honors.Is.wisc.edu)
Washburn Observatory, 1401 Observatory Drive, 608-262-2984
Students admitted to or interested in the Honors Program
L\&S SuccessWorks (https://careers.Is.wisc.edu)
711 State Street, Suite 300, 608-262-3921
Career advising and development for students and alumni in L\&S
Undergraduate Research Scholars (URS) (http://urs.Is.wisc.edu)
313 Red Gym, 716 Langdon Street, 608-890-3696
Helps first- and second-year undergraduates get hands-on experience in research

## STUDY ABROAD

About 25\% of undergraduates make study abroad an integral part of their UW-Madison experience.

International Academic Programs (IAP) (https://
www.studyabroad.wisc.edu) at UW-Madison offers over 200 study abroad options in about 60 countries on 6 continents. In addition to taking the opportunity to learn new languages, understand new cultures and see the world, UW-Madison students study abroad to complement their on-campus academic goals, strengthen their professional potential and enrich their personal lives.

Students of all academic levels and majors study abroad. While many programs include language training-from the basics to full language immersion-most IAP programs have no language requirement and include courses taught in English.

All courses taken abroad through IAP count as "in-residence" credit, just like taking courses on campus at UW-Madison, so students advance towards their degrees while abroad. And study abroad isn't limited to classroom experience. Many students also complete internships, do research, fieldwork and service learning.

In addition to resources on health, safety, academic planning and other aspects, UW-Madison students receive the information and guidance
they need to plan a study abroad experiences that fits their budgets. Many study abroad programs cost about the same or less than studying on campus, and student financial aid can be applied in most cases.

While IAP offers programs to students of all majors, including to students in the College of Agricultural and Life Sciences in collaboration with the CALS International Programs office, the College of Engineering and the School of Business also offer programs tailored specifically to the needs of their students. All of these program options are listed here (https:// www.studyabroad.wisc.edu/programs).

For more information on study abroad at UW-Madison, see Study Abroad (http://studyabroad.wisc.edu) or call 608-265-6329.

## SUCCESSWORKS

SuccessWorks (https://careers.Is.wisc.edu), 711 State Street, Suite 300, 608-262-3921.

At the College of Letters \& Science (L\&S) SuccessWorks advisors work with students from the time they are interested in exploring career options through preparing and conducting a successful job search or graduate school application-in other words, from freshman year through one year after graduation. Don't hesitate to get started early! We help students reflect and capitalize on their academic skills, explore and try out occupations, participate in internships, and network with professionals in the field. In addition to traditional resume and interview services, SuccessWorks offers one-on-one advising, career and internship courses, occupation-specific advising and resources, the L\&S Badger Internship Program, internship scholarships, a mentoring program, and much more. Together we can develop a plan and the tools you need to achieve your goals!

## UNDERGRADUATE RESEARCH SCHOLARS PROGRAM

The Undergraduate Research Scholars program (URS) is dedicated to enhancing the academic experience of UW-Madison students by providing first and second year undergraduates with opportunities to earn credit for participating in the research and creative work with UWMadison faculty and staff. The program has been designed to include partnerships between students and mentors, seminars on researchrelevant issues, and practice in research/artistic presentations. The many benefits of the program are found in the fluid interaction between these activities. Please refer to Undergraduate Research Scholars (http:// urs.ls.wisc.edu) for more information.

## HONORS

## L\&S HONORS PROGRAM

The College of Letters \& Science Honors Program seeks to provide students with a small, liberal arts college experience within this large university. The Honors Program is home to more than 1,200 motivated, curious and high-achieving students, all pursuing one of three degree tracks: Honors in the Liberal Arts, Honors in the Major, or Comprehensive Honors-the highest undergraduate degree awarded by the college. In addition to an enhanced curriculum that offers small, faculty-led courses, the program also offers academic advising services; grants, scholarships, and awards; and many professional development and co-curricular opportunities. Events, term-specific deadlines, course descriptions for the upcoming semester and much more can be found on the L\&S Honors Program website (http://honors.ls.wisc.edu). We welcome inquiries
via phone at 608-262-2984. The L\&S Honors Program is located in the historic Washburn Observatory at 1401 Observatory Drive in Madison, WI 53706.

## HOW TO GET IN

Students may apply to enter the L\&S Honors Program in any semester of their undergraduate careers. Any UW-Madison Honors credits earned before admission to the Honors Program may be applied toward Honors degree requirements. Eligibility criteria and admissions procedures differ for the different Honors degrees.

## ADMISSION TO HONORS IN THE LIBERAL ARTS (HLA)

To become a candidate for the Honors in the Liberal Arts degree, a student must apply directly to the L\&S Honors Program. Students may apply at any point in their undergraduate careers provided they meet the eligibility requirements described below.

All students admitted to the university and to the College of Letters \& Science are invited to apply to be considered for admission to the Honors Program to pursue the Honors in the Liberal Arts degree. Interested students can apply via an online application form. Students receive an invitation message by email that contains the URL to the online application. The application deadline will be 30 days from the student's initial login to the application system. Admission to the program is competitive, and space is limited.

Continuing and transfer students with a cumulative grade point average of 3.300 or above who are currently enrolled at UW-Madison or who are transferring to UW-Madison from another college or university may apply to the L\&S Honors Program at any time. Applications are available from the Honors Program website (http://honors.ls.wisc.edu) and admission decisions are usually made within three weeks of submission of the completed application and supporting materials. While continuing or transfer students having 60 or more credits at the time of application to the Honors Program are eligible to participate in the Honors in the Liberal Arts (HLA) degree track, they are encouraged to consider Honors in the Major (HM) as an option (see below), since they may find it difficult to complete the HLA degree requirements if beginning that program in the junior or senior year.

## ADMISSION TO HONORS IN THE MAJOR (HM)

Students interested in pursuing an Honors in the Major degree are encouraged to consult the department listings (p. 320) in this Guide and speak with the department's academic advisors, who will be able to explain admissions procedures and requirements for the degree. After officially declaring the major and receiving authorization from the department to declare Honors in the Major, students must submit a completed Honors in the Major Declaration Form to the Honors Program office. These forms may be obtained from either the departmental advisor or the Honors Program office.

## REQUIREMENTS

Honors may be earned in any L\&S undergraduate degree (Bachelor of Arts; Bachelor of Science; Bachelor of Science-Applied Mathematics, Engineering, and Physics; Bachelor of Arts-Journalism or Bachelor of Science-Journalism; Bachelor of Music; and Bachelor of Social Work). For students who complete the requirements, Honors will appear on diplomas and transcripts (for example, B.A. with Honors in the Liberal Arts or B.S. with Honors in the Major).

## HONORS IN THE LIBERAL ARTS (HLA)

Honors in the Liberal Arts is often the primary focus for most first- and second-year Honors students. It requires students earn Honors credits in a breadth of disciplines and is meant to enrich and enhance a student's academic experience outside of the major. Students who complete this curriculum develop strong skills in communication, critical thinking and complex problem solving, which will serve them well regardless of career path. The specific requirements for the HLA degree are:

1. completion of the L\&S general degree requirements;
2. a cumulative grade point average of at least 3.300 ;
3. completion of at least 24 credits in Honors courses with grades of $B$ or better;
4. of the 24 Honors credits, at least 6 must be in the humanities, 6 in the social sciences, and 6 in the natural sciences; and
5. of the 24 Honors credits, at least 15 must be "Automatic Honors" credits-that is, in courses that carry the "Honors Only" or
"Accelerated Honors" designations in the Course Guide (http:// public.my.wisc.edu).

## HONORS IN THE MAJOR (HM)

After formally declaring a major in the College of Letters \& Science, students may opt to pursue Honors in that Major. Honors in the Major requirements can be completed independently from Honors in the Liberal Arts; they may also be completed in conjunction with Honors in the Liberal Arts (which would result in a Comprehensive Honors degree). Each academic department and program in the college, with approval of the Faculty Honors Committee, establishes its own requirements for the Honors in the Major degree. Honors in the Major is intended for students who are interested in original research and who wish to graduate with the best possible undergraduate training in the discipline. Honors in the Major is especially appropriate for students who are considering graduate work, or who want a particularly rigorous training in research, reasoning, and writing skills useful to a wide range of career choices.

Although many of the specific requirements for HM vary by department, all students pursuing Honors in the Major must:

1. complete the L\&S general degree requirements;
2. complete the regular major requirements;
3. obtain an overall cumulative grade point average of at least 3.300 ;
4. earn a grade of $B$ or better in all courses counting towards Honors in the Major requirements; and
5. successfully complete a capstone experience during their senior year, typically a Senior Honors Thesis (see below for more information).

In addition to these collegewide requirements, Honors in the Major students may be required to complete additional upper-level, Honors coursework; participate in department research colloquia; and meet a minimum grade point average in all classes in the major (typically between 3.300 and 3.500 ).

As mentioned above, most departments require a Senior Honors Thesis as the culmination of their Honors in the Major curriculum. In departments for which a research thesis is not the most appropriate capstone, an alternative such as a performance, a professional practicum, or a major piece of creative writing may be required instead. The two-semester Honors thesis or capstone project is often the most challenging part of the Honors in the Major experience, and for most students it also proves to be the most rewarding. The Senior Honors Thesis is a two-semester (or summer and semester) effort; students
first enroll in Senior Honors Thesis 681, followed the next term by Senior Honors Thesis 682 (some departments may use different numeric designations for Senior Honors Thesis options). These two courses may not be taken concurrently. The final grade for the entire thesis is assigned after 682 has been completed.

Students who intend to complete Honors in the Major and write a Senior Honors Thesis should consult with department advisors as early as possible. They are also strongly encouraged to begin working with a faculty advisor no later than the beginning of the junior year in order to formulate a research topic, which will enhance the student's potential for success in research grant funding cycles for their senior year. Some departments offer special courses designed to facilitate the organization, planning, and execution of Honors thesis projects. Other departments encourage (and some require) students to take a directed study or tutorial course with the thesis advisor sometime during the junior year. Students who receive funding from the L\&S Honors Program for their thesis research should submit an unbound copy of their thesis to the Honors Program Office.

Students pursuing Honors in the Major in two majors may apply for Dual Thesis Authorization, which will allow them to write one interdisciplinary thesis to satisfy both major capstone requirements. Please see the Honors Program Associate Director for Academic Services to learn more about the application process prior to enrolling in the 681 course.

Prior authorization is needed when students intend to complete either 681 or 682 while away from UW-Madison. Consult with the Associate Director for Academic Services if this is your intention.

## COMPREHENSIVE HONORS

Students who complete the requirements for both Honors in the Liberal Arts and Honors in the Major in at least one department or program earn Comprehensive Honors, the highest undergraduate degree awarded by the College.

## HOW TO EARN HONORS CREDIT

There are three unique Honors course designations, each described here:

- "Honors Only" courses are reserved for Honors candidates. They are generally small classes, led by a faculty member and designed for substantive engagement, or discussion sections or labs reserved for Honors students in larger non-Honors lecture courses. The enrollment system will automatically assign Honors credit to all enrolled students. These "Honors Only" courses are sometimes denoted with the symbol " H ".
- "Accelerated Honors" are open to all students. Honors credit is awarded in recognition of the rigor and pace of the course. These Honors courses are often conducted at a faster pace than the nonHonors course counterparts or are upper-level capstone courses in a major that require significant engagement with the course material. As with "Honors Only" designated courses, the enrollment system will automatically assign Honors credit to all enrolled students. These "Accelerated Honors" courses are sometimes denoted with the symbol "!".
- "Honors Optional" designates courses for which Honors is available through an optional Honors component of the course curriculum. These courses are open to all students for enrollment. Opting into the Honors component of the course is done through the enrollment process. Students enrolled in an "Honors Optional" course are advised to consult with the instructor during the first weeks of the term to determine the Honors curriculum if it is not outlined on the
syllabus. Instructors either have designated Honors curricula or students may be encouraged to develop a project idea of their own. These "Honors Optional" courses are sometimes denoted with the symbol "\%".

When the Schedule of Classes is published for the upcoming term, students can use Course Guide or the Enroll App to identify which courses are being offered for Honors and with which designation. A course being offered for Honors in a past term in no way guarantees that it will be offered for Honors in a future term.

Honors candidates may also earn Honors credit through the following methods:

- Designing and successfully completing an additional Honors project for a course not carrying any of the Honors designations above in the given term. This option requires consent of the instructor and approval of the L\&S Honors Program. To request permission from the Honors Program, students must submit a completed Green Sheet Agreement form and all supporting documentation to the Honors Program office no later than the eighth week of a regular semester, or the fourth week of an eight-week summer term. Green Sheets are available on the Honors Program website (http://honors.Is.wisc.edu). Supporting documentation includes a formal proposal outlining the additional Honors project in up to 500 words, and a completed Course Change Request Form. Additional information is available from Honors advisors and on the Honors Program website.
- Students who study abroad on a non-Honors study abroad program may petition to receive up to 4 Honors credits per semester (one course). Upon returning from abroad, students are asked to write a petition in which they are required to reflect on the nature of the course taken abroad and explain why the course meets the desired criteria for general Honors credit, Honors breadth credit and/or Automatic Honors credit. For more details about the petition process, please consult the Honors Program website (http:// honors.ls.wisc.edu).
- Studying abroad in an Honors Study Abroad Program. (Currently programs are available in Ecuador and Utrecht, Netherlands.) Students may earn up to 16 Honors credits. Students receive Honors credit in these cases through the study abroad equivalency process upon their return from abroad.

In all cases, to receive Honors credit in a course, students must earn a final grade of $B$ or higher in that course. If a grade of $B C$ or lower is earned in an Honors course, the Honors notation remains on the student's record, but the course does not count toward Honors degree requirements. If the course is retaken for Honors, regardless of the grade earned during this second attempt, the course cannot satisfy an Honors degree requirement.

Students may not receive Honors credit in courses carried on a pass/fail basis.

## ADVISING AND CAREERS

The University of Wisconsin-Madison can seem overwhelming because of its size and the complexity of its policies and procedures. Academic advisors help students get (and maintain) their bearings on campus. The L\&S Honors Program has a team of specially trained academic and peer advisors who accompany and support Honors candidates as they pursue diverse educational and co-curricular experiences compatible with their long-term goals. Advising occurs through a variety of formats including small group workshops, individual appointments, drop-in hours
and email. Additional information is available on the Honors Program website (http://honors.Is.wisc.edu).

The L\&S Honors Program encourages our students to begin working on their career exploration and preparation soon after arriving on campus. We partner with the L\&S SuccessWorks office to help students leverage the academic skills learned in your major(s) and liberal arts degree, explore and try out different career paths, participate in internships, prepare for the job search and/or graduate school applications, and network with professionals in the field (alumni and employers).

Letters \& Science graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, regardless of major or career goals.

## PEOPLE

Faculty Director. Dr. Sabine Gross, Chair of L\&S Faculty Honors Committee and Professor of German
Associate Director for Administration: Dr. Matt Kohlstedt Associate Director for Academic Services: Jacqui Guthrie
Program Administrator. Erin Warner
Academic Advisor. Maria Hartwig

## POLICIES

## CRITERIA FOR REMAINING IN GOOD STANDING IN HLA

Students must obtain a grade point average of 3.300 or higher to be eligible to graduate with an Honors in the Liberal Arts degree. As such, we encourage students to strive for at least this GPA each academic term. The Honors Program advising team will work with students on an improvement plan should their GPA drop below 3.300. Students must also make satisfactory progress toward degree requirements, meaning:

1. successfully complete (grade of B or higher) at least one Honors course (any designation) by the end of the third semester on campus and
2. successfully complete (grade of $B$ or higher) at least two Automatic Honors courses by the end of the fifth semester on campus.

Students may withdraw from HLA at any time by completing an Honors in the Liberal Arts Withdrawal Form, available from the Honors Program office, and submitting it to the Honors Program.

## CRITERIA FOR REMAINING IN GOOD STANDING IN HM

Because each department sets its own criteria for the HM degree program, students are encouraged to work closely with departmental advisors to stay on track towards successful completion. In addition to the criteria established by individual departments, all students must obtain a cumulative grade point average of 3.300 or higher in UWMadison coursework to be eligible to graduate with the Honors in the Major degree. Students may withdraw from HM at any time by submitting a completed Honors in the Major Withdrawal Form, available from either the department advisor or the Honors Program office.

## HONORS IN THE INDIVIDUAL MAJOR

To complete the Individual Major with Honors, the student must earn Honors credit in at least 20 of the 36 or more credits comprising the Individual Major and must complete a Senior Honors Thesis of 6-8 credits. Students wishing to complete an Honors in the Major degree with an Individual Major should append to their Individual Major proposal a specific outline of how the Honors in the Major requirements would be met, including appropriate Honors-caliber courses, upper-level seminars,
and a two-semester capstone project, typically a Senior Honors Thesis. The proposal for Honors in the Individual Major will be reviewed by the Honors Program Associate Director for Academic Services. This individual is authorized to determine whether requests for exceptions to the approved HM requirements will be approved.

## HONORS TRANSFER CREDIT

Honors credit earned at other institutions is not currently accepted towards L\&S Honors Program degree requirements.

## GRANTS AND AWARDS

The L\&S Honors Program strives to support Honors students as they pursue original research, study abroad, attend academic conferences, and pursue other endeavors that complement their learning and growth. The following funding opportunities are regularly offered. Please see the L\&S Honors Program website (http://honors.Is.wisc.edu) for additional opportunities, specific deadlines and additional information about the applications process.

## WELTON SOPHOMORE SUMMER HONORS RESEARCH APPRENTICESHIPS

These competitively awarded grants provide funding for Honors students who learn more about the research process by working as research apprentices with UW-Madison faculty. Students may not earn course credit for this work. For past students, these apprenticeships often evolved into paid research positions and/or Senior Honors Thesis projects. Applications for the Welton are submitted and considered early in the spring term.

## TREWARTHA UNDERGRADUATE THESIS RESEARCH AWARD

This grant enables Honors students to undertake more demanding and extensive Honors Senior Thesis research projects than might otherwise be possible. Besides recognition of an excellent thesis proposal, grant recipients receive funds (up to $\$ 1500$ ) to cover travel expenses and other costs needed to complete the research. These resources may enable students to travel to archives or research sites, or to initiate other research activities that require special funding. Each year 1216 Trewartha awards are granted. Applications for the Trewartha are submitted and considered during the fall term.

## MARK MENSINK HONORS RESEARCH GRANT

The Mark Mensink Honors Research Grant is the L\&S Honors Program's most prestigious grant, awarded in recognition of an exceptional thesis proposal. The purpose of the grant is to enable its recipient to undertake more demanding and extensive Honors senior thesis research than might otherwise be possible due to limited resources or time. Students do not apply specifically for the Mensink award. The Mensink is awarded to a particularly promising Trewartha applicant.

## HONORS SUMMER SENIOR THESIS RESEARCH GRANT

These grants enable students to undertake more demanding and extensive senior thesis research projects than might otherwise be possible. Besides recognition of an excellent thesis proposal, grant recipients are awarded a cash stipend of up to $\$ 3000$ to cover researchrelated expenses. Such resources may enable students to travel to archives or research sites, arrange participant interviews or initiate other research activities that require special funding. Applications for summer research grants are submitted and considered during the spring term.

## LEADERSHIP TRUST AWARD

The Leadership Trust Award supports students as they plan, develop and implement projects designed to improve UW-Madison, the community and/or the university student body. Each year, up to two (2) students receive awards equal to two (2) semesters of resident, full-time tuition plus project funds up to $\$ 3000$ as justified in the submitted project budget. Past award recipients have established mentoring programs for underrepresented students; collaborated with local organizations to improve community access to fresh, healthy and local produce; and founded an academic journal, the Madison Journal of Literary Criticism, to increase students' opportunities to see their work published. Applicants are asked to identify a UW-Madison faculty member who will serve in an advisory/resource capacity and award winners are expected to submit progress reports to the L\&S Faculty Honors Committee. Applications for the Leadership Trust Award are submitted and considered during the spring term for the following academic year.

## STUDY ABROAD AWARDS

Up to four \$1,500 travel awards will be awarded to eligible L\&S Honors Program students who plan to study abroad. Students studying for either a semester or a year abroad are eligible, however preference will be given to students participating in a year-long program. Applications for this funding opportunity are available in the spring term.

## BROMLEY RESEARCH CONFERENCE TRAVEL GRANT

These awards are meant to support students who present at and/or attend regional or national professional conferences. Priority is given to those who plan to present. The award amount is up to $\$ 500$. The application process is competitive and students with the most promising proposals are selected.

## AFRICAN CULTURAL STUDIES

The mission of the Department of African Cultural Studies is to research and teach the languages and expressive cultures of Africa and Africans around the world. This includes work at the graduate and undergraduate levels, and emphasizes the development and application of analytical, linguistic, and methodological tools that enable students to work effectively and imaginatively across regions, languages, cultural forms, methodologies, and disciplines.

Undergraduates study one of six languages offered by the department -Arabic, Hausa, Swahili, Wolof, Yoruba, and Zulu-and combine their language study with popular courses in the humanities, literature, and ethnic studies. The department's undergraduate courses cover a wide range of topics, including introductory African literature and storytelling, contemporary cinema and music, and social issues. Students also have the opportunity to study less commonly taught African languages through the self-study methodology program, which enables independent learning of a language through supportive, peer-to-peer and instructor-led coursework.

Majors are encouraged to study abroad in Africa during their undergraduate careers. Study abroad programs sponsored by UWMadison include semesters or full years in Morocco, Senegal, South Africa, Ghana, and other African nations. Other programs are available through different institutions. See International Academic Programs (http://www.studyabroad.wisc.edu) and visit the Majors Advising Page (https://www.studyabroad.wisc.edu/map_africanlanguages.asp).

For more information, students should feel free to contact the Department of African Cultural Studies (http://african.wisc.edu) or the advisor (https://calendar.wisc.edu/scheduling-assistant/public/ profiles/YjfjFEtg.html) at any time.

## DEGREES/MAJORS/CERTIFICATES

- African Cultural Studies, B.A. (p. 362)
- African Cultural Studies, B.S. (p. 367)


## PEOPLE

## FACULTY

To view full faculty profiles, visit our website (https://african.wisc.edu/ people/faculty).

Matthew H. Brown: African screen media (particularly "Nollywood"), oral traditions, literature
Névine El Nossery: Francophone \& Middle Eastern literature and culture, postcolonial studies
Samuel England: Classical Arabic poetry and prose, modern Arabic literature
Jo Ellen Fair: Intersectionality of journalism, popular culture, social theory, and politics
Luis Madureira: Colonial and postcolonial studies, modernism, theater and performance
Mustafa Mustafa: Arabic
Tejumola Olaniyan: African, African American, and Caribbean literature and culture
Ronald Radano: ethnomusicology, US Black music and its transnational circulation
Damon Sajnani: Africana cultural studies, social and political theory, HipHop studies
Michael Schatzberg: African politics, comparative politics, political culture
Katrina Daly Thompson: African discourse, linguistic ethnography, language pedagogy

## EMERITUS FACULTY

Patrick Bennett
Dustin Cowell
Magdalena Hauner
Linda Hunter
Edris Makward
Harold Scheub
Aliko Songolo

## ACADEMIC STAFF

Bill Bach, Department Administrator
Toni Landis, Academic Advisor/Student Services Coordinator

## AFRICAN CULTURAL STUDIES, B.A.

The mission of the Department of African Cultural Studies is to research and teach the languages and expressive cultures of Africa and Africans around the world. This includes work at the graduate and undergraduate levels, and emphasizes the development and application of analytical, linguistic, and methodological tools that enable students to work
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For more information, students should feel free to contact the Department of African Cultural Studies (http://african.wisc.edu) or the advisor (https://calendar.wisc.edu/scheduling-assistant/public/ profiles/YjfjFEtg.html) at any time.

## HOW TO GET IN

Declaring the major in African cultural studies is as easy as meeting with the advisor. Make an appointment today (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/YjfjFEtg.html).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics requirements Quantitative Reasoning a (QRA) and Quantitative Reasoning $b(Q R B)$ coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90 th credit |  |


| Minimum | 2.000 in all coursework at UW-Madison |
| :--- | :--- |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

Principal African languages taught by the department are Arabic, Hausa, Swahili, Wolof, Yoruba, and Zulu. The program supports the study of various other African languages through courses and/or individualized study.

## REQUIREMENTS FOR THE MAJOR

30 credits and eight courses as follows:

## LANGUAGE

| Code | Title | Credits |
| :---: | :---: | :---: |
| 4th unit of one African language |  | 4 |
| AFRICAN 324 | Fourth Semester Arabic |  |
| AFRICAN 334 | Fourth Semester Swahili |  |
| AFRICAN 338 | Fourth Semester-A Language of Southern Africa |  |
| AFRICAN 374 | Fourth Semester Yoruba |  |
| AFRICAN 394 | Fourth Semester-A Language of West Africa |  |
| Total Credits |  | 4 |
| CULTURE STUDIES |  |  |
| Code | Title | Credits |
| AFRICAN 100 | Introduction to African Cultural Expression | 3 |
| One 200-level course: |  | 3-4 |
| AFRICAN 201 | Introduction to African Literature |  |
| AFRICAN/ <br> FOLKLORE 210 | The African Storyteller |  |
| AFRICAN 211 | The African Autobiography |  |
| AFRICAN 212 | Introduction to African Popular Culture |  |
| AFRICAN/ <br> AFROAMER 220 | HipHop, Youth Culture, and Politics in Senegal |  |
| AFRICAN 230 | Introduction to Yoruba Life and Culture |  |
| AFRICAN 231 | Introduction to Arabic Literary Culture |  |


| AFRICAN 232 | Introduction to Swahili Cultures |
| :--- | :--- |
| AFRICAN/ | Global HipHop and Social Justice |
| AFROAMER 233 |  |
| AFRICAN/ | The Hero and Trickster in African |
| FOLKLORE 270 | Oral Traditions |
| AFRICAN/ | Africa: An Introductory Survey |
| AFROAMER/ |  |
| ANTHRO/GEOG/ |  |
| HISTORY/ |  |
| POLI SCI/ |  |
| SOC 277 | African and African-American |
| AFRICAN/ |  |
| AFROAMER/ | Linkages: An Introduction |
| HISTORY/ |  |
| POLI SCI 297 | Theories of African Cultural Studies |
| AFRICAN 403 | Topics in African Cultural Studies |
| AFRICAN 405 |  |
| One from: |  |


| AFRICAN 300 | African Literature in Translation |  |
| :---: | :---: | :---: |
| AFRICAN 301 | Introduction to African Linguistics |  |
| AFRICAN 303 | African Literature and Visual Culture |  |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture |  |
| AFRICAN 402 | Theory of African Literature |  |
| AFRICAN 406 | Topics in African Literature |  |
| AFRICAN 407 | Topics in African Languages |  |
| AFRICAN 412 | Contemporary African Fiction |  |
| AFRICAN/ <br> AFROAMER 413 | Contemporary African and Caribbean Drama |  |
| AFRICAN/ FRENCH 440 | African/Francophone Film |  |
| AFRICAN/ PORTUG 451 | Lusophone African Literature |  |
| AFRICAN 453 | Modern African Literature in English |  |
| AFRICAN/ <br> FOLKLORE 471 | Oral Traditions and the Written Word |  |
| AFRICAN 500 | Language and Society in Africa |  |
| AFRICAN 501 | Structure and Analysis of African Languages |  |
| One course outside language | he department or 6th unit of African | 3-4 |
| Outside courses: |  |  |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture |  |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History |  |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas |  |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| ANTHRO 333 | Prehistory of Africa |  |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) |  |
| ART HIST/ AFROAMER 241 | Introduction to African Art and Architecture |  |
| ART HIST 479 | Art and History in Africa |  |


| ART HIST 579 | Proseminar in African Art |
| :---: | :---: |
| ECON/A A E 477 | Agricultural and Economic Development in Africa |
| GEN\&WS/ <br> AFROAMER 221 | Introduction to Black Women's Studies |
| GEN\&WS/ <br> AFROAMER 267 | Artistic/Cultural Images of Black Women |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa |
| GEOG 355 | Africa, South of the Sahara |
| HISTORY 201 | The Historian's Craft (Roman Africa) |
| HISTORY 278 | Africans in the Americas, 1492-1808 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present |
| HISTORY 377 | History of Africa, 1500 to 1870 |
| HISTORY 378 | History of Africa Since 1870 |
| HISTORY 444 | History of East Africa |
| HISTORY 445 | History of Equatorial Africa |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen |
| MUSIC/ AFROAMER/ DANCE 318 | Cultural Cross Currents: West African Dance/Music in the Americas |
| POLI SCI 329 | African Politics |
| POLI SCI/ <br> GEN\&WS 429 | Gender and Politics in Comparative Perspective |
| POLI SCI 455 | African International Relations |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature |
| 6th-unit language courses: |  |
| AFRICAN 436 | Advanced Studies in Swahili Language-Readings |
| AFRICAN/ LCA LANG 446 | Readings in Advanced Arabic Texts |
| AFRICAN 330 | Sixth Semester Arabic |
| AFRICAN 476 | Sixth Semester Yoruba |
| AFRICAN 494 | Sixth Semester, A Language of Southern Africa |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa |
| AFRICAN 498 | Sixth Semester, A Language of West Africa |

Total Credits

## ELECTIVES

Credits in any African Language or Culture Studies course (listed above) or any of the following courses to achieve 30 credits and eight courses in the major:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN 323 | Third Semester Arabic | 4 |
| AFRICAN 333 | Third Semester Swahili | 4 |
| AFRICAN 337 | Third Semester-A Language of | 4 |
|  | Southern Africa | 4 |


| AFRICAN 475 | Fifth Semester Yoruba | 3 |
| :--- | :--- | :---: |
| AFRICAN 493 | Fifth Semester, A Language of <br> Southern Africa | 3 |
| AFRICAN 495 | Fifth Semester, A Language of <br> Northern Africa | 3 |
| AFRICAN 497 | Fifth Semester, A Language of West <br> Africa | 3 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all AFRICAN and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in AFRICAN, taken on the UW-Madison campus
1 Courses with intermediate or advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the African Cultural Studies Major in consultation with the African Cultural Studies undergraduate advisor. To be admitted to the Honors Program in African Cultural Studies, students must have achieved a 3.300 university GPA and a 3.300 GPA in all AFRICAN courses as well as all courses accepted in the major.

## Honors in the African Cultural Studies Major Requirements

To earn a B.A. or B.S. with Honors in the Major in African Cultural Studies students must satisfy both the requirements for the major (above) and the following additional requirements:

1. Earn a 3.300 overall university GPA
2. Earn 3.300 GPA in all AFRICAN courses, and all courses accepted in the major
3. Complete a minimum of 15 credits in the major for Honors while in residence at UW-Madison from the following:
a. 9 credits in courses no lower than 200 level
b. A two-semester Senior Honors Thesis in AFRICAN 681 Senior Honors Thesis and AFRICAN 682 Senior Honors Thesis, for a total of 6 credits.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Content) Recognize canonical authors and texts, historical forms, genres, and structures, and recognize aesthetic and cultural concerns in Africa and its diasporas.
2. (Content) Demonstrate their understanding of major theories, approaches, concepts, and current and classical research findings in African and diaspora literary and cultural studies.
3. (Content) Develop a level of proficiency in the different "ways of knowing" Africa and the diaspora through language, literatures, and cultures.
4. (Research Skills) Understand their own learning processes and possess the capacity to intentionally seek, evaluate, and learn from information, and recognize and reduce bias in their thinking.
5. (Research Skills) Effectively retrieve and comprehend primary sources in English and African languages, and secondary sources from a range of disciplines.
6. (Communication Skills) Develop or improve speaking, listening, writing, reading skills in an African language, and integrate these skills to communicate effectively.
7. (Communication Skills) Communicate effectively through essays, oral presentations, and discussion, so they may share their knowledge, wisdom, and values with others across social and professional settings.
8. (Communication Skills) Show knowledge of conventional rhetorical strategies, and integrate research by other authors while distinguishing between their own ideas and those of others.
9. (Communication Skills) Write and speak across disciplinary boundaries with regard to existing research about Africa and the diaspora in the humanities and social sciences.
10. (Analytical Skills) Discuss cultural texts from various theoretical and critical perspectives, formulate ideas and make connections between literary/cultural concepts and themes.
11. (Analytical Skills) Demonstrate command of the terminology and methodology of cultural studies, construct complex arguments, and use primary and secondary sources to support arguments.

## ADVISING AND CAREERS

## ADVISING

## How does the major in African cultural studies fit into my educational goals?

While there are a wide variety of reasons to visit your major advisor, there seem to be two recurring questions:

1. Can I complete the major during the time I have left at UW?
2. Which classes will be offered in the future?

If you like to plan, seeing your major advisor is very important; it can make the difference between fitting in Contemporary Arabic Literature and Culture and Global HipHop and Social Justice before you graduate. Many students also try to complete more than one major or certificate, and discussing how you might be able to reach this goal is another primary role of your major advisor. Advisors can speak to you about course content, which courses fit best with your interest areas, and what kinds of courses might work best with your learning style-e.g., do you prefer multiple choice or essays? Any and all of these discussions can occur during your advising appointment.

In addition to discussing the major, advisors also know a lot about:

- General Education requirements
- Breadth requirements
- Interpreting university policies and deadlines
- Connecting majors to careers
- Getting involved with campus organizations
- Finding volunteer and/or internship opportunities
- Talking about your challenges and difficulties
- Connecting with tutors
- Picking a study abroad program
- Practicing for interviews
- Talking about graduate school
- Proofreading resumes and cover letters

Ready to meet with the ACS advisor? Make an appointment today (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ YjfjFEtg.html).

## CAREERS

While many students have a difficult time believing it, a humanities major such as ours, enables students who complete it to consider just about any type of career or educational pursuit. Our coursework builds the critical thinking and communication skills needed to succeed in careers ranging from politics and education to business and law.

Think about what you learn in a classroom setting as well as what you do each day to be a successful student; the skills you develop are equally important in the workplace:

- critical reading, reflection, and analysis
- proper research design and methodology
- expanded world view and exposure to new ideas/ways of thinking
- effective teamwork to advance a common project/purpose
- effective time-management and self-motivation to complete projects independently
- demonstrated writing proficiency in short and long essay format
- discussion and debate strategies
- broader knowledge of career and graduate-study options

One of the more significant skills majors develop is language acquisition. Your study of African languages sets you apart and demonstrates your willingness to explore and expand your understanding of history and culture. In addition, the study of these less commonly taught languages
shows discipline and perseverance, since they can be difficult languages to learn.

Overall, you will have a wide variety of skills and talents to start you on the path to a rewarding career!

Visit our website (http://african.wisc.edu/programs/undergraduate/ careers-skill-development) for more information.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

To view full faculty profiles, visit our website (https://african.wisc.edu/ people/faculty).

Matthew H. Brown: African screen media (particularly "Nollywood"), oral traditions, literature
Névine El Nossery: Francophone \& Middle Eastern literature and culture, postcolonial studies
Samuel England: Classical Arabic poetry and prose, modern Arabic literature
Jo Ellen Fair: Intersectionality of journalism, popular culture, social theory, and politics
Luis Madureira: Colonial and postcolonial studies, modernism, theater and performance
Mustafa Mustafa: Arabic
Tejumola Olaniyan: African, African American, and Caribbean literature and culture
Ronald Radano: ethnomusicology, US Black music and its transnational circulation
Damon Sajnani: Africana cultural studies, social and political theory, HipHop studies
Michael Schatzberg: African politics, comparative politics, political culture
Katrina Daly Thompson: African discourse, linguistic ethnography, language pedagogy

## EMERITUS FACULTY

Patrick Bennett
Dustin Cowell
Magdalena Hauner
Linda Hunter
Edris Makward
Harold Scheub
Aliko Songolo

## ACADEMIC STAFF

Bill Bach, Department Administrator
Toni Landis, Academic Advisor/Student Services Coordinator

## RESOURCES AND SCHOLARSHIPS

## RESOURCES FOR LANGUAGE LEARNERS

One of the most valuable resources for students interested in language study is the Language Institute and its website, Languages at UWMadison (http://www.languages.wisc.edu).

Learn more about scholarships (http://www.languages.wisc.edu/beyond/ scholarships) and other opportunities for funded language study.

## AFRICAN CULTURAL STUDIES, B.S.

The mission of the Department of African Cultural Studies is to research and teach the languages and expressive cultures of Africa and Africans around the world. This includes work at the graduate and undergraduate levels, and emphasizes the development and application of analytical, linguistic, and methodological tools that enable students to work effectively and imaginatively across regions, languages, cultural forms, methodologies, and disciplines.

Undergraduates study one of six languages offered by the department -Arabic, Hausa, Swahili, Wolof, Yoruba, and Zulu-and combine their language study with popular courses in the humanities, literature, and ethnic studies. The department's undergraduate courses cover a wide range of topics, including introductory African literature and storytelling, contemporary cinema and music, and social issues. Students also have the opportunity to study less commonly taught African languages through the self-study methodology program, which enables independent learning of a language through supportive, peer-to-peer and instructor-led coursework.

Majors are encouraged to study abroad in Africa during their undergraduate careers. Study abroad programs sponsored by UWMadison include semesters or full years in Morocco, Senegal, South Africa, Ghana, and other African nations. Other programs are available through different institutions. See International Academic Programs (http://www.studyabroad.wisc.edu) and visit the Majors Advising Page (https://www.studyabroad.wisc.edu/map_africanlanguages.asp).

For more information, students should feel free to contact the Department of African Cultural Studies (http://african.wisc.edu) or the advisor (https://calendar.wisc.edu/scheduling-assistant/public/ profiles/YjfjFEtg.html) at any time.

## HOW TO GET IN

Declaring the major in African cultural studies is as easy as meeting with the advisor. Make an appointment today (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/YjfjFEtg.html).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)
BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- |
| COMP SCI, STAT |
| Limit one each: COMP SCI, STAT |

| Foreign | Complete the third unit of a foreign language <br> Language <br> Note: A unit is one year of high school work or one <br> semester/term of college work. |
| :--- | :--- |

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science
Liberal Arts 108 credits and Science Coursework
Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work
Major Declare and complete at least one (1) major

Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit
Minimum $\quad 2.000$ in all coursework at UW-Madison
GPAs 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

Principal African languages taught by the department are Arabic, Hausa, Swahili, Wolof, Yoruba, and Zulu. The program supports the study of various other African languages through courses and/or individualized study.

## REQUIREMENTS FOR THE MAJOR

30 credits and eight courses as follows:

## LANGUAGE

| Code | Title | Credits |
| :--- | :--- | ---: |
| 4th unit of one African language | 4 |  |
| AFRICAN 324 | Fourth Semester Arabic |  |
| AFRICAN 334 | Fourth Semester Swahili |  |
| AFRICAN 338 | Fourth Semester-A Language of <br> Southern Africa |  |
| AFRICAN 374 | Fourth Semester Yoruba |  |
| AFRICAN 394 | Fourth Semester-A Language of <br> West Africa |  |

Total Credits

## CULTURE STUDIES

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN 100 | Introduction to African Cultural Expression | 3 |
| One 200-level course: |  | 3-4 |
| AFRICAN 201 | Introduction to African Literature |  |
| AFRICAN/ <br> FOLKLORE 210 | The African Storyteller |  |
| AFRICAN 211 | The African Autobiography |  |
| AFRICAN 212 | Introduction to African Popular Culture |  |
| AFRICAN/ <br> AFROAMER 220 | HipHop, Youth Culture, and Politics in Senegal |  |
| AFRICAN 230 | Introduction to Yoruba Life and Culture |  |
| AFRICAN 231 | Introduction to Arabic Literary Culture |  |
| AFRICAN 232 | Introduction to Swahili Cultures |  |
| AFRICAN/ <br> AFROAMER 233 | Global HipHop and Social Justice |  |
| AFRICAN/ <br> FOLKLORE 270 | The Hero and Trickster in African Oral Traditions |  |
| AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/ <br> POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey |  |
| AFRICAN/ AFROAMER/ HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction |  |
| AFRICAN 403 | Theories of African Cultural Studies | 3 |
| AFRICAN 405 | Topics in African Cultural Studies | 3 |
| One from: |  | 3-4 |
| AFRICAN 300 | African Literature in Translation |  |
| AFRICAN 301 | Introduction to African Linguistics |  |
| AFRICAN 303 | African Literature and Visual Culture |  |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture |  |
| AFRICAN 402 | Theory of African Literature |  |
| AFRICAN 406 | Topics in African Literature |  |
| AFRICAN 407 | Topics in African Languages |  |
| AFRICAN 412 | Contemporary African Fiction |  |
| AFRICAN/ AFROAMER 413 | Contemporary African and Caribbean Drama |  |
| AFRICAN/ FRENCH 440 | African/Francophone Film |  |
| AFRICAN/ PORTUG 451 | Lusophone African Literature |  |
| AFRICAN 453 | Modern African Literature in English |  |
| AFRICAN/ <br> FOLKLORE 471 | Oral Traditions and the Written Word |  |
| AFRICAN 500 | Language and Society in Africa |  |


| AFRICAN 501 | Structure and Analysis of African Languages |  |
| :---: | :---: | :---: |
| One course outside the department or 6th unit of African language |  | 3-4 |
| Outside courses: |  |  |
| AFROAMER/ <br> ART HIST 241 | Introduction to African Art and Architecture |  |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History |  |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas |  |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| ANTHRO 333 | Prehistory of Africa |  |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) |  |
| ART HIST/ <br> AFROAMER 241 | Introduction to African Art and Architecture |  |
| ART HIST 479 | Art and History in Africa |  |
| ART HIST 579 | Proseminar in African Art |  |
| ECON/A A E 477 | Agricultural and Economic Development in Africa |  |
| GEN\&WS/ <br> AFROAMER 221 | Introduction to Black Women's Studies |  |
| GEN\&WS/ <br> AFROAMER 267 | Artistic/Cultural Images of Black Women |  |
| GEN\&WS/ AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| GEOG 355 | Africa, South of the Sahara |  |
| HISTORY 201 | The Historian's Craft (Roman Africa) |  |
| HISTORY 278 | Africans in the Americas, 1492-1808 |  |
| HISTORY 279 | Afro-Atlantic History, 1808-Present |  |
| HISTORY 377 | History of Africa, 1500 to 1870 |  |
| HISTORY 378 | History of Africa Since 1870 |  |
| HISTORY 444 | History of East Africa |  |
| HISTORY 445 | History of Equatorial Africa |  |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature |  |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen |  |
| MUSIC/ AFROAMER/ DANCE 318 | Cultural Cross Currents: West African Dance/Music in the Americas |  |
| POLI SCI 329 | African Politics |  |
| POLI SCI/ <br> GEN\&WS 429 | Gender and Politics in Comparative Perspective |  |
| POLI SCI 455 | African International Relations |  |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature |  |
| 6th-unit language courses: |  |  |
| AFRICAN 436 | Advanced Studies in Swahili Language-Readings |  |
| AFRICAN/ LCA LANG 446 | Readings in Advanced Arabic Texts |  |
| AFRICAN 330 | Sixth Semester Arabic |  |


| AFRICAN 476 | Sixth Semester Yoruba |
| :--- | :--- |
| AFRICAN 494 | Sixth Semester, A Language of <br> Southern Africa |
| AFRICAN 496 | Sixth Semester, A Language of <br> Northern Africa |
| AFRICAN 498 | Sixth Semester, A Language of West <br> Africa |

## Total Credits

## ELECTIVES

Credits in any African Language or Culture Studies course (listed above) or any of the following courses to achieve 30 credits and eight courses in the major:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN 323 | Third Semester Arabic | 4 |
| AFRICAN 333 | Third Semester Swahili | 4 |
| AFRICAN 337 | Third Semester-A Language of <br> Southern Africa | 4 |
| AFRICAN 373 | Third Semester Yoruba | 4 |
| AFRICAN 475 | Fifth Semester Yoruba | 3 |
| AFRICAN 493 | Fifth Semester, A Language of <br> Southern Africa | 3 |
| AFRICAN 495 | Fifth Semester, A Language of <br> Northern Africa | 3 |
| Fifth Semester, A Language of West | 3 |  |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all AFRICAN and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in AFRICAN, taken on the UW-Madison campus
1 Courses with intermediate or advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the African Cultural Studies Major in consultation with the African Cultural Studies undergraduate advisor. To be admitted to the Honors Program in African Cultural Studies, students must have achieved a 3.300 university GPA and a 3.300 GPA in all AFRICAN courses as well as all courses accepted in the major.

## Honors in the African Cultural Studies Major Requirements

To earn a B.A. or B.S. with Honors in the Major in African Cultural Studies students must satisfy both the requirements for the major (above) and the following additional requirements:

1. Earn a 3.300 overall university GPA
2. Earn 3.300 GPA in all AFRICAN courses, and all courses accepted in the major
3. Complete a minimum of 15 credits in the major for Honors while in residence at UW-Madison from the following:
a. 9 credits in courses no lower than 200 level
b. A two-semester Senior Honors Thesis in AFRICAN 681 Senior Honors Thesis and AFRICAN 682 Senior Honors Thesis, for a total of 6 credits.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of
Work
Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Content) Recognize canonical authors and texts, historical forms, genres, and structures, and recognize aesthetic and cultural concerns in Africa and its diasporas.
2. (Content) Demonstrate their understanding of major theories, approaches, concepts, and current and classical research findings in African and diaspora literary and cultural studies.
3. (Content) Develop a level of proficiency in the different "ways of knowing" Africa and the diaspora through language, literatures, and cultures.
4. (Research Skills) Understand their own learning processes and possess the capacity to intentionally seek, evaluate, and learn from information, and recognize and reduce bias in their thinking.
5. (Research Skills) Effectively retrieve and comprehend primary sources in English and African languages, and secondary sources from a range of disciplines.
6. (Communication Skills) Develop or improve speaking, listening, writing, reading skills in an African language, and integrate these skills to communicate effectively.
7. (Communication Skills) Communicate effectively through essays, oral presentations, and discussion, so they may share their knowledge, wisdom, and values with others across social and professional settings.
8. (Communication Skills) Show knowledge of conventional rhetorical strategies, and integrate research by other authors while distinguishing between their own ideas and those of others.
9. (Communication Skills) Write and speak across disciplinary boundaries with regard to existing research about Africa and the diaspora in the humanities and social sciences.
10. (Analytical Skills) Discuss cultural texts from various theoretical and critical perspectives, formulate ideas and make connections between literary/cultural concepts and themes.
11. (Analytical Skills) Demonstrate command of the terminology and methodology of cultural studies, construct complex arguments, and use primary and secondary sources to support arguments.

## ADVISING AND CAREERS

## ADVISING

How does the major in African cultural studies fit into my educational goals?

While there are a wide variety of reasons to visit your major advisor, there seem to be two recurring questions:

1. Can I complete the major during the time I have left at UW?
2. Which classes will be offered in the future?

If you like to plan, seeing your major advisor is very important; it can make the difference between fitting in Contemporary Arabic Literature and Culture and Global HipHop and Social Justice before you graduate. Many students also try to complete more than one major or certificate, and discussing how you might be able to reach this goal is another primary role of your major advisor. Advisors can speak to you about course content, which courses fit best with your interest areas, and what kinds of courses might work best with your learning style-e.g., do you prefer multiple choice or essays? Any and all of these discussions can occur during your advising appointment.

In addition to discussing the major, advisors also know a lot about:

- General Education requirements
- Breadth requirements
- Interpreting university policies and deadlines
- Connecting majors to careers
- Getting involved with campus organizations
- Finding volunteer and/or internship opportunities
- Talking about your challenges and difficulties
- Connecting with tutors
- Picking a study abroad program
- Practicing for interviews
- Talking about graduate school
- Proofreading resumes and cover letters

Ready to meet with the ACS advisor? Make an appointment today (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ YjfjFEtg.html).

## CAREERS

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critical thinking and communication skills needed to succeed in careers ranging from politics and education to business and law.

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- critical reading, reflection, and analysis
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- broader knowledge of career and graduate-study options

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Overall, you will have a wide variety of skills and talents to start you on the path to a rewarding career!

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## L\&S CAREER RESOURCES

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- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

To view full faculty profiles, visit our website (https://african.wisc.edu/ people/faculty).

Matthew H. Brown: African screen media (particularly "Nollywood"), oral traditions, literature
Névine El Nossery: Francophone \& Middle Eastern literature and culture, postcolonial studies

Samuel England: Classical Arabic poetry and prose, modern Arabic literature
Jo Ellen Fair: Intersectionality of journalism, popular culture, social theory, and politics
Luis Madureira: Colonial and postcolonial studies, modernism, theater and performance
Mustafa Mustafa: Arabic
Tejumola Olaniyan: African, African American, and Caribbean literature and culture
Ronald Radano: ethnomusicology, US Black music and its transnational circulation
Damon Sajnani: Africana cultural studies, social and political theory, HipHop studies
Michael Schatzberg: African politics, comparative politics, politica culture
Katrina Daly Thompson: African discourse, linguistic ethnography, language pedagogy

## EMERITUS FACULTY

Patrick Bennett
Dustin Cowell
Magdalena Hauner
Linda Hunter
Edris Makward
Harold Scheub
Aliko Songolo

## ACADEMIC STAFF

Bill Bach, Department Administrator
Toni Landis, Academic Advisor/Student Services Coordinator

## RESOURCES AND SCHOLARSHIPS

## RESOURCES FOR LANGUAGE LEARNERS

One of the most valuable resources for students interested in language study is the Language Institute and its website, Languages at UWMadison (http://www.languages.wisc.edu).

Learn more about scholarships (http://www.languages.wisc.edu/beyond/ scholarships) and other opportunities for funded language study.

## AFRO-AMERICAN STUDIES

The Department of Afro-American Studies at the University of Wisconsin-Madison offers students an opportunity to study those aspects of black history, culture, and society in ideal interdisciplinary models that reconstruct Afro-American life. It challenges students to critically examine facts and issues that are historically and contemporaneously relevant to the Afro-American experience.

The department offers undergraduate majors in five areas: literature and culture; theater, music and the visual arts; history; Black Women's studies; and inter-group relations. The M.A. program is based on personalized programs of study shaped to meet the needs of individual students, many of whom participate in the "Bridge" programs which
enable them to move directly into Ph.D. programs in English and history. Faculty members and students are active in a broad range of activities, including hip-hop programs for at-risk youth, community theater, college classes for low-income adults, and various support activities for the National Voting Rights Museum in Selma, Alabama. The department prides itself on positive working relationships with our colleagues in traditional disciplines as well as the Women's Studies Program and the Department of African Cultural Studies. A vibrant community of scholars and students who believe in the ideal of unity without uniformity, we welcome all those committed to the deeper understanding of race in America and the world.

## DEGREES/MAJORS/CERTIFICATES

- Afro-American Studies, B.A. (p. 372)
- Afro-American Studies, B.S. (p. 376)
- Afro-American Studies, Certificate (p. 380)


## PEOPLE

Professors Adell, Drewal, Greene, Plummer, Thornton, Werner

Associate Professor Clark-Pujara
Assistant Professors Almiron, Brown, Davis

## AFRO-AMERICAN STUDIES, B.A.

The Department of Afro-American Studies at the University of Wisconsin-Madison offers students an opportunity to study those aspects of black history, culture, and society in ideal interdisciplinary models that reconstruct Afro-American life. It challenges students to critically examine facts and issues that are historically and contemporaneously relevant to the Afro-American experience.

The department offers undergraduate majors in five areas: literature and culture; theater, music and the visual arts; history; Black Women's studies; and inter-group relations. The M.A. program is based on personalized programs of study shaped to meet the needs of individual students, many of whom participate in the "Bridge" programs which enable them to move directly into Ph.D. programs in English and history. Faculty members and students are active in a broad range of activities, including hip-hop programs for at-risk youth, community theater, college classes for low-income adults, and various support activities for the National Voting Rights Museum in Selma, Alabama. The department prides itself on positive working relationships with our colleagues in traditional disciplines as well as the Women's Studies Program and the Department of African Cultural Studies. A vibrant community of scholars and students who believe in the ideal of unity without uniformity, we welcome all those committed to the deeper understanding of race in America and the world.

## HOW TO GET IN

Students should inform the Department of Afro-American Studies Office of their intention to major and be assigned an advisor within the department.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QRB) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major in Afro-American studies requires a minimum of 30 credits and one area of concentration, plus electives as follows: ${ }^{1}$
1 Electives may be taken from any concentration area. A maximum 9 credits in Directed Study (AFROAMER 199, AFROAMER 699) may apply.

## AFRO-AMERICAN CULTURE: CHOOSE AN EMPHASIS

 LiteratureCode
Two courses from:
Title
Credits

AFROAMER 155
AFROAMER/
GEN\&WS 222
AFROAMER 227

AFROAMER 265
One course from:

They: Race in American Literature Introduction to Black Women Writers
Masterpieces of African American Literature
African-American Autobiography

| AFROAMER 154 | Hip-Hop and Contemporary American Society |  |
| :---: | :---: | :---: |
| AFROAMER 156 | Black Music and American Cultural History |  |
| AFROAMER 225 | Introduction to African American Dramatic Literature |  |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture |  |
| AFROAMER/ ART HIST 242 | Introduction to Afro-American Art |  |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| AFROAMER 456 | Soul Music and the African American Freedom Movement |  |
| Three courses from: |  | 9 |
| AFROAMER 337 | The Harlem Renaissance |  |
| AFROAMER 338 | The Black Arts Movement |  |
| AFROAMER 525 | Major Authors |  |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature |  |
| AFROAMER/ ENGL 672 | Selected Topics in Afro-American Literature |  |
| AFROAMER 675 | Selected Topics in Afro-American Culture |  |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings |  |


| Total Credits | 18 |
| :--- | :---: |

The Arts

| Code | Title | Credits |
| :---: | :---: | :---: |
| Two courses from: |  | 6 |
| AFROAMER 154 | Hip-Hop and Contemporary American Society |  |
| AFROAMER 156 | Black Music and American Cultural History |  |
| AFROAMER 225 | Introduction to African American Dramatic Literature |  |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture |  |
| AFROAMER/ ART HIST 242 | Introduction to Afro-American Art |  |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| One course from: |  | 3 |
| AFROAMER 155 | They: Race in American Literature |  |
| AFROAMER/ GEN\&WS 222 | Introduction to Black Women Writers |  |
| AFROAMER 227 | Masterpieces of African American Literature |  |
| AFROAMER 265 | African-American Autobiography |  |
| Three courses from: |  | 9 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women |  |
| AFROAMER 303 | Blacks, Film, and Society |  |
| AFROAMER 337 | The Harlem Renaissance |  |


| AFROAMER 338 | The Black Arts Movement |
| :--- | :--- |
| AFROAMER 456 | Soul Music and the African <br> American Freedom Movement |
| AFROAMER/ | Seminar in Afro-American Music <br> MUSIC 509 |
| AFROAMER/ Selected Topics on Afro-American <br> ART 674 Artists |  |
| AFROAMER 675 | Selected Topics in Afro-American <br> Culture |
| AFROAMER/ | Visual Culture, Gender and Critical |
| GEN\&WS 679 | Race Theory |

$\begin{array}{ll}\text { Total Credits } & 18\end{array}$

## AFRO-AMERICAN HISTORY

Code Title Credits

One course from: 3-4

| AFROAMER 231 | Introduction to Afro-American <br> History |
| :--- | :--- |
| AFROAMER 272 | Race and American Politics from <br> the New Deal to the New Right |
| AFROAMER/ | African and African-American |
| AFRICAN/ | Linkages: An Introduction |
| HISTORY/ |  |
| POLI SCI 297 | The Caribbean and its Diasporas |
| AFROAMER/ |  |
| HISTORY 347 |  |
| Two courses from: |  |


| AFROAMER 302 | Undergraduate Studies in Afro- <br> American History |
| :--- | :--- |
| AFROAMER 303 | Blacks, Film, and Society |
| AFROAMER/ | Black Women in America: <br> GEN\&WS 324 <br> Reconstruction to the Present |
| AFROAMER/ | Race and Gender in Post-World War <br> GEN\&WS 326 |
| II U.S. Society |  |

AFROAMER/ Afro-American History Since 1900
HISTORY 321

AFROAMER/ Afro-American History to 1900
HISTORY 322
AFROAMER/ Slavery, Civil War, and
HISTORY 393 Reconstruction, 1848-1877
AFROAMER/ African American Women's Activism
GEN\&WS 624 (19th \& 20th Centuries)
AFROAMER 631 Colloquium in Afro-American History
AFROAMER 671 Selected Topics in Afro-American History

Total Credits
18-19

| AFRO-AMERICAN SOCIETY: CHOOSE AN EMPHASIS |  |  |
| :---: | :---: | :---: |
| Black Women's Studies |  |  |
| Code | Title | Credits |
| AFROAMER/ GEN\&WS 221 | Introduction to Black Women's Studies | 3 |
| Two courses from: |  | 6 |
| AFROAMER/ GEN\&WS 222 | Introduction to Black Women Writers |  |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History |  |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History |  |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present |  |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society |  |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| Three courses from: |  | 9 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women |  |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) |  |
| AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement |  |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings |  |
| AFROAMER/ GEN\&WS 679 | Visual Culture, Gender and Critical Race Theory |  |


| Total Credits | 18 |
| :--- | :--- |


| Intergroup Relations |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AFROAMER 151 | Introduction to Contemporary AfroAmerican Society | 3 |
| Two courses from: |  | 6 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History |  |
| AFROAMER/ ASIAN AM 443 | Mutual Perceptions of Racial Minorities |  |
| Three courses from: |  | 9 |
| AFROAMER/ <br> ANTHRO/ <br> C\&E SOC/GEOG/ <br> HISTORY/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction |  |
| AFROAMER/ POLI SCI 519 | African American Political Theory |  |
| AFROAMER/ <br> HDFS/ <br> SOC WORK 521 | African American Families |  |
| AFROAMER 673 | Selected Topics in Afro-American Society |  |

Total Credits

## RESIDENCE \& QUALITY OF WORK IN THE MAJOR

2.000 GPA in all AFROAMER and major courses
2.000 GPA on at least 15 credits of upper-level work in the major, in residence ${ }^{2}$

15 credits in AFROAMER, taken on the UW-Madison campus
2 Upper-level in the major includes AFROAMER courses numbered 300 and above and courses that count for the major that are designated as Intermediate or Advanced level.

## DISTINCTION

## Distinction in the Major

Afro-American studies majors not enrolled for Honors in the Major may receive the "Distinction in the Major" notation on the transcript by earning a 3.750 grade point average in major courses and successfully completing the AFROAMER 691-AFROAMER 692 Senior Thesis project.

## Thesis of Distinction

The award Thesis of Distinction is granted for an exceptionally good or original thesis, without consideration of the student's record in other work. A committee of at least two faculty members will evaluate the thesis and recommend to the dean the granting of this award when appropriate.

## HONORS IN THE MAJOR

Students may declare Honors in the Afro-American Studies Major in consultation with the Afro-American Studies undergraduate advisor(s).

## HONORS IN THE AFRO-AMERICAN STUDIES MAJOR REQUIREMENTS

To earn Honors in the Major in Afro-American Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- 3.300 University GPA
- 3.500 GPA in all AFROAMER courses, and all courses accepted in the major
- Complete at least one course with a cross-cultural or comparative focus:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFROAMER/ | Introduction to African Art and | 3 |
| ART HIST 241 | Architecture |  |
| AFROAMER/ | Latin America: An Introduction | $3-4$ |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  | 4 |
| LACIS/POLI SCI/ |  |  |
| SOC/SPANISH 260 |  | 4 |
| AFROAMER/ | Africa: An Introductory Survey |  |
| AFRICAN/ANTHRO/ |  |  |
| GEOG/HISTORY/ |  | 3 |
| POLI SCI/SOC 277 |  |  |
| AFROAMER/ | African and African-American |  |
| AFRICAN/HISTORY/ | Linkages: An Introduction |  |
| POLI SCI 297 |  | The Caribbean and its Diasporas |
| AFROAMER/ |  |  |
| HISTORY 347 |  |  |


| AFROAMER/ <br> AFRICAN 413 | Contemporary African and Caribbean Drama |
| :---: | :---: |
| AFROAMER/ <br> ASIAN AM 443 <br> - Complete a 600 level, to in AFROAM | Mutual Perceptions of Racial <br> Minorities <br> at least 15 credits in AFROAMER at the 500 or o include a two-semester Senior Honors Thesis MER 681 and AFROAMER 682, for a total of 6 credits. |
| UNIVERSITY DEGREE REQUIREMENTS |  |
| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Familiar with the history, culture and social conditions of African Americans in the United States and, secondarily, in the African diaspora.
2. Prepared to interact effectively in a multicultural world.
3. Prepared to share the results of academic research in the area of race with their communities in Wisconsin, the U.S., and the world.
4. Prepared for careers working in institutions that address the needs of multicultural communities.
5. Develop an understanding of the connection between different disciplinary approaches to the study of race.

## ADVISING AND CAREERS

## ADVISING

The Department of Afro-American Studies encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

Professor Sandra Adell, Undergraduate and Certificate advisor in the major
saadell@wisc.edu
608-262-0425

4115 Helen C. White Hall

## CAREERS

## Afro-American Studies Main Office:

Department of Afro-American Studies
4141 Helen C. White Hall
600 North Park Street, Madison, WI 53706
Phone: 608-263-1642; Fax: 608-263-7198

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Adell, Drewal, Greene, Plummer, Thornton, Werner
Associate Professor Clark-Pujara
Assistant Professors Almiron, Brown, Davis

## AFRO-AMERICAN STUDIES, B.S.

The Department of Afro-American Studies at the University of Wisconsin-Madison offers students an opportunity to study those aspects of black history, culture, and society in ideal interdisciplinary models that reconstruct Afro-American life. It challenges students to critically examine facts and issues that are historically and contemporaneously relevant to the Afro-American experience.

The department offers undergraduate majors in five areas: literature and culture; theater, music and the visual arts; history; Black Women's studies; and inter-group relations. The M.A. program is based on personalized programs of study shaped to meet the needs of individual students, many of whom participate in the "Bridge" programs which enable them to move directly into Ph.D. programs in English and history. Faculty members and students are active in a broad range of activities, including hip-hop programs for at-risk youth, community theater, college classes for low-income adults, and various support activities for the National Voting Rights Museum in Selma, Alabama. The department
prides itself on positive working relationships with our colleagues in traditional disciplines as well as the Women's Studies Program and the Department of African Cultural Studies. A vibrant community of scholars and students who believe in the ideal of unity without uniformity, we welcome all those committed to the deeper understanding of race in America and the world.

## HOW TO GET IN

Students should inform the Department of Afro-American Studies Office of their intention to major and be assigned an advisor within the department.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT

| Foreign <br> Language$\quad$Complete the third unit of a foreign language <br> Note: A unit is one year of high school work or one <br> semester/term of college work. |
| :--- |
| L\&S Breadth- Humanities, 12 credits: 6 of the 12 credits must be in <br> literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits <br> in biological science; and must include 6 credits in <br> physical science |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major in Afro-American studies requires a minimum of 30 credits and one area of concentration, plus electives as follows: ${ }^{1}$

1 Electives may be taken from any concentration area. A maximum 9 credits in Directed Study (AFROAMER 199, AFROAMER 699) may apply.

## AFRO-AMERICAN CULTURE: CHOOSE AN EMPHASIS

## Literature

Code Title Credits
Two courses from: 6
AFROAMER 155
AFROAMER/
GEN\&WS 222
AFROAMER 227 Masterpieces of African American Literature

## AFROAMER 265

 One course from:| AFROAMER 154 | Hip-Hop and Contemporary American Society |  |
| :---: | :---: | :---: |
| AFROAMER 156 | Black Music and American Cultural History |  |
| AFROAMER 225 | Introduction to African American Dramatic Literature |  |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture |  |
| AFROAMER/ <br> ART HIST 242 | Introduction to Afro-American Art |  |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| AFROAMER 456 | Soul Music and the African American Freedom Movement |  |
| Three courses from: |  | 9 |
| AFROAMER 337 | The Harlem Renaissance |  |
| AFROAMER 338 | The Black Arts Movement |  |
| AFROAMER 525 | Major Authors |  |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature |  |
| AFROAMER/ <br> ENGL 672 | Selected Topics in Afro-American Literature |  |
| AFROAMER 675 | Selected Topics in Afro-American Culture |  |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings |  |

## Total Credits

The Arts

| Code | Title | Credits |
| :---: | :---: | :---: |
| Two courses from: |  | 6 |
| AFROAMER 154 | Hip-Hop and Contemporary American Society |  |
| AFROAMER 156 | Black Music and American Cultural History |  |
| AFROAMER 225 | Introduction to African American Dramatic Literature |  |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture |  |
| AFROAMER/ ART HIST 242 | Introduction to Afro-American Art |  |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| One course from: |  | 3 |
| AFROAMER 155 | They: Race in American Literature |  |
| AFROAMER/ GEN\&WS 222 | Introduction to Black Women Writers |  |
| AFROAMER 227 | Masterpieces of African American Literature |  |
| AFROAMER 265 | African-American Autobiography |  |
| Three courses from: |  | 9 |


| AFROAMER 303 | Blacks, Film, and Society |
| :--- | :--- |
| AFROAMER 337 | The Harlem Renaissance |
| AFROAMER 338 | The Black Arts Movement |
| AFROAMER 456 | Soul Music and the African <br> American Freedom Movement |
| AFROAMER/ | Seminar in Afro-American Music <br> MUSIC 509 |
| AFROAMER/ Selected Topics on Afro-American and Criticism <br> ART 674 Artists <br> AFROAMER 675 Selected Topics in Afro-American <br> AFROAMER/ Culture <br> GEN\&WS 679 Race Theory |  |

## Total Credits

## AFRO-AMERICAN HISTORY

Code Title Credits

One course from: 3-4

| AFROAMER 231 | Introduction to Afro-American History |  |
| :---: | :---: | :---: |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right |  |
| AFROAMER/ AFRICAN/ HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction |  |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas |  |
| Two courses from: |  | 6 |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History |  |
| AFROAMER 303 | Blacks, Film, and Society |  |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present |  |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society |  |
| AFROAMER 456 | Soul Music and the African American Freedom Movement |  |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States |  |

Three courses from:
9

| AFROAMER/ | Afro-American History Since 1900 |
| :--- | :--- |
| HISTORY 321 |  |
| AFROAMER/ | Afro-American History to 1900 |
| HISTORY 322 |  |
| AFROAMER/ | Slavery, Civil War, and |
| HISTORY 393 | Reconstruction, 1848-1877 |
| AFROAMER/ | African American Women's Activism |
| GEN\&WS 624 | (19th \& 20th Centuries) |
| AFROAMER 631 | Colloquium in Afro-American <br> History |

AFROAMER 671 Selected Topics in Afro-American History
Total Credits

| AFRO-AMERICAN SOCIETY: CHOOSE AN EMPHASIS |  |  |
| :---: | :---: | :---: |
| Black Women's Studies |  |  |
| Code | Title | Credits |
| AFROAMER/ GEN\&WS 221 | Introduction to Black Women's Studies | 3 |
| Two courses from: |  | 6 |
| AFROAMER/ GEN\&WS 222 | Introduction to Black Women Writers |  |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History |  |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History |  |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present |  |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society |  |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa |  |
| Three courses from: |  | 9 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women |  |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) |  |
| AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement |  |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings |  |
| AFROAMER/ GEN\&WS 679 | Visual Culture, Gender and Critical Race Theory |  |


| Total Credits | 18 |
| :--- | :--- |


| Intergroup Relations |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AFROAMER 151 | Introduction to Contemporary AfroAmerican Society | 3 |
| Two courses from: |  | 6 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History |  |
| AFROAMER/ ASIAN AM 443 | Mutual Perceptions of Racial Minorities |  |
| Three courses from: |  | 9 |
| AFROAMER/ <br> ANTHRO/ <br> C\&E SOC/GEOG/ <br> HISTORY/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction |  |
| AFROAMER/ POLI SCI 519 | African American Political Theory |  |
| AFROAMER/ <br> HDFS/ <br> SOC WORK 521 | African American Families |  |
| AFROAMER 673 | Selected Topics in Afro-American Society |  |

Total Credits

## RESIDENCE \& QUALITY OF WORK IN THE MAJOR

2.000 GPA in all AFROAMER and major courses
2.000 GPA on at least 15 credits of upper-level work in the major, in residence ${ }^{2}$

15 credits in AFROAMER, taken on the UW-Madison campus
2 Upper-level in the major includes AFROAMER courses numbered 300 and above and courses that count for the major that are designated as Intermediate or Advanced level.

## DISTINCTION

## Distinction in the Major

Afro-American studies majors not enrolled for Honors in the Major may receive the "Distinction in the Major" notation on the transcript by earning a 3.750 grade point average in major courses and successfully completing the AFROAMER 691-AFROAMER 692 Senior Thesis project.

## Thesis of Distinction

The award Thesis of Distinction is granted for an exceptionally good or original thesis, without consideration of the student's record in other work. A committee of at least two faculty members will evaluate the thesis and recommend to the dean the granting of this award when appropriate.

## HONORS IN THE MAJOR

Students may declare Honors in the Afro-American Studies Major in consultation with the Afro-American Studies undergraduate advisor(s).

## HONORS IN THE AFRO-AMERICAN STUDIES MAJOR REQUIREMENTS

To earn Honors in the Major in Afro-American Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- 3.300 University GPA
- 3.500 GPA in all AFROAMER courses, and all courses accepted in the major
- Complete at least one course with a cross-cultural or comparative focus:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFROAMER/ | Introduction to African Art and | 3 |
| ART HIST 241 | Architecture |  |
| AFROAMER/ | Latin America: An Introduction | $3-4$ |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  | 4 |
| LACIS/POLI SCI/ |  |  |
| SOC/SPANISH 260 |  | 4 |
| AFROAMER/ | Africa: An Introductory Survey |  |
| AFRICAN/ANTHRO/ |  |  |
| GEOG/HISTORY/ |  | 3 |
| POLI SCI/SOC 277 |  |  |
| AFROAMER/ | African and African-American |  |
| AFRICAN/HISTORY/ | Linkages: An Introduction |  |
| POLI SCI 297 |  | The Caribbean and its Diasporas |
| AFROAMER/ |  |  |
| HISTORY 347 |  |  |


| AFROAMER/ <br> AFRICAN 413 | Contemporary African and Caribbean Drama |
| :---: | :---: |
| AFROAMER/ <br> ASIAN AM 443 <br> - Complete at 600 level, to in AFROAM | Mutual Perceptions of Racial <br> 3 Minorities <br> at least 15 credits in AFROAMER at the 500 or o include a two-semester Senior Honors Thesis MER 681 and AFROAMER 682, for a total of 6 credits. |
| UNIVERSITY DEGREE REQUIREMENTS |  |
| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| Residency $\begin{array}{cc}\text { D } \\ & \text { c } \\ & \\ & \text { d } \\ & \\ & \text { fo } \\ & \text { A }\end{array}$ | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Familiar with the history, culture and social conditions of African Americans in the United States and, secondarily, in the African diaspora.
2. Prepared to interact effectively in a multicultural world.
3. Prepared to share the results of academic research in the area of race with their communities in Wisconsin, the U.S., and the world.
4. Prepared for careers working in institutions that address the needs of multicultural communities.
5. Develop an understanding of the connection between different disciplinary approaches to the study of race.

ADVISING AND CAREERS

## ADVISING

The Department of Afro-American Studies encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

Professor Sandra Adell, Undergraduate and Certificate advisor in the major
saadell@wisc.edu
608-262-0425

## 4115 Helen C. White Hall

## CAREERS

Afro-American Studies Main Office:
Department of Afro-American Studies
4141 Helen C. White Hall
600 North Park Street, Madison, WI 53706
Phone: 608-263-1642; Fax: 608-263-7198

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Adell, Drewal, Greene, Plummer, Thornton, Werner
Associate Professor Clark-Pujara
Assistant Professors Almiron, Brown, Davis

## AFRO-AMERICAN STUDIES, CERTIFICATE

The certificate in Afro-American studies introduces undergraduate students to the interdisciplinary study of African American, African diaspora and African history, society, and culture. Students may choose courses in African American history, literature, black women's studies, art history, visual culture, music history and sociology. The certificate offers students opportunities to engage in interdisciplinary study and practice that will complement their major and enhance their intellectual and creative participation in their chosen professions and as citizens in our global society.

## HOW TO GET IN

To declare a certificate in Afro-American studies, students must be enrolled as an undergraduate at the University of Wisconsin-Madison.

Interested students must contact the department's undergraduate adviser to declare the certificate and be assigned a faculty adviser in their area of interest. Students may not declare both the certificate and the major in Afro-American studies.

## REQUIREMENTS

## CERTIFICATE REQUIREMENTS

Certificate students must plan with a faculty adviser a cohesive program consisting of 15 credits chosen from undergraduate AFROAMER courses.

- At least one 3-credit course must focus on Afro-American history (see list below).
- A minimum of 9 credits must be completed from AFROAMER courses numbered 300-699.
- At least one 3-credit course must be advanced (AFROAMER 500-697).
- A maximum of 3 credits of directed study (AFROAMER 699) may count toward the certificate.
- Students may not substitute courses from other academic programs or subject listings to fulfill the requirements for this program.
Code Title Credits

All certificate students must take one 3-credit course in 3
Afro-American history:

| AFROAMER 231 | Introduction to Afro-American History |  |
| :---: | :---: | :---: |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right |  |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History |  |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 |  |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 |  |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present |  |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society |  |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 |  |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) |  |
| AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement |  |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States |  |
| AFROAMER 631 | Colloquium in Afro-American History |  |
| AFROAMER 671 | Selected Topics in Afro-American History |  |
| AFROAMER elective requirement for the | to meet the minimum credit ertificate | 12 |
| Total Credits |  | 15 |

## RESIDENCE \& QUALITY OF WORK

At least 8 credits must be taken in residence. Courses taken on a UWMadison study abroad program are considered resident credits; however, study abroad courses must qualify as Afro-American studies credit.

A minimum 2.500 GPA in all courses eligible for the certificate is required. All certificate courses must be graded; credit/no credit and pass/fail do not qualify.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. To familiarize students with the history, culture and social conditions of African Americans in the United States.
2. To introduce students to an interdisciplinary approach to the study of race, gender, and ethnicity in America.
3. To prepare students for careers in institutions that address the needs of multicultural communities.

## ADVISING AND CAREERS

## Professor Sandra Adell, Certificate Advisor

saadell@wisc.edu
608-262-0425
4115 Helen C. White Hall
DARS is the document of record for the Afro-American studies certificate. Students should contact the certificate advisor to make sure they are on track to completing the program and to get confirmation of completion of the certificate.

## Main Office:

Department of Afro-American Studies
4141 Helen C. White Hall
600 North Park Stret, Madison, WI 53706
Phone: 608-263-1642
Fax: 608-263-7198

## PEOPLE

Professors: Sandra Adell, Henry Drewal, Christina Greene, Brenda Plummer, Michael Thornton, Craig Werner, Ethelene Whitmire

Associate Professor. Christy Clark-Pujara
Assistant Professors: Johanna Almiron, Ashley Brown, Thulani Davis

## AMERICAN INDIAN STUDIES PROGRAM

The American Indian Studies Program seeks to provide and maintain the highest levels of education, scholarship, leadership, and support to all students, staff, and faculty at the university. As an integral part of the university, the program maintains a special focus on assisting and supporting American Indians in their educational endeavors. In addition to the commitment to the university community, the program provides consultation and services to numerous local, state, and national organizations.

It is the mission of the American Indian Studies Program to provide leadership to other university departments and programs in the pursuit of American Indian course development and scholarship. In addition, the program serves as a resource center and support for individuals who are interested in American Indian culture, history, research, and contemporary life.

## DEGREES/MAJORS/CERTIFICATES

- American Indian Studies, Certificate (p. 382)


## PEOPLE

Director: Roberta Hill (https://english.wisc.edu/faculty-hill.htm) Associate Director: Denise Wiyaka (http://amindian.wisc.edu/facultystaff.htm)

## FACULTY

- Larry Nesper (http://www.anthropology.wisc.edu/staff/nesper-larry), Anthropology
- Shannon Sparks (http://sohe.wisc.edu/staff/shannon-sparks-phd), Civil Liberties and Community Studies
- Rand Valentine (http://vanhise.Iss.wisc.edu/ling/?q=node/33), Linguistics


## AFFILIATED FACULTY

- Emily Arthur, (https://www.youtube.com/watch?v=R_70xsPvNQ8) Art
- Bret Benally Thompson (http://www.uwhealth.org/findadoctor/ profile/bret-r-benally-thompson-md/9039), Family Medicine
- Sarah Clayton (http://www.anthropology.wisc.edu/staff/claytonsarah), Anthropology
- Ada Deer (http://socwork.wisc.edu/ada-deer), Social Work, Emerita
- Eve Emshwiller (http://www.botany.wisc.edu/emshwiller.htm), Botany
- John Hall (https://history.wisc.edu/faculty_jh.htm), History
- John Hitchcock (https://art.wisc.edu/people/faculty), Art
- Leah Horowitz (https://sohe.wisc.edu/staff/leah-horowitz), Nelson Institute
- Tom Jones (https://art.wisc.edu/people/faculty), Art
- Stephen Kantrowitz (https://history.wisc.edu/faculty_sk.htm), History
- Patty Loew (http://Isc.wisc.edu/people/faculty/patty-loew), Life Sciences Communication
- Truman Lowe, Art, Emeritus
- Monica Macaulay (http://vanhise.Iss.wisc.edu/ling/?q=node/30), Linguistics
- Shaun Marcott (http://geoscience.wisc.edu/geoscience/people/ faculty/shaun-marcott), Geoscience
- Richard Monette (http://www.law.wisc.edu/profiles/ rmonette@wisc.edu), Law School
- Shiela Reaves (http://Isc.wisc.edu/faculty/shiela-reaves), Life Sciences Communication
- Doug Reinemann (https://bse.wisc.edu/Douglas_Reinemann.htm), Biological Systems Engineering
- Paul Robbins (https://nelson.wisc.edu/director.php), Nelson Institute
- Sissel Schroeder (http://www.anthropology.wisc.edu/staff/schroedersissel), Anthropology
- Ahna Skop (https://genetics.wisc.edu/staff/skop-ahna), Genetics
- Lucas Zoet, (http://geoscience.wisc.edu/geoscience/people/faculty/ lucas-zoet) Geoscience


## AFFILIATED STAFF

- Aaron Bird Bear (http://www.education.wisc.edu/soe/about/ resource-service-units/student-diversity-programs/american-indian-curriculum-services/why-act31/exemplars/viewpoints-aaron-birdbear), Education
- Jessie Conaway, (https://nelson.wisc.edu/contact/car-staff.php) Nelson Institute


## AMERICAN INDIAN STUDIES, CERTIFICATE

## CERTIFICATE IN AMERICAN INDIAN STUDIES

A certificate in American Indian studies is a way of giving recognition to students who have made a significant effort to learn about American Indian culture and the place of American Indians in American society. Students receiving a certificate will have the achievement officially recorded via transcript notation.

## WHAT CAN I DO WITH A CERTIFICATE IN AMERICAN INDIAN STUDIES?

Students of American Indian studies go on to successful careers in administration, advising, academics, advocacy, the arts, business, community outreach, consulting, education, government, health or health education, journalism, library science, literacy programming, lobbying, management, politics, publishing, school counseling, social work, research, and many more.

## HOW TO GET IN

Students are required to declare the American Indian studies (AIS) certificate. To begin the certificate declaration process, students must fill out the Certificate Program Application form and bring it to room 316 Ingraham Hall. Students should contact the AIS certificate advisor to obtain the form and to obtain more details about the program. The certificate is open to Special students and undergraduate students regardless of the college of enrollment.

To learn more about the AIS certificate, contact Denise Wiyaka at denise.wiyaka@wisc.edu or request information by sending an email
to ais@letsci.wisc.edu. Students can also visit the AIS office at 316 Ingraham Hall.

## REQUIREMENTS

Certificate advisor: Denise Wiyaka (denise.wiyaka@wisc.edu)
To receive a certificate in American Indian studies, a student must contact the American Indian studies advisor to fill out the necessary forms. Students are required to complete a total of 15 credits.

| Code <br> Introduction to Ame | Title <br> an Indian Studies: | Credits |
| :---: | :---: | :---: |
| AMER IND 100 | Introduction to American Indian Studies |  |
| FOUR courses from AT LEAST TWO of the following disciplines: |  |  |
| History |  |  |
| AMER IND/ HISTORY 490 | American Indian History |  |
| Literature and Media |  |  |
| AMER IND/ ENGL 275 | American Indian Oral Literatures |  |
| AMER IND 325 | American Indians in Film |  |
| AMER IND/ LSC 444 | Native American Environmental Issues and the Media |  |
| Anthropology |  |  |
| AMER IND/ ANTHRO 314 | Indians of North America |  |
| AMER IND 320 | Native Peoples of the Southwest |  |
| AMER IND/ ANTHRO 353 | Indians of the Western Great Lakes |  |
| AMER IND/ ANTHRO 354 | Archaeology of Wisconsin |  |
| Language |  |  |
| AMER IND 301 | First Semester Ojibwe |  |
| AMER IND 302 | Second Semester Ojibwe |  |
| AMER IND/ LINGUIS 371 | Survey of North American Indian Languages |  |
| AMER IND 401 | Ojibwe Language III |  |
| AMER IND 402 | Ojibwe Language IV |  |
| American Indian Social and Cultural Issues |  |  |
| AMER IND 250 | Indians of Wisconsin |  |
| AMER IND/ ANTHRO/ FOLKLORE/ GEN\&WS 437 | American Indian Women |  |
| AMER IND 450 | Issues in American Indian Studies |  |
| AMER IND/ ANTHRO/ BOTANY 474 | Ethnobotany |  |
| AMER IND/ HDFS 522 | American Indian Families |  |
| AMER IND/ <br> C\&E SOC/ <br> SOC 578 | Poverty and Place |  |

Additional credits to meet the minimum number of credits and courses required for the Certificate

## RESIDENCE AND QUALITY OF WORK

2.000 GPA must be earned on all coursework eligible to meet the certificate requirements.

6 credits may be taken as pass/fail. All other credits must be taken for a letter grade.

8 credits of the certificate coursework must be completed in residence.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. Apply knowledge and methods of inquiry characteristic of this interdisciplinary field.
2. Apply knowledge of historical precedents to contemporary issues.
3. Demonstrate knowledge of the creativity and ethos contained within the diverse ways of knowing (Indigenous Knowledge Systems) among American Indian nations and communities.
4. Apply knowledge of the effects (ongoing) of oppression and racism that American Indians experience.
5. Demonstrate knowledge of the contributions of American Indian value-belief systems and practical knowledge across all fields of human endeavor.

## ADVISING AND CAREERS

Students are required to declare the American Indian studies (AIS) certificate. For academic advising regarding the certificate, students should contact the AIS certificate advisor to obtain more details about the certificate program and general academic advising. Contact Denise Wiyaka at denise.wiyaka@wisc.edu or request information by sending an email to ais@letsci.wisc.edu. Students can also visit the AIS office at 316 Ingraham Hall.

## PEOPLE

Director: Roberta Hill (https://english.wisc.edu/faculty-hill.htm)
Associate Director: Denise Wiyaka (http://amindian.wisc.edu/facultystaff.htm)

## FACULTY

[^12]- Rand Valentine (http://vanhise.Iss.wisc.edu/ling/?q=node/33), Linguistics


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- Doug Reinemann (https://bse.wisc.edu/Douglas_Reinemann.htm), Biological Systems Engineering
- Paul Robbins (https://nelson.wisc.edu/director.php), Nelson Institute
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- Ahna Skop (https://genetics.wisc.edu/staff/skop-ahna), Genetics
- Lucas Zoet, (http://geoscience.wisc.edu/geoscience/people/faculty/ lucas-zoet) Geoscience


## AFFILIATED STAFF

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- Jessie Conaway, (https://nelson.wisc.edu/contact/car-staff.php) Nelson Institute


## ANTHROPOLOGY

Anthropology is the comparative study of human diversity through time and across the world. Its scope spans the humanities, the social sciences, and the biological, physical, and evolutionary sciences. As a history of the human species, anthropology studies all human biological and behavioral variation from the earliest fossil records to the present; it includes the study of nonhuman primates as well. As a social science, anthropology aims at uncovering the patterns of past and present societies. As one of the humanities, anthropology seeks to understand
the ways cultural meaning and political power have shaped human experience.

At the University of Wisconsin-Madison, anthropology consists of three subfields: archaeology-the investigation and analysis of the remains from past cultures, uncovered through excavation; biological anthropology-the study of human evolution and the roots of the biological and genetic diversity found among contemporary peoples; and sociocultural anthropology-the comparative study of society, politics, economy, and culture, whether in historical times or in our contemporary moment. UW-Madison also offers some classes in anthropological linguistics-the analysis of language and its place in social life. Comparative and empirical work-and fieldwork in particularare the hallmarks of anthropology on this campus.

Thus, anthropology at UW-Madison is characterized by a comparative point of view, a focus on humans and societies in all their variation and similarity, and an effort to reveal and understand the complex but organized diversity that has shaped the human condition, past and present.

## DEGREES/MAJORS/CERTIFICATES

- Anthropology, B.A. (p. 385)
- Anthropology, B.S. (p. 390)
- Archaeology, Certificate (p. 395)


## PEOPLE

## FACULTY

- Katherine Bowie (http://www.anthropology.wisc.edu/staff/bowiekatherine)
Cultural anthropology, Southeast Asia, Thailand
- Henry T. Bunn (http://www.anthropology.wisc.edu/staff/bunn-henry) Archaeology, emergence of culture, behavioral ecology, East Africa
- Jerome Camal (http://www.anthropology.wisc.edu/staff/camaljerome)
Cultural anthropology, ethnomusicology, Caribbean
- Sarah Clayton (http://www.anthropology.wisc.edu/staff/claytonsarah)
Archaeology, Mesoamerica, Teotihuacan
- Falina Enriquez (http://www.anthropology.wisc.edu/staff/enriquezfalina)
Cultural anthropology, ethnomusicology, Brazil
- John Hawks (http://www.anthropology.wisc.edu/staff/hawks-john) Biological anthropology, paleoanthropology, anthropological genomics, South Africa
- J. Mark Kenoyer (http://www.anthropology.wisc.edu/staff/kenoyer-jmark)
Archaeology, South Asia, Harappa, craft production
- Nam C. Kim (http://www.anthropology.wisc.edu/staff/kim-nam-c) Archaeology, Southeast Asia, Vietnam, complex societies, warfare
- Maria Lepowsky (http://www.anthropology.wisc.edu/staff/lepowskymaria)

Cultural anthropology, medical anthropology, Oceania

- Richard McFarland (http://www.anthropology.wisc.edu/staff/ mcfarland-richard)
Biological anthropology, primatology, behavioral ecology
- Larry Nesper (http://www.anthropology.wisc.edu/staff/nesper-larry) Cultural anthropology, legal anthropology, North America, Wisconsin
- Emiko Ohnuki-Tierney (http://www.anthropology.wisc.edu/staff/ ohnuki-tierney-emiko)
Cultural anthropology, East Asia, Japan
- Travis Pickering (http://www.anthropology.wisc.edu/staff/pickeringtravis)
Biological anthropology, taphonomy, South Africa
- Sissel Schroeder (http://www.anthropology.wisc.edu/staff/schroedersissel)
Archaeology, historical ecology, Eastern North America, complex societies
- Amy Stambach (http://www.anthropology.wisc.edu/staff/stambachamy)
Cultural anthropology, East Africa
- Karen Strier (http://www.anthropology.wisc.edu/staff/strier-karen) Biological anthropology, primatology, behavioral ecology, Brazil
- Claire Wendland (http://www.anthropology.wisc.edu/staff/wendlandclaire)
Cultural anthropology, medical anthropology, Africa, Malawi
- Zhou Yongming (http://www.anthropology.wisc.edu/staff/zhouyongming)
Cultural anthropology, East Asia, China, development


## ACADEMIC STAFF

- Elizabeth Leith (https://www.anthropology.wisc.edu/staff/leithelizabeth), Senior Academic Curator

Museum anthropology, protohistoric, European trade, historical archaeology

## AFFILIATE FACULTY

- William Aylward (http://canes.wisc.edu/aylward-william.htm)
- Bruce Barrett (http://www.fammed.wisc.edu/directory/327)
- Nicholas Cahill (http://arthistory.wisc.edu/nicholas-cahillbiography.htm)
- Jane Collins (http://dces.wisc.edu/people/faculty/jane-collins)
- Linda Hogle (http://medhist.wisc.edu/faculty/hogle/index.shtml)
- Elizabeth Mertz (http://law.wisc.edu/profiles/eemertz@wisc.edu)
- Ellen Rafferty


## ADMINISTRATIVE STAFF

For general information: anthroinfo@mailplus.wisc.edu

608-262-2866

- Kristine Schultz, Administrator kristine.schultz@wisc.edu 608-262-2868
- Clara Pfefferkorn, Graduate Coordinator cpfefferkorn@wisc.edu
608-262-2869
- Kyle Speth, Financial Specialist
speth2@wisc.edu
608-262-2867


## EMERITUS FACULTY

- Kenneth George

Cultural anthropology, Southeast Asia, Indonesia

- Sharon Hutchinson
sehutchi@wisc.edu
Cultural anthropology, Africa
- Anatoly Khazanov (http://www.anthropology.wisc.edu/staff/ khazanov-anatoly)
Cultural anthropology
- Herbert Lewis

Cultural anthropology, history of anthropology

- T. Douglas Price

Archaeology, Archaeological chemistry, Europe

- Frank Salomon

Cultural anthropology, South America

- James Stoltman

Archaeology, North America, Wisconsin

## ANTHROPOLOGY, B.A.

Anthropology is the comparative study of human diversity through time and across the world. Its scope spans the humanities, the social sciences, and the biological, physical, and evolutionary sciences. As a history of the human species, anthropology studies all human biological and behavioral variation from the earliest fossil records to the present; it includes the study of nonhuman primates as well. As a social science, anthropology aims at uncovering the patterns of past and present societies. As one of the humanities, anthropology seeks to understand the ways cultural meaning and political power have shaped human experience.

At the University of Wisconsin-Madison, anthropology consists of three subfields: archaeology-the investigation and analysis of the remains from past cultures, uncovered through excavation; biological anthropology-the study of human evolution and the roots of the biological and genetic diversity found among contemporary peoples; and sociocultural anthropology-the comparative study of society, politics, economy, and culture, whether in historical times or in our contemporary moment. UW-Madison also offers some classes in anthropological linguistics-the analysis of language and its place in
social life. Comparative and empirical work-and fieldwork in particularare the hallmarks of anthropology on this campus.

Thus, anthropology at UW-Madison is characterized by a comparative point of view, a focus on humans and societies in all their variation and similarity, and an effort to reveal and understand the complex but organized diversity that has shaped the human condition, past and present.

## HOW TO GET IN

Students wishing to declare an anthropology major should go to the Department of Anthropology, 5240 William H. Sewell Social Science Building.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of
one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS



| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :--- | :--- | ---: |
| ANTHRO 105 | Principles of Biological | 3 |
|  | Anthropology |  |
| ANTHRO 300 | Cultural Anthropology: Theory and <br>  <br> Ethnography | 3 |
| ANTHRO 490 | Undergraduate Seminar ${ }^{1}$ | 3 |


| Select two of the following: | 6 |  |
| :--- | :--- | :--- |
| ANTHRO 212 | Principles of Archaeology |  |
| ANTHRO 321 | The Emergence of Human Culture |  |
| ANTHRO 322 | The Origins of Civilization |  |
| Additional credits in ANTHRO to reach 30 credit minimum |  |  |
| for the major. |  |  |

Total Credits
${ }^{1}$ By arrangement with a supervising professor, certain students may substitute a thesis for 4 of the required credits, to be written in biological anthropology, archaeology, or sociocultural anthropology in ANTHRO 690.

## Residence and Quality of Work

2.000 GPA in all ANTHRO and major courses
2.000 GPA in 15 upper-level major credits in residence ${ }^{2}$

15 credits in ANTHRO, taken on campus
${ }^{2}$ Courses 300 level and higher are counted as upper level, with the exception of Quechua and Yucatec Maya language courses (ANTHRO/ LACIS 361 Elementary Quechua, ANTHRO/LACIS 362 Elementary Quechua, ANTHRO/LACIS 363 Intermediate Quechua, ANTHRO/ LACIS 364 Advanced Quechua, ANTHRO/LACIS 376 First Semester Yucatec Maya, ANTHRO/LACIS 377 Second Semester Yucatec Maya).

Students planning to go on to graduate-level study should talk to their advisor about foreign languages, field experience, or other training needed for advanced anthropological research. Additional courses in related fields should be discussed with an advisor in the department.

## DISTINCTION IN THE MAJOR

Undergraduate students who are not enrolled in the honors program are eligible to be recommended by their advisor to the department to receive Distinction in the Major if they have maintained a 3.500 GPA in their major and have written an exceptional senior thesis or an exceptional paper in an undergraduate seminar or independent study.

## HONORS IN THE MAJOR

Students may declare Honors in the Major in Anthropology in consultation with the Anthropology advisor(s).

## HONORS IN THE ANTHROPOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Anthropology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all ANTHRO courses, and all courses accepted in the major
- Complete the following coursework:
- ANTHRO 490 Undergraduate Seminar or one seminar at the 600 level; choose from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ANTHRO 601 | Proseminar in Biological | 3 |
|  | Anthropology |  |
| ANTHRO 603 | Seminar in Evolutionary Theory | 3 |


| ANTHRO 604 | Seminar: Topics in Physical <br> Anthropology of the Living | 3 |
| :--- | :--- | :---: |
| ANTHRO 605 | Seminar-Current Problems in <br> Paleoanthropology | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | $3-4$ |
| ANTHRO 690 | Problems in Anthropology | $3-4$ |

- A two-semester Senior Honors Thesis in ANTHRO 681 Senior Honors Thesis and ANTHRO 682 Senior Honors Thesis, for a total of 6 credits.


## 9 OR MORE CREDITS, TAKEN FOR HONORS, WITH 3 CREDITS IN EACH SECTION OF ANTHROPOLOGY (BIOLOGICAL, ARCHAEOLOGICAL, AND CULTURAL) AND A B OR BETTER EARNED IN EACH COURSE

| Code | Title | Credits |
| :---: | :---: | :---: |
| BIOLOGICAL |  | 3 |
| ANTHRO 105 | Principles of Biological Anthropology |  |
| ANTHRO 302 | Hominoid Evolution |  |
| ANTHRO 303 | Human Skeletal Anatomy |  |
| ANTHRO 304 | Heredity, Environment and Human Populations |  |
| ANTHRO/ BOTANY/ ZOOLOGY 410 | Evolutionary Biology |  |
| ANTHRO 411 | The Evolution of the Genus, Homo |  |
| ANTHRO 420 | Introduction to Primatological Research |  |
| ANTHRO 454 | Study Abroad: Topics in Biological Anthropology |  |
| ANTHRO 458 | Primate Behavioral Ecology |  |
| ANTHRO 601 | Proseminar in Biological Anthropology |  |
| ANTHRO 603 | Seminar in Evolutionary Theory |  |
| ANTHRO 604 | Seminar: Topics in Physical Anthropology of the Living |  |
| ANTHRO 605 | Seminar-Current Problems in Paleoanthropology |  |
| ANTHRO/ <br> NTP/PSYCH/ <br> ZOOLOGY 619 | Biology of Mind |  |
| ANTHRO 658 | Ecological Models of Behavior |  |
| ANTHRO 668 | Primate Conservation |  |
| Code | Title | Credits |
| CULTURAL |  | 3 |
| ANTHRO 104 | Cultural Anthropology and Human Diversity |  |
| ANTHRO/ <br> FOLKLORE/ <br> INTL ST/ <br> LINGUIS 211 | Global Language Issues |  |
| ANTHRO/ <br> MED HIST 231 | Introduction to Social Medicine |  |
| ANTHRO 237 | Cut ' $n$ ' Mix: Music, Race, and Culture in the Caribbean |  |


| ANTHRO/ <br> AFROAMER/ <br> C\&E SOC/GEOG/ <br> HISTORY/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction |
| :---: | :---: |
| ANTHRO 265 | Introduction to Culture and Health |
| ANTHRO/ <br> AFRICAN/ <br> AFROAMER/ <br> GEOG/HISTORY/ <br> POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography |
| ANTHRO/ <br> LINGUIS 301 | Introduction to Linguistics: Descriptive and Theoretical |
| ANTHRO 307 | Urban Anthropology |
| ANTHRO/ AMER IND 314 | Indians of North America |
| ANTHRO 327 | Peoples of the Andes Today |
| ANTHRO 330 | Topics in Ethnology |
| ANTHRO 340 | Music, Race, And Culture in Brazil |
| ANTHRO/ <br> RELIG ST 343 | Anthropology of Religion |
| ANTHRO/ <br> FOLKLORE 344 | Anthropological Approaches to Folklore |
| ANTHRO 345 | Family, Kin and Community in Anthropological Perspective |
| ANTHRO 348 | Economic Anthropology |
| ANTHRO 350 | Political Anthropology |
| ANTHRO/ AMER IND 353 | Indians of the Western Great Lakes |
| ANTHRO 357 | Introduction to the Anthropology of Japan |
| ANTHRO 358 | Anthropology of China |
| ANTHRO/ <br> LACIS 361 | Elementary Quechua |
| ANTHRO/ LACIS 362 | Elementary Quechua |
| ANTHRO/ LACIS 363 | Intermediate Quechua |
| ANTHRO/ LACIS 364 | Advanced Quechua |
| ANTHRO 365 | Medical Anthropology |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe |
| ANTHRO/ <br> LACIS 376 | First Semester Yucatec Maya |
| ANTHRO/ LACIS 377 | Second Semester Yucatec Maya |
| ANTHRO 424 | Historical Anthropology |
| ANTHRO/ <br> AMER IND/ FOLKLORE 431 | American Indian Folklore |
| ANTHRO/ AMER IND/ | American Indian Women |


| FOLKLORE/ GEN\&WS 437 |  |
| :---: | :---: |
| ANTHRO 448 | Anthropology of Law |
| ANTHRO 455 | Study Abroad: Topics in Cultural Anthropology |
| ANTHRO 456 | Symbolic Anthropology |
| ANTHRO 460 | The Anthropology of Dance: Movement and Music in Performance |
| ANTHRO/ <br> AMER IND/ <br> BOTANY 474 | Ethnobotany |
| ANTHRO 477 | Anthropology, Environment, and Development |
| ANTHRO/ <br> FOLKLORE 520 | Ethnic Representations in Wisconsin |
| ANTHRO/ <br> FOLKLORE/ <br> MUSIC/ <br> THEATRE 539 | The Folklore of Festivals and Celebrations |
| ANTHRO 545 | Psychological Anthropology |
| ANTHRO/ <br> ED POL 570 | Anthropology and Education |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism |
| ANTHRO 632 | Linguistic Anthropology |
| ANTHRO/ FOLKLORE 639 | Field School: Ethnography of Wisconsin Festivals |
| ANTHRO/ RELIG ST 666 | The Anthropology of Shamanism and Occult Experience |


| Code | Title | Credits |
| :---: | :---: | :---: |
| ARCHAEOLOGICAL |  | 3 |
| ANTHRO 102 | Archaeology and the Prehistoric World |  |
| ANTHRO 212 | Principles of Archaeology |  |
| ANTHRO/ <br> ART HIST/ DS/HISTORY/ <br> LAND ARC 264 | Dimensions of Material Culture |  |
| ANTHRO 309 | Prehistoric Europe |  |
| ANTHRO 310 | Topics in Archaeology |  |
| ANTHRO 311 | Archaeological Chemistry |  |
| ANTHRO 321 | The Emergence of Human Culture |  |
| ANTHRO 322 | The Origins of Civilization |  |
| ANTHRO 333 | Prehistory of Africa |  |
| ANTHRO 337 | Lithics and Archaeology |  |
| ANTHRO 352 | Ancient Technology and Invention |  |
| ANTHRO/ <br> AMER IND 354 | Archaeology of Wisconsin |  |
| ANTHRO/ AMER IND 355 | Archaeology of Eastern North America |  |
| ANTHRO 370 | Field Course in Archaeology |  |
| ANTHRO 391 | Bones for the Archaeologist |  |
| ANTHRO 453 | Study Abroad: Topics in Archaeology |  |


| ANTHRO/ | Ethnobotany |
| :--- | :--- |
| AMER IND/ |  |
| BOTANY 474 |  |
| ANTHRO/ | Ethnic Representations in |
| FOLKLORE 520 | Wisconsin |
| ANTHRO 696 | Archaeological Methods of Curation |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Acquire specialized training in anthropological research.
2. Obtain comparative global knowledge of human diversity, material culture, culture history, and the evolution of people's relationships with the physical, cultural, and natural world.
3. Gain an awareness of ethnographic, archaeological and bio\# anthropological ethics practice and research.
4. Distinguish between empirical and speculative narratives and claims about human diversity past and present.

## ADVISING AND CAREERS

## ADVISING

Students interested in anthropology and declaring the major should contact the department directly by calling the general number (608-262-2866) or stopping by 5240 William H. Sewell Social Science Building for individual advising.

## CAREER EXPLORATION

Anthropology encourages majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important that students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

- Katherine Bowie (http://www.anthropology.wisc.edu/staff/bowiekatherine)
Cultural anthropology, Southeast Asia, Thailand
- Henry T. Bunn (http://www.anthropology.wisc.edu/staff/bunn-henry) Archaeology, emergence of culture, behavioral ecology, East Africa
- Jerome Camal (http://www.anthropology.wisc.edu/staff/camaljerome)
Cultural anthropology, ethnomusicology, Caribbean
- Sarah Clayton (http://www.anthropology.wisc.edu/staff/claytonsarah)
Archaeology, Mesoamerica, Teotihuacan
- Falina Enriquez (http://www.anthropology.wisc.edu/staff/enriquezfalina)
Cultural anthropology, ethnomusicology, Brazil
- John Hawks (http://www.anthropology.wisc.edu/staff/hawks-john) Biological anthropology, paleoanthropology, anthropological genomics, South Africa
- J. Mark Kenoyer (http://www.anthropology.wisc.edu/staff/kenoyer-jmark)
Archaeology, South Asia, Harappa, craft production
- Nam C. Kim (http://www.anthropology.wisc.edu/staff/kim-nam-c) Archaeology, Southeast Asia, Vietnam, complex societies, warfare
- Maria Lepowsky (http://www.anthropology.wisc.edu/staff/lepowskymaria)
Cultural anthropology, medical anthropology, Oceania
- Richard McFarland (http://www.anthropology.wisc.edu/staff/ mcfarland-richard)
Biological anthropology, primatology, behavioral ecology
- Larry Nesper (http://www.anthropology.wisc.edu/staff/nesper-larry) Cultural anthropology, legal anthropology, North America, Wisconsin
- Emiko Ohnuki-Tierney (http://www.anthropology.wisc.edu/staff/ ohnuki-tierney-emiko)
Cultural anthropology, East Asia, Japan
- Travis Pickering (http://www.anthropology.wisc.edu/staff/pickeringtravis)
Biological anthropology, taphonomy, South Africa
- Sissel Schroeder (http://www.anthropology.wisc.edu/staff/schroedersissel)
Archaeology, historical ecology, Eastern North America, complex societies
- Amy Stambach (http://www.anthropology.wisc.edu/staff/stambachamy)
Cultural anthropology, East Africa
- Karen Strier (http://www.anthropology.wisc.edu/staff/strier-karen) Biological anthropology, primatology, behavioral ecology, Brazil
- Claire Wendland (http://www.anthropology.wisc.edu/staff/wendlandclaire)
Cultural anthropology, medical anthropology, Africa, Malawi
- Zhou Yongming (http://www.anthropology.wisc.edu/staff/zhouyongming)
Cultural anthropology, East Asia, China, development


## ACADEMIC STAFF

- Elizabeth Leith (https://www.anthropology.wisc.edu/staff/leithelizabeth), Senior Academic Curator

Museum anthropology, protohistoric, European trade, historical archaeology

## AFFILIATE FACULTY

- William Aylward (http://canes.wisc.edu/aylward-william.htm)
- Bruce Barrett (http://www.fammed.wisc.edu/directory/327)
- Nicholas Cahill (http://arthistory.wisc.edu/nicholas-cahillbiography.htm)
- Jane Collins (http://dces.wisc.edu/people/faculty/jane-collins)
- Linda Hogle (http://medhist.wisc.edu/faculty/hogle/index.shtml)
- Elizabeth Mertz (http://law.wisc.edu/profiles/eemertz@wisc.edu)
- Ellen Rafferty


## ADMINISTRATIVE STAFF

For general information:
anthroinfo@mailplus.wisc.edu
608-262-2866

- Kristine Schultz, Administrator
kristine.schultz@wisc.edu
608-262-2868
- Clara Pfefferkorn, Graduate Coordinator cpfefferkorn@wisc.edu 608-262-2869
- Kyle Speth, Financial Specialist speth2@wisc.edu 608-262-2867


## EMERITUS FACULTY

- Kenneth George

Cultural anthropology, Southeast Asia, Indonesia

- Sharon Hutchinson
sehutchi@wisc.edu
Cultural anthropology, Africa
- Anatoly Khazanov (http://www.anthropology.wisc.edu/staff/ khazanov-anatoly)
Cultural anthropology
- Herbert Lewis

Cultural anthropology, history of anthropology

- T. Douglas Price

Archaeology, Archaeological chemistry, Europe

- Frank Salomon

Cultural anthropology, South America

- James Stoltman

Archaeology, North America, Wisconsin

## ANTHROPOLOGY, B.S.

Anthropology is the comparative study of human diversity through time and across the world. Its scope spans the humanities, the social sciences, and the biological, physical, and evolutionary sciences. As a history of the human species, anthropology studies all human biological and behavioral variation from the earliest fossil records to the present; it includes the study of nonhuman primates as well. As a social science, anthropology aims at uncovering the patterns of past and present societies. As one of the humanities, anthropology seeks to understand the ways cultural meaning and political power have shaped human experience.

At the University of Wisconsin-Madison, anthropology consists of three subfields: archaeology-the investigation and analysis of the remains from past cultures, uncovered through excavation; biological anthropology-the study of human evolution and the roots of the biological and genetic diversity found among contemporary peoples; and sociocultural anthropology-the comparative study of society, politics, economy, and culture, whether in historical times or in our contemporary moment. UW-Madison also offers some classes in anthropological linguistics-the analysis of language and its place in social life. Comparative and empirical work-and fieldwork in particularare the hallmarks of anthropology on this campus.

Thus, anthropology at UW-Madison is characterized by a comparative point of view, a focus on humans and societies in all their variation
and similarity, and an effort to reveal and understand the complex but organized diversity that has shaped the human condition, past and present.

## HOW TO GET IN

Students wishing to declare an anthropology major should go to the Department of Anthropology, 5240 William H. Sewell Social Science Building.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| ANTHRO 105 | Principles of Biological Anthropology | 3 |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| ANTHRO 490 | Undergraduate Seminar ${ }^{1}$ | 3 |
| Select two of the following: |  | 6 |
| ANTHRO 212 | Principles of Archaeology |  |
| ANTHRO 321 | The Emergence of Human Culture |  |
| ANTHRO 322 | The Origins of Civilization |  |
| Additional credits in ANTHRO to reach 30 credit minimum for the major. ${ }^{1}$ |  | 15 |
| Total Credits |  | 30 |
| ${ }^{1}$ By arrangement with a supervising professor, certain students may substitute a thesis for 4 of the required credits, to be written in biological anthropology, archaeology, or sociocultural anthropology in ANTHRO 690. |  |  |

## Residence and Quality of Work

2.000 GPA in all ANTHRO and major courses
2.000 GPA in 15 upper-level major credits in residence ${ }^{2}$

15 credits in ANTHRO, taken on campus
${ }^{2}$ Courses 300 level and higher are counted as upper level, with the exception of Quechua and Yucatec Maya language courses (ANTHRO/ LACIS 361 Elementary Quechua, ANTHRO/LACIS 362 Elementary Quechua, ANTHRO/LACIS 363 Intermediate Quechua, ANTHRO/ LACIS 364 Advanced Quechua, ANTHRO/LACIS 376 First Semester Yucatec Maya, ANTHRO/LACIS 377 Second Semester Yucatec Maya).

Students planning to go on to graduate-level study should talk to their advisor about foreign languages, field experience, or other training needed for advanced anthropological research. Additional courses in related fields should be discussed with an advisor in the department.

## DISTINCTION IN THE MAJOR

Undergraduate students who are not enrolled in the honors program are eligible to be recommended by their advisor to the department to receive Distinction in the Major if they have maintained a 3.500 GPA in their major and have written an exceptional senior thesis or an exceptional paper in an undergraduate seminar or independent study.

## HONORS IN THE MAJOR

Students may declare Honors in the Major in Anthropology in consultation with the Anthropology advisor(s).

## HONORS IN THE ANTHROPOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Anthropology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all ANTHRO courses, and all courses accepted in the major
- Complete the following coursework:
- ANTHRO 490 Undergraduate Seminar or one seminar at the 600 level; choose from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ANTHRO 601 | Proseminar in Biological <br> Anthropology | 3 |
| ANTHRO 603 | Seminar in Evolutionary Theory | 3 |
| ANTHRO 604 | Seminar: Topics in Physical <br> Anthropology of the Living | 3 |
| ANTHRO 605 | Seminar-Current Problems in <br> Paleoanthropology | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | $3-4$ |
| ANTHRO 690 | Problems in Anthropology | $3-4$ |

- A two-semester Senior Honors Thesis in ANTHRO 681 Senior Honors Thesis and ANTHRO 682 Senior Honors Thesis, for a total of 6 credits.

9 OR MORE CREDITS, TAKEN FOR HONORS, WITH 3 CREDITS IN EACH SECTION OF ANTHROPOLOGY (BIOLOGICAL, ARCHAEOLOGICAL, AND CULTURAL) AND A B OR BETTER EARNED IN EACH COURSE

| Code | Title |  |
| :---: | :---: | :---: |
| BIOLOGICAL |  | 3 |
| ANTHRO 105 | Principles of Biological Anthropology |  |
| ANTHRO 302 | Hominoid Evolution |  |
| ANTHRO 303 | Human Skeletal Anatomy |  |
| ANTHRO 304 | Heredity, Environment and Human Populations |  |
| ANTHRO/ BOTANY/ ZOOLOGY 410 | Evolutionary Biology |  |
| ANTHRO 411 | The Evolution of the Genus, Homo |  |
| ANTHRO 420 | Introduction to Primatological Research |  |
| ANTHRO 454 | Study Abroad: Topics in Biological Anthropology |  |
| ANTHRO 458 | Primate Behavioral Ecology |  |
| ANTHRO 601 | Proseminar in Biological Anthropology |  |
| ANTHRO 603 | Seminar in Evolutionary Theory |  |
| ANTHRO 604 | Seminar. Topics in Physical Anthropology of the Living |  |
| ANTHRO 605 | Seminar-Current Problems in Paleoanthropology |  |
| ANTHRO/ <br> NTP/PSYCH/ <br> ZOOLOGY 619 | Biology of Mind |  |
| ANTHRO 658 | Ecological Models of Behavior |  |
| ANTHRO 668 | Primate Conservation |  |
| Code | Title | Credits |
| CULTURAL |  | 3 |
| ANTHRO 104 | Cultural Anthropology and Human Diversity |  |
| ANTHRO/ <br> FOLKLORE/ <br> INTL ST/ <br> LINGUIS 211 | Global Language Issues |  |
| ANTHRO/ <br> MED HIST 231 | Introduction to Social Medicine |  |
| ANTHRO 237 | Cut 'n' Mix: Music, Race, and Culture in the Caribbean |  |
| ANTHRO/ <br> AFROAMER/ <br> C\&E SOC/GEOG/ <br> HISTORY/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction |  |

ANTHRO 265 Introduction to Culture and Health

| ANTHRO/ | Africa: An Introductory Survey |
| :---: | :---: |
| AFRICAN/ |  |
| AFROAMER/ |  |
| GEOG/HISTORY/ |  |
| POLI SCI/ |  |
| SOC 277 |  |
| ANTHRO 300 | Cultural Anthropology: Theory and |
|  | Ethnography |
| ANTHRO/ | Introduction to Linguistics: |
| LINGUIS 301 | Descriptive and Theoretical |
| ANTHRO 307 | Urban Anthropology |
| ANTHRO/ | Indians of North America |
| AMER IND 314 |  |
| ANTHRO 327 | Peoples of the Andes Today |
| ANTHRO 330 | Topics in Ethnology |
| ANTHRO 340 | Music, Race, And Culture in Brazil |
| ANTHRO/ <br> RELIG ST 343 | Anthropology of Religion |
| ANTHRO/ | Anthropological Approaches to |
| FOLKLORE 344 | Folklore |
| ANTHRO 345 | Family, Kin and Community in |
|  | Anthropological Perspective |
| ANTHRO 348 | Economic Anthropology |
| ANTHRO 350 | Political Anthropology |
| AMER IND 353 |  |
| ANTHRO 357 | Introduction to the Anthropology of Japan |
| ANTHRO 358 | Anthropology of China |
| ANTHRO/ LACIS 361 | Elementary Quechua |
| ANTHRO/ <br> LACIS 362 | Elementary Quechua |
| ANTHRO/ LACIS 363 | Intermediate Quechua |
| ANTHRO/ <br> LACIS 364 | Advanced Quechua |
| ANTHRO 365 | Medical Anthropology |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe |
| ANTHRO/ <br> LACIS 376 | First Semester Yucatec Maya |
| ANTHRO/ LACIS 377 | Second Semester Yucatec Maya |
| ANTHRO 424 | Historical Anthropology |
| ANTHRO/ <br> AMER IND/ <br> FOLKLORE 431 | American Indian Folklore |
| ANTHRO/ <br> AMER IND/ <br> FOLKLORE/ <br> GEN\&WS 437 | American Indian Women |
| ANTHRO 448 | Anthropology of Law |
| ANTHRO 455 | Study Abroad: Topics in Cultural Anthropology |
| ANTHRO 456 | Symbolic Anthropology |


| ANTHRO 460 | The Anthropology of Dance: Movement and Music in Performance |  |
| :---: | :---: | :---: |
| ANTHRO/ AMER IND/ BOTANY 474 | Ethnobotany |  |
| ANTHRO 477 | Anthropology, Environment, and Development |  |
| ANTHRO/ <br> FOLKLORE 520 | Ethnic Representations in Wisconsin |  |
| ANTHRO/ <br> FOLKLORE/ <br> MUSIC/ <br> THEATRE 539 | The Folklore of Festivals and Celebrations |  |
| ANTHRO 545 | Psychological Anthropology |  |
| ANTHRO/ <br> ED POL 570 | Anthropology and Education |  |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism |  |
| ANTHRO 632 | Linguistic Anthropology |  |
| ANTHRO/ FOLKLORE 639 | Field School: Ethnography of Wisconsin Festivals |  |
| ANTHRO/ <br> RELIG ST 666 | The Anthropology of Shamanism and Occult Experience |  |
| Code | Title | Credits |
| ARCHAEOLOGICAL |  | 3 |
| ANTHRO 102 | Archaeology and the Prehistoric World |  |
| ANTHRO 212 | Principles of Archaeology |  |
| ANTHRO/ <br> ART HIST/ DS/HISTORY/ LAND ARC 264 | Dimensions of Material Culture |  |
| ANTHRO 309 | Prehistoric Europe |  |
| ANTHRO 310 | Topics in Archaeology |  |
| ANTHRO 311 | Archaeological Chemistry |  |
| ANTHRO 321 | The Emergence of Human Culture |  |
| ANTHRO 322 | The Origins of Civilization |  |
| ANTHRO 333 | Prehistory of Africa |  |
| ANTHRO 337 | Lithics and Archaeology |  |
| ANTHRO 352 | Ancient Technology and Invention |  |
| ANTHRO/ AMER IND 354 | Archaeology of Wisconsin |  |
| ANTHRO/ AMER IND 355 | Archaeology of Eastern North America |  |
| ANTHRO 370 | Field Course in Archaeology |  |
| ANTHRO 391 | Bones for the Archaeologist |  |
| ANTHRO 453 | Study Abroad: Topics in Archaeology |  |
| ANTHRO/ AMER IND/ BOTANY 474 | Ethnobotany |  |
| ANTHRO/ FOLKLORE 520 | Ethnic Representations in Wisconsin |  |
| ANTHRO 696 | Archaeological Methods of Curation |  |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Acquire specialized training in anthropological research.
2. Obtain comparative global knowledge of human diversity, material culture, culture history, and the evolution of people's relationships with the physical, cultural, and natural world.
3. Gain an awareness of ethnographic, archaeological and bio\# anthropological ethics practice and research.
4. Distinguish between empirical and speculative narratives and claims about human diversity past and present.

## ADVISING AND CAREERS

## ADVISING

Students interested in anthropology and declaring the major should contact the department directly by calling the general number (608-262-2866) or stopping by 5240 William H. Sewell Social Science Building for individual advising.

## CAREER EXPLORATION

Anthropology encourages majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important that students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school
applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/Isci)


## PEOPLE

## FACULTY

- Katherine Bowie (http://www.anthropology.wisc.edu/staff/bowiekatherine)
Cultural anthropology, Southeast Asia, Thailand
- Henry T. Bunn (http://www.anthropology.wisc.edu/staff/bunn-henry) Archaeology, emergence of culture, behavioral ecology, East Africa
- Jerome Camal (http://www.anthropology.wisc.edu/staff/camaljerome)
Cultural anthropology, ethnomusicology, Caribbean
- Sarah Clayton (http://www.anthropology.wisc.edu/staff/claytonsarah)
Archaeology, Mesoamerica, Teotihuacan
- Falina Enriquez (http://www.anthropology.wisc.edu/staff/enriquezfalina)
Cultural anthropology, ethnomusicology, Brazil
- John Hawks (http://www.anthropology.wisc.edu/staff/hawks-john) Biological anthropology, paleoanthropology, anthropological genomics, South Africa
- J. Mark Kenoyer (http://www.anthropology.wisc.edu/staff/kenoyer-jmark)
Archaeology, South Asia, Harappa, craft production
- Nam C. Kim (http://www.anthropology.wisc.edu/staff/kim-nam-c) Archaeology, Southeast Asia, Vietnam, complex societies, warfare
- Maria Lepowsky (http://www.anthropology.wisc.edu/staff/lepowskymaria)
Cultural anthropology, medical anthropology, Oceania
- Richard McFarland (http://www.anthropology.wisc.edu/staff/ mcfarland-richard)
Biological anthropology, primatology, behavioral ecology
- Larry Nesper (http://www.anthropology.wisc.edu/staff/nesper-larry) Cultural anthropology, legal anthropology, North America, Wisconsin
- Emiko Ohnuki-Tierney (http://www.anthropology.wisc.edu/staff/ ohnuki-tierney-emiko)
Cultural anthropology, East Asia, Japan
- Travis Pickering (http://www.anthropology.wisc.edu/staff/pickeringtravis)
Biological anthropology, taphonomy, South Africa
- Sissel Schroeder (http://www.anthropology.wisc.edu/staff/schroedersissel)
Archaeology, historical ecology, Eastern North America, complex societies
- Amy Stambach (http://www.anthropology.wisc.edu/staff/stambachamy)
Cultural anthropology, East Africa
- Karen Strier (http://www.anthropology.wisc.edu/staff/strier-karen) Biological anthropology, primatology, behavioral ecology, Brazil
- Claire Wendland (http://www.anthropology.wisc.edu/staff/wendlandclaire)
Cultural anthropology, medical anthropology, Africa, Malawi
- Zhou Yongming (http://www.anthropology.wisc.edu/staff/zhouyongming)
Cultural anthropology, East Asia, China, development


## ACADEMIC STAFF

- Elizabeth Leith (https://www.anthropology.wisc.edu/staff/leithelizabeth), Senior Academic Curator

Museum anthropology, protohistoric, European trade, historical archaeology

## AFFILIATE FACULTY

- William Aylward (http://canes.wisc.edu/aylward-william.htm)
- Bruce Barrett (http://www.fammed.wisc.edu/directory/327)
- Nicholas Cahill (http://arthistory.wisc.edu/nicholas-cahillbiography.htm)
- Jane Collins (http://dces.wisc.edu/people/faculty/jane-collins)
- Linda Hogle (http://medhist.wisc.edu/faculty/hogle/index.shtml)
- Elizabeth Mertz (http://law.wisc.edu/profiles/eemertz@wisc.edu)
- Ellen Rafferty


## ADMINISTRATIVE STAFF

For general information:
anthroinfo@mailplus.wisc.edu
608-262-2866

- Kristine Schultz, Administrator kristine.schultz@wisc.edu 608-262-2868
- Clara Pfefferkorn, Graduate Coordinator cpfefferkorn@wisc.edu 608-262-2869
- Kyle Speth, Financial Specialist
speth2@wisc.edu
608-262-2867


## EMERITUS FACULTY

\author{

- Kenneth George <br> Cultural anthropology, Southeast Asia, Indonesia <br> - Sharon Hutchinson <br> sehutchi@wisc.edu <br> Cultural anthropology, Africa <br> - Anatoly Khazanov (http://www.anthropology.wisc.edu/staff/ khazanov-anatoly) <br> Cultural anthropology <br> - Herbert Lewis <br> Cultural anthropology, history of anthropology <br> - T. Douglas Price <br> Archaeology, Archaeological chemistry, Europe <br> - Frank Salomon <br> Cultural anthropology, South America <br> - James Stoltman <br> Archaeology, North America, Wisconsin
}


## ARCHAEOLOGY, CERTIFICATE

Ancient history is a puzzle made up of innumerable fragmentspieces of bone, pottery, stone, and metal; remnants of architecture and monuments; residues of food; and traces of other things. Archaeology is the field of study that provides the tools to discover these fragments and piece them together to reconstruct a picture of the ancient world and to illuminate the stories of past peoples. An accurate understanding of the past is critical for developing a better present and future.

The archaeology certificate is designed to help students obtain a global and interdisciplinary perspective on archaeology and human culture and to gain many of the skills needed to analyze archaeological materials and conduct archaeological field investigations. Through their participation in the archaeology certificate program, students acquire an understanding of how past societies in different regions of the world have successfully or, in many cases, unsuccessfully dealt with adaptation to their environment and interaction with other communities. Students also gain a better appreciation of the diversity of human culture and increased respect for the differences that have resulted from millennia of social, economic, political and ideological developments. Students are able to explore the origins of subsistence strategies, trade, technology, belief systems, and conflict that are still relevant to our modern world, as well as ever changing global economic and political situations.

The archaeology certificate provides an interdisciplinary linkage among courses in several departments and stimulates students to think about similar topics from different academic and theoretical perspectives. Through the curriculum, students get training specific to archaeology. In addition to providing students with a mechanism for developing an understanding of archaeology in its broadest sense, the certificate provides a strong intellectual foundation and skills for future careers and graduate study in archaeology and related fields. Students who
successfully complete the certificate, along with a B.A. or B.S. degree from UW-Madison, improve their competitiveness in graduate school applications and, more importantly, have documentation that they are qualified for entry-level employment opportunities in archaeology.

For further information on the archaeology certificate, including a list of core faculty, please see the Department of Anthropology website (http://www.anthropology.wisc.edu/for-undergraduates/the-certificate-inarchaeology).

## HOW TO GET IN

Students wishing to declare an archaeology certificate should go to the Department of Anthropology, 5240 William H. Sewell Social Science Building. The telephone number for the department is 608-262-2866.

## REQUIREMENTS

## 7 COURSES AND 21 CREDITS

Credits must be distributed in at least three SUBJECTs, and must meet these requirements:

| Introductory course <br> Code <br> Complete one: | Title | Credits |
| :---: | :--- | ---: |
| ANTHRO 102 | Archaeology and the Prehistoric <br> World |  |
| ANTHRO 105 | Principles of Biological <br> Anthropology |  |
| ANTHRO 212 | Principles of Archaeology |  |
| Total Credits |  | 3 |


| Area courses |  |
| :--- | ---: | ---: |
| Code Title | Credits |

Complete 6 credits from: 6

| ANTHRO 309 | Prehistoric Europe |
| :---: | :---: |
| ANTHRO 310 | Topics in Archaeology |
| ANTHRO 321 | The Emergence of Human Culture |
| ANTHRO 322 | The Origins of Civilization |
| ANTHRO 333 | Prehistory of Africa |
| ANTHRO/ <br> AMER IND 354 | Archaeology of Wisconsin |
| ANTHRO/ AMER IND 355 | Archaeology of Eastern North America |
| ART HIST/ CLASSICS 300 | The Art and Archaeology of Ancient Greece |
| ART HIST/ CLASSICS 304 | The Art and Archaeology of Ancient Rome |
| ART HIST 305 | History of Islamic Art and Architecture |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century |
| ART HIST 390 | Pre-Columbian Art |
| ART HIST 405 | Cities and Sanctuaries of Ancient Greece |
| ART HIST 600 | Special Topics in Art History ${ }^{1}$ |


| CLASSICS/ | Introduction to Biblical Archaeology |
| :--- | :--- |
| JEWISH 241 |  |
| CLASSICS 320 | The Greeks |
| CLASSICS 322 | The Romans |
| CLASSICS 379 | Eureka! Technology and Practice in <br> the Ancient World |
| CLASSICS/ | Biblical Archaeology |
| JEWISH 452 |  |
| CLASSICS 602 | The Ancient Mediterranean City |
| HISTORY 303 | A History of Greek Civilization |
| HISTORY 307 | A History of Rome |
| HISTORY/ Introduction to Byzantine History <br> MEDIEVAL 313 and Civilization |  |
| HISTORY 377 | History of Africa, 1500 to 1870 |
| Must be an archaeology topic. |  |

## Methods

Code Title Credits

Complete 6 credits from: 6

| ANTHRO 302 | Hominoid Evolution |
| :---: | :---: |
| ANTHRO 303 | Human Skeletal Anatomy |
| ANTHRO 311 | Archaeological Chemistry |
| ANTHRO 352 | Ancient Technology and Invention |
| ANTHRO 391 | Bones for the Archaeologist |
| ANTHRO 696 | Archaeological Methods of Curation |
| BOTANY 240 | Plants and Humans |
| ANTHRO/ BOTANY/ $\text { ZOOLOGY } 410$ | Evolutionary Biology |
| BOTANY/ AMER IND/ ANTHRO 474 | Ethnobotany |
| CLASSICS 430 | Topics in Classical Archaeology |
| ENVIR ST/ <br> ATM OCN/GEOG/ <br> GEOSCI 335 | Climatic Environments of the Past |
| ENVIR ST/ <br> CIV ENGR/ <br> GEOG 377 | An Introduction to Geographic Information Systems |
| ENVIR ST/ <br> CIV ENGR/G L E/ <br> GEOSCI 444 | Practical Applications of GPS Surveying |
| GEOG/ <br> GEOSCI 320 | Geomorphology |
| GEOG 321 | Climatology |
| GEOG 329 | Landforms and Landscapes of North America |
| GEOG 360 | Quantitative Methods in Geographical Analysis |
| GEOG 370 | Introduction to Cartography |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems |

GEOG/ Glacial and Pleistocene Geology

| GEOG/ $\text { GEOSCI } 527$ | The Quaternary Period |
| :---: | :---: |
| GEOG/ATM OCN/ ENVIR ST 528 | Past Climates and Climatic Change |
| GEOSCI 202 | Introduction to Geologic Structures |
| GEOSCI 203 | Earth Materials |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { GEOG } 320 \end{aligned}$ | Geomorphology |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { GEOG } 326 \end{aligned}$ | Landforms-Topics and Regions |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { GEOG } 420 \end{aligned}$ | Glacial and Pleistocene Geology |
| GEOSCI 430 | Sedimentology and Stratigraphy |
| GEOSCI/ <br> CIV ENGR/ <br> ENVIR ST/ <br> GLE 444 | Practical Applications of GPS Surveying |
| GEOSCI/G L E 594 Introduction to Applied Geophysics |  |
| ZOOLOGY/ <br> ANTHRO/ <br> BOTANY 410 | Evolutionary Biology |

## Field course

| Code | Title | Credits |
| :--- | :--- | ---: |
| ANTHRO 370 | Field Course in Archaeology | $3-6$ |
| 俍 |  |  |

Total Credits 3-6

## Capstone

Code Title Credits
Choose from: 3-4

| ANTHRO 352 | Ancient Technology and Invention ${ }^{2}$ |
| :--- | :--- |
| ANTHRO 490 | Undergraduate Seminar ${ }^{3}$ |

Total Credits

ANTHRO 352 can count either for a methods course or for the capstone course, but not both.
3 ANTHRO 490 is a Topics course. In order to meet the capstone requirement, it must be on an archaeology topic.

## RESIDENCE AND QUALITY OF WORK ${ }^{4}$

2.000 GPA on all certificate-approved courses 11 credits in the certificate, in residence
4 Pass/fail courses do not apply to the certificate.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATE

This certificate is intended to be completed in the context of an undergraduate degree and for those seeking this certificate that is preferred. For students who have substantially completed this certificate at UW-Madison (at least 12 credits) and may need one or two courses to complete the certificate, they may do so immediately after completion of the bachelor's degree by enrolling in the course as a University Special (nondegree) student. The certificate must be completed within a year of completion of the bachelor's degree. Students should keep in mind that University Special students have the last registration priority and that may limit availability of desired courses. Financial aid is not
available when enrolled as a University Special student to complete an undergraduate certificate.

## LEARNING OUTCOMES

1. acquire specialized training in archaeological research, which may include: obtaining basic knowledge of and skills in observational methods and recording of information for a variety of lines of archaeological evidence, putting these abilities into practice in the classroom and outside of the classroom, developing research questions and the analytical skills necessary to address them, strengthening archaeological interpretations through critical thinking and reference to empirical evidence, gaining experience in considering a problem, synthesizing information from disparate sources, and evaluating contrasting arguments, being able to distinguish between empirical research and speculation, communicating archaeological findings through written and oral expression.
2. obtain comparative global knowledge of archaeology, material culture, and the evolution of people's relationships with the physical world.
3. become aware of the ethical practice of archaeology and heritage preservation.
4. synthesize information relevant to archaeological research across multiple disciplines.
5. gain an appreciation of cultural diversity through time and space.

## ADVISING AND CAREERS

Students wishing to receive advising for the archaeology certificate should go to the Department of Anthropology, 5240 William H. Sewell Social Science Building. The telephone number for the department is 608-262-2866.

## PEOPLE

## FACULTY

- Katherine Bowie (http://www.anthropology.wisc.edu/staff/bowiekatherine)
Cultural anthropology, Southeast Asia, Thailand
- Henry T. Bunn (http://www.anthropology.wisc.edu/staff/bunn-henry) Archaeology, emergence of culture, behavioral ecology, East Africa
- Jerome Camal (http://www.anthropology.wisc.edu/staff/camaljerome)
Cultural anthropology, ethnomusicology, Caribbean
- Sarah Clayton (http://www.anthropology.wisc.edu/staff/claytonsarah)
Archaeology, Mesoamerica, Teotihuacan
- Falina Enriquez (http://www.anthropology.wisc.edu/staff/enriquezfalina)
Cultural anthropology, ethnomusicology, Brazil
- John Hawks (http://www.anthropology.wisc.edu/staff/hawks-john) Biological anthropology, paleoanthropology, anthropological genomics, South Africa
- J. Mark Kenoyer (http://www.anthropology.wisc.edu/staff/kenoyer-jmark)
Archaeology, South Asia, Harappa, craft production
- Nam C. Kim (http://www.anthropology.wisc.edu/staff/kim-nam-c) Archaeology, Southeast Asia, Vietnam, complex societies, warfare
- Maria Lepowsky (http://www.anthropology.wisc.edu/staff/lepowskymaria)
Cultural anthropology, medical anthropology, Oceania
- Richard McFarland (http://www.anthropology.wisc.edu/staff/ mcfarland-richard)
Biological anthropology, primatology, behavioral ecology
- Larry Nesper (http://www.anthropology.wisc.edu/staff/nesper-larry) Cultural anthropology, legal anthropology, North America, Wisconsin
- Emiko Ohnuki-Tierney (http://www.anthropology.wisc.edu/staff/ ohnuki-tierney-emiko)
Cultural anthropology, East Asia, Japan
- Travis Pickering (http://www.anthropology.wisc.edu/staff/pickeringtravis)
Biological anthropology, taphonomy, South Africa
- Sissel Schroeder (http://www.anthropology.wisc.edu/staff/schroedersissel)
Archaeology, historical ecology, Eastern North America, complex societies
- Amy Stambach (http://www.anthropology.wisc.edu/staff/stambachamy)
Cultural anthropology, East Africa
- Karen Strier (http://www.anthropology.wisc.edu/staff/strier-karen) Biological anthropology, primatology, behavioral ecology, Brazil
- Claire Wendland (http://www.anthropology.wisc.edu/staff/wendlandclaire)
Cultural anthropology, medical anthropology, Africa, Malawi
- Zhou Yongming (http://www.anthropology.wisc.edu/staff/zhouyongming)
Cultural anthropology, East Asia, China, development


## ACADEMIC STAFF

- Elizabeth Leith (https://www.anthropology.wisc.edu/staff/leithelizabeth), Senior Academic Curator

Museum anthropology, protohistoric, European trade, historical archaeology

## AFFILIATE FACULTY

- William Aylward (http://canes.wisc.edu/aylward-william.htm)
- Bruce Barrett (http://www.fammed.wisc.edu/directory/327)
- Nicholas Cahill (http://arthistory.wisc.edu/nicholas-cahillbiography.htm)
- Jane Collins (http://dces.wisc.edu/people/faculty/jane-collins)
- Linda Hogle (http://medhist.wisc.edu/faculty/hogle/index.shtml)
- Elizabeth Mertz (http://law.wisc.edu/profiles/eemertz@wisc.edu)
- Ellen Rafferty


## ADMINISTRATIVE STAFF

For general information:
anthroinfo@mailplus.wisc.edu
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- Clara Pfefferkorn, Graduate Coordinator cpfefferkorn@wisc.edu 608-262-2869
- Kyle Speth, Financial Specialist speth2@wisc.edu
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## EMERITUS FACULTY

- Kenneth George

Cultural anthropology, Southeast Asia, Indonesia

- Sharon Hutchinson
sehutchi@wisc.edu
Cultural anthropology, Africa
- Anatoly Khazanov (http://www.anthropology.wisc.edu/staff/ khazanov-anatoly)
Cultural anthropology
- Herbert Lewis

Cultural anthropology, history of anthropology

- T. Douglas Price

Archaeology, Archaeological chemistry, Europe

- Frank Salomon

Cultural anthropology, South America

- James Stoltman

Archaeology, North America, Wisconsin

## ART HISTORY

Through innovative research, teaching, and outreach activities, the Department of Art History takes a leading role in promoting visual literacy, emphasizing careful attention to continuities and differences across human history and world cultures. Examining expressive forms, from artifacts to new media, the department explores the ways in which art and visual and material culture are fully integrated into larger cultural histories. A specialized focus on images, objects, and the built environment promotes critical and creative approaches to analysis, problem-solving, writing and visual communication in a variety of media. Interdisciplinary collaborations encourage aesthetic, historical, economic, and ethical questions, in order to produce new knowledge, sophisticated readers, engaged writers, critical viewers, independent thinkers, and
confident cultural citizens who are well prepared to thrive in global society.

Students considering art history as a major should come to the department for advising as early as possible in their undergraduate careers. Upon declaration, students are strongly encouraged to meet regularly with the undergraduate program advisor to ensure timely progress toward completion of the degree. Annual meetings with the director of undergraduate studies are also highly encouraged.

## DEGREES/MAJORS/CERTIFICATES

- Art History, B.A. (p. 399)
- Art History, B.S. (p. 408)
- Art History, Certificate (p. 416)
- Material Culture Studies, Certificate (p. 419)


## PEOPLE

Professors Andrzejewski (chair), Cahill, Casid, Chopra, Dale, Drewal, Marshall, Martin, Phillips

Associate Professors McClure, Phillips-Court
Assistant Professors Brisman, Li, Pruitt
Adjunct Lecturer Fuller
Affiliate Professors Aylward, Clark, Kern, Nadler
Affiliate Associate Professor Abdu'Allah
Affiliate UW-Milwaukee Associate Professor Sen
Affiliate UW-Milwaukee Assistant Professors Benyamin, Moon

## ART HISTORY, B.A.

## OVERVIEW

The art history major provides a foundation for answering key questions about what it means to be human as well as valuable skills for today's workplaces. A specialized focus on images, objects, and the built environment promotes critical and creative approaches to analysis, problem-solving, writing and visual communication in a variety of media. Interdisciplinary collaborations encourage aesthetic, historical, economic, and ethical questions in order to produce new knowledge, sophisticated readers, engaged writers, critical viewers, independent thinkers, and confident cultural citizens who are well prepared to thrive in global society.

Through innovative research, teaching, and outreach activities, the Department of Art History takes a leading role in promoting visual literacy, emphasizing careful attention to continuities and differences across human history and world cultures. Examining expressive forms, from artifacts to new media, the department explores the ways in which art and visual and material culture are fully integrated into larger cultural histories.

## STUDY ABROAD

The department strongly encourages art history majors to participate in study abroad programs. Students gain firsthand experience of other cultures and languages and have the opportunity to study major artistic monuments. Credit for appropriate coursework can be applied toward the major after arrangements have been made with the study abroad program, or, in the case of non-UW study abroad programs, the Office of Admissions and Recruitment (http://www.admissions.wisc.edu/ equivalencies). For more information, see the Study Abroad website (http://www.studyabroad.wisc.edu).

## HOW TO GET IN

Students considering art history as a major should come to the department for advising as early as possible in their undergraduate careers. Upon declaration, students are strongly encouraged to meet regularly with the undergraduate program advisor to ensure timely progress toward completion of the degree. Annual meetings with the director of undergraduate studies are also highly encouraged. More detailed information can be found at Declaring the Art History Major (https://arthistory.wisc.edu/academics/undergrad/advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of

Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :--- | :--- |
| Language | - Complete the third unit of a foreign language and the |
| second unit of an additional foreign language |  |

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

| Liberal Arts | 108 credits |
| :--- | :--- |
| and Science |  |
| Coursework |  |$\quad . \quad$| Depth of | 60 intermediate or advanced credits |
| :--- | :--- |
| Intermediate/ |  |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison <br> GPAs |
|  | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS IN THE MAJOR FOREIGN LANGUAGE

Note: A unit is one year of high school work or one semester/term of college work.

1. Complete the fourth unit of a foreign language; or
2. Complete the third unit of a foreign language and the second unit of an additional foreign language

## LEVEL REQUIREMENTS

Nine (9) courses in ART HIST as follows:

## 200-level ART HIST (two required)

| Code <br> ART HIST 104 | Title <br> The Art of Diversity: Race and <br> Representation in the Art and Visual <br> Culture of the United States |
| :--- | :--- | :--- |
| ART HIST 201 | History of Western Art I: From <br> Pyramids to Cathedrals |
| ART HIST 202 | History of Western Art II: From <br> Renaissance to Contemporary |
| ART HIST 203 | Survey of Asian Art |
| ART HIST/ | Introduction to Visual Cultures |
| AFROAMER 204 | Global Arts |
| ART HIST 205 | A History of the World in 20 |
| ART HIST 210 | Buildings |
| ART HIST 227 | The Ends of Modernism |
| ART HIST/ | Introduction to African Art and |
| AFROAMER 241 | Architecture |
| ART HIST/ | Dimensions of Material Culture |
| ANTHRO/DS/ |  |
| HISTORY/ |  |
| LAND ARC 264 |  |


| 300-level ART HIST (three required) |
| :--- | :--- |
| Code |
| Title |$\quad$ Credits


| ART HIST 322 | Italian Art from Donatello to | 400-level ART HIST (two required) |  | Credits |
| :---: | :---: | :---: | :---: | :---: |
|  | Leonardo da Vinci, 1400-1500 | Code | Title |  |
| ART HIST 323 | From Michelangelo \& Raphael to Titian: The Arts in 16th Century Italy | ART HIST 405 | Cities and Sanctuaries of Ancient Greece |  |
| ART HIST 330 | The Painting \& Graphic Arts of Germany 1350-1530 | ART HIST 407 | Topics in Nineteenth Century Art |  |
|  |  | ART HIST 408 | Topics in Twentieth-Century Art |  |
| ART HIST 331 | Angels, Demons, and Nudes: Early Netherlandish Painting from Bosch to Bruegel | ART HIST 411 | Topics in Asian Art |  |
|  |  | ART HIST 412 | Topics in African and African Diaspora Art History |  |
| ART HIST 332 | Northern Painting and Graphics from Bosch and Holbein to Bruegel | ART HIST 413 | Art and Architecture in the Age of the Caliphs |  |
| ART HIST 333 | Netherlandish Painting of the 17th Century | ART HIST/ <br> MEDIEVAL 415 | Topics in Medieval Art |  |
| ART HIST 335 | Study Abroad in Ancient/Medieval Art | ART HIST 420 | Topics in Italian Renaissance Art |  |
| ART HIST 336 | Study Abroad in Renaissance/ Baroque/Northern Art | ART HIST 425 | Race and Gender in Italian Early Modern Art |  |
| ART HIST 337 | Study Abroad in 18th-20th Century Art | ART HIST/ <br> LCA 428 | Visual Cultures of South Asia |  |
| ART HIST 338 |  | ART HIST 430 | Topics in Visual Culture |  |
| ART HIST 338 | Study Abroad in African/Asian Art | ART HIST 431 | Topics in Theory |  |
| ART HIST 346 | Italian Baroque Art | ART HIST 432 | Multiculturalism and the New Museology |  |
|  | British Art and Society from the Eighteenth Century to the Present |  |  |  |
| ART HIST 350 | 19th Century Painting in Europe | ART HIST 433 | Sign, Symbol, Stereotype: Native Icons Revealed |  |
| ART HIST 351 | 20th Century Art in Europe | ART HIST 435 | Study Abroad in Ancient/Medieval Art |  |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present |  |  |  |
| ART HIST 355 | Atlantic Rim: 1800 to the Present History of Photography | ART HIST 436 | Study Abroad in Renaissance/ Baroque/Northern Art |  |
| ART HIST 358 | European Architecture: The Modern Movements | ART HIST 437 | Study Abroad in 18th-20th Century Art |  |
| ART HIST/ | American Indian Art History: | ART HIST 438 | Study Abroad in African/Asian Art |  |
| AMER IND 359 | Contemporary Issues | ART HIST 440 | Art and Power in the Arab World |  |
| ART HIST 360 | Early Modern Art of Northern Europe: Renaissances and Reformations | ART HIST 449 | Topics in Architectural History |  |
|  |  | ART HIST 454 | Art in Germany, 1900-1945 |  |
| ART HIST/DS 363 | American Decorative Arts and Interiors: 1620-1840 | ART HIST 457 | History of American Vernacular Architecture and Landscapes |  |
| ART HIST 364 | History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present | ART HIST 463 | Topics in American Material Culture |  |
|  |  | ART HIST/DS/ HISTORY 464 | Dimensions of Material Culture |  |
| ART HIST 365 | The Concept of Contemporary Art | ART HIST 468 | Frank Lloyd Wright |  |
| ART HIST 367 | American Architecture: Colonial and Federal | ART HIST 469 | Interdisciplinary Studies in the Arts |  |
|  |  | ART HIST 475 | Japanese Ceramics and Allied Arts |  |
| ART HIST 368 | American Architecture: The 19th Century | ART HIST/ RELIG ST 478 | Art and Religious Practice in Medieval Japan |  |
| ART HIST 371 | Chinese Painting | ART HIST 479 | Art and History in Africa | Credits |
| ART HIST 372 | Arts of Japan | 500-level ART HIST (one required) |  |  |
| ART HIST/ RELIG ST 373 | Great Cities of Islam | Code | Title |  |
| ART HIST 375 | Later Japanese Painting and Woodblock Prints | ART HIST 500 | Proseminar: Special Topics in Art History |  |
|  | Cities of Asia | ART HIST 505 | Proseminar in Ancient Art |  |
| LCA 379 | Cities of Asia | ART HIST 506 | Curatorial Studies Exhibition Practice |  |
| ART HIST 390 | Pre-Columbian Art | ART HIST 515 | Proseminar in Medieval Art |  |


| ART HIST 525 | Proseminar in Italian Renaissance <br> Art |
| :--- | :--- |
| ART HIST 535 | Proseminar in Northern European <br> Painting |
| ART HIST 555 | Proseminar in 19th Century <br> European Art |
| ART HIST 556 | Proseminar in 20th Century <br> European Art |
| ART HIST 563 | Proseminar in Material Culture |
| ART HIST 565 | Proseminar in American Art |
| ART HIST 567 | Proseminar in American <br> Architecture |
| ART HIST 569 | Interdisciplinary Studies in the Arts |
| ART HIST 575 | Proseminar in Japanese Art |
| ART HIST 576 | Proseminar in Chinese Art |
| ART HIST 579 | Proseminar in African Art |

Electives to meet minimum nine courses required
Code Title
ART HIST 100-699

## CHRONOLOGICAL DISTRIBUTION

Of the nine required ART HIST courses, at least one course from each area:

| Ancient to Medieval |  |
| :--- | :--- |
| Code | Title |
| ART HIST/ | The Art and Archaeology of Ancient <br> CLASSICS 300 |
| AReece |  |$\quad$ Credits

ART HIST $440 \quad$ Art and Power in the Arab World ${ }^{1}$
ART HIST $475 \quad{ }_{1}$ Japanese Ceramics and Allied Arts

ART HIST/ Art and Religious Practice in
RELIG ST 478 Medieval Japan
1 Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information.

Early Modern (Circa 1400-Circa 1800)
Code
Title
Credits
ART HIST 305 History of Islamic Art and Architecture ${ }^{1}$

ART HIST 308 Later Chinese Art: From the Tenth Century to the Present ${ }^{1}$
ART HIST 320 Italian Renaissance Art
ART HIST 322 Italian Art from Donatello to Leonardo da Vinci, 1400-1500
ART HIST 323 From Michelangelo \& Raphael to Titian: The Arts in 16th Century Italy
ART HIST 330 The Painting \& Graphic Arts of Germany 1350-1530
ART HIST 331 Angels, Demons, and Nudes: Early Netherlandish Painting from Bosch to Bruegel

| ART HIST 332 | Northern Painting and Graphics <br> from Bosch and Holbein to Bruegel |
| :--- | :--- |
| ART HIST 333 | Netherlandish Painting of the 17th <br> Century |
| ART HIST 336 | Study Abroad in Renaissance/ <br> Baroque/Northern Art |
| ART HIST 341 | Italian Baroque Art |
| ART HIST 360 | Early Modern Art of Northern <br> Europe: Renaissances and <br> Reformations |

ART HIST/DS 363 American Decorative Arts and Interiors: 1620-1840 ${ }^{1}$
ART HIST 364 History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present ${ }^{1}$
ART HIST $371 \quad$ Chinese Painting ${ }^{1}$
ART HIST 372 Arts of Japan ${ }^{1}$
ART HIST/ Great Cities of Islam
RELIG ST 373
ART HIST 375 Later Japanese Painting and Woodblock Prints
ART HIST/ Cities of Asia ${ }^{1}$
LCA 379
ART HIST 420 Topics in Italian Renaissance Art
ART HIST 425 Race and Gender in Italian Early Modern Art
ART HIST 436 Study Abroad in Renaissance/ Baroque/Northern Art
ART HIST 475 Japanese Ceramics and Allied Arts

ART HIST $479 \quad$ Art and History in Africa
1 Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information.

| Modern (Circa 1800-Circa 1945) |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present ${ }^{1}$ |  |
| ART HIST 337 | Study Abroad in 18th-20th Century Art |  |
| ART HIST 346 | British Art and Society from the Eighteenth Century to the Present ${ }^{1}$ |  |
| ART HIST 350 | 19th Century Painting in Europe |  |
| ART HIST 351 | 20th Century Art in Europe |  |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present ${ }^{1}$ |  |
| ART HIST 355 | History of Photography ${ }^{1}$ |  |
| ART HIST 358 | European Architecture: The Modern Movements |  |
| ART HIST/DS 363 | American Decorative Arts and Interiors: 1620-1840 ${ }^{1}$ |  |
| ART HIST 364 | History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present ${ }^{1}$ |  |
| ART HIST 367 | American Architecture: Colonial and Federal |  |
| ART HIST 368 | American Architecture: The 19th Century |  |
| ART HIST 371 | Chinese Painting ${ }^{1}$ |  |
| ART HIST 372 | Arts of Japan ${ }^{1}$ |  |
| ART HIST/ LCA 379 | Cities of Asia ${ }^{1}$ |  |
| ART HIST 407 | Topics in Nineteenth Century Art |  |
| ART HIST 408 | Topics in Twentieth-Century Art |  |
| ART HIST/ LCA 428 | Visual Cultures of South Asia |  |
| ART HIST 437 | Study Abroad in 18th-20th Century Art |  |
| ART HIST 454 | Art in Germany, 1900-1945 |  |
| ART HIST 457 | History of American Vernacular Architecture and Landscapes ${ }^{1}$ |  |
| ART HIST 463 | Topics in American Material Culture |  |
| ART HIST 468 | Frank Lloyd Wright |  |
| ART HIST 475 | Japanese Ceramics and Allied Arts 1 |  |

Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information.

| Contemporary | ost 1945) |
| :---: | :---: |
| Code | Title Credits |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present ${ }^{1}$ |
| ART HIST 337 | Study Abroad in 18th-20th Century Art |
| ART HIST 346 | British Art and Society from the Eighteenth Century to the Present ${ }^{1}$ |
| ART HIST 350 | 19th Century Painting in Europe |
| ART HIST 351 | 20th Century Art in Europe |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present ${ }^{1}$ |
| ART HIST 355 | History of Photography ${ }^{1}$ |
| ART HIST 358 | European Architecture: The Modern Movements |
| ART HIST/DS 363 | American Decorative Arts and Interiors: 1620-1840 ${ }^{1}$ |
| ART HIST 364 | History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present ${ }^{1}$ |
| ART HIST 367 | American Architecture: Colonial and Federal |
| ART HIST 368 | American Architecture: The 19th Century |
| ART HIST 371 | Chinese Painting ${ }^{1}$ |
| ART HIST 372 | Arts of Japan ${ }^{1}$ |
| ART HIST/ LCA 379 | Cities of Asia ${ }^{1}$ |
| ART HIST 407 | Topics in Nineteenth Century Art |
| ART HIST 408 | Topics in Twentieth-Century Art |
| ART HIST/ LCA 428 | Visual Cultures of South Asia |
| ART HIST 437 | Study Abroad in 18th-20th Century Art |
| ART HIST 454 | Art in Germany, 1900-1945 |
| ART HIST 457 | History of American Vernacular Architecture and Landscapes ${ }^{1}$ |
| ART HIST 463 | Topics in American Material Culture |
| ART HIST 468 | Frank Lloyd Wright |
| ART HIST 475 | Japanese Ceramics and Allied Arts 1 |
| ART HIST 479 | Art and History in Africa |
| 1 Course is eligible area, but that cour Geographical area information. | fulfill more than one Chronological or Geographical rse may only satisfy one Chronological and one . See Advising and Careers section for more |

## GEOGRAPHIC DISTRIBUTION

Of the nine required ART HIST courses, at least one course from three of these five areas:

Cross-Cultural/Diaspora
Code
Title
Credits

ART HIST/ Introduction to Afro-American Art
AFROAMER 242

| ART HIST 305 | History of Islamic Art and <br> Architecture ${ }^{1}$ |
| :--- | :--- |
| ART HIST 354 | Cross-Cultural Arts Around the <br> Atlantic Rim: 1800 to the Present ${ }^{1}$ |
| ART HIST/ <br> RELIG ST 373 | Great Cities of Islam |
| ART HIST/ | Cities of Asia ${ }^{1}$ |
| LCA 379 | Topics in African and African |
| ART HIST 412 | Diaspora Art History ${ }^{1}$ |
| ART HIST 413 | Art and Architecture in the Age of |
| the Caliphs ${ }^{1}$ |  |


| Africa/Middle East |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ART HIST 305 | History of Islamic Art and Architecture ${ }^{1}$ |  |
| ART HIST 338 | Study Abroad in African/Asian Art |  |
| ART HIST/ RELIG ST 373 | Great Cities of Islam |  |
| ART HIST 412 | Topics in African and African Diaspora Art History ${ }^{1}$ |  |
| ART HIST 413 | Art and Architecture in the Age of the Caliphs ${ }^{1}$ |  |
| ART HIST 440 | Art and Power in the Arab World ${ }^{1}$ |  |
| ART HIST 479 | Art and History in Africa |  |
| Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information. |  |  |


| Asia |  |
| :--- | :--- |
| Code |  |
| ART HIST 307 | Title <br> Early Chinese Art: From Antiquity to <br> the Tenth Century |
| ART HIST 308 | Later Chinese Art: From the Tenth <br> Century to the Present |
| ART HIST 338 | Study Abroad in African/Asian Art |
| ART HIST 371 | Chinese Painting |
| ART HIST 372 | Arts of Japan |
| ART HIST/ | Great Cities of Islam |
| RELIG ST 373 | Later Japanese Painting and  <br> ART HIST 375 Woodblock Prints |
| ART HIST/ | Cities of Asia 1 |
| LCA 379 | Topics in Asian Art |
| ART HIST 411 | Visual Cultures of South Asia |
| ART HIST/ |  |
| LCA 428 |  |


| ART HIST 475 | Japanese Ceramics and Allied Arts |
| :--- | :--- |
| ART HIST/ | Art and Religious Practice in |
| RELIG ST 478 | Medieval Japan |

## Credits

| Europe |  |
| :--- | :--- |
| Code | Title |
| ART HIST/ | The Art and Archaeology of Ancient |
| CLASSICS 300 | Greece |
| ART HIST 301 | Myths, Loves, and Lives in Greek <br> Vases |
| ART HIST 302 | Greek Sculpture |
| ART HIST/ | The Art and Archaeology of Ancient |
| CLASSICS 304 | Rome |
| ART HIST 310 | Early Christian and Byzantine Art |
| ART HIST 318 | Romanesque and Gothic Art and <br> Architecture |
| ART HIST 320 | Italian Renaissance Art <br> ART HIST 321 <br> Italian Art: 1250-1400 |
| ART HIST 322 | Italian Art from Donatello to <br> Leonardo da Vinci, 1400-1500 |
| ART HIST 323 | From Michelangelo \& Raphael to <br> Titian: The Arts in 16th Century Italy |
| ART HIST 331 330 | The Painting \& Graphic Arts of <br> Germany 1350-1530 <br> Angels, Demons, and Nudes: Early <br> Netherlandish Painting from Bosch <br> to Bruegel |


| ART HIST 332 | Northern Painting and Graphics <br> from Bosch and Holbein to Bruegel |
| :--- | :--- |
| ART HIST 333 | Netherlandish Painting of the 17th <br> Century |
| ART HIST 341 | Italian Baroque Art |
| ART HIST 346 | British Art and Society from the <br> Eighteenth Century to the Present |
| ART HIST 350 | 19th Century Painting in Europe |
| ART HIST 351 | 20th Century Art in Europe |
| ART HIST 354 | Cross-Cultural Arts Around the <br> Atlantic Rim: 1800 to the Present |
| ART HIST 355 | History of Photography ${ }^{1}$ |
| ART HIST 358 | European Architecture: The Modern <br> Movements |
| ART HIST 360 | Early Modern Art of Northern <br> Europe: Renaissances and |
|  | Reformations |

ART HIST 405 Cities and Sanctuaries of Ancient Greece
ART HIST 407 Topics in Nineteenth Century Art
ART HIST 408 Topics in Twentieth-Century Art
ART HIST/ Topics in Medieval Art
MEDIEVAL 415
ART HIST 420 Topics in Italian Renaissance Art

| ART HIST 425 | Race and Gender in Italian Early <br> Modern Art |
| :--- | :--- |
| ART HIST 454 | Art in Germany, 1900-1945 |
| 1 | Course is eligible fulfill more than one Chronological or Geographical <br> area, but that course may only satisfy one Chronological and one |
| Geographical area. See Advising and Careers section for more <br> information. |  |


| The Americas |  |
| :---: | :---: |
| Code | Title Credits |
| ART HIST 355 | History of Photography ${ }^{1}$ |
| ART HIST/ <br> AMER IND 359 | American Indian Art History: Contemporary Issues |
| ART HIST/DS 363 | American Decorative Arts and Interiors: 1620-1840 |
| ART HIST 364 | History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present |
| ART HIST 365 | The Concept of Contemporary Art |
| ART HIST 367 | American Architecture: Colonial and Federal |
| ART HIST 368 | American Architecture: The 19th Century |
| ART HIST 390 | Pre-Columbian Art |
| ART HIST 433 | Sign, Symbol, Stereotype: Native Icons Revealed |
| ART HIST 457 | History of American Vernacular Architecture and Landscapes |
| ART HIST 463 | Topics in American Material Culture |
| ART HIST 468 | Frank Lloyd Wright |
| 1 Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information. |  |

THEORY AND METHOD DISTRIBUTION
Of the nine required ART HIST courses, at least one course from:

| Code | Title |
| :--- | :--- |
| ART HIST 354 | Cross-Cultural Arts Around the <br> Atlantic Rim: 1800 to the Present |
| ART HIST 355 | History of Photography |
| ART HIST 430 | Topics in Visual Culture |
| ART HIST 431 | Topics in Theory |
| ART HIST 432 | Multiculturalism and the New <br> Museology |
| ART HIST 449 | Topics in Architectural History |
| ART HIST 463 | Topics in American Material Culture |
| ART HIST/DS/ | Dimensions of Material Culture |
| HISTORY 464 | Interdisciplinary Studies in the Arts |
| ART HIST 469 | Introduction to Museum Studies I |
| ART HIST 601 | Introduction to Museum Studies II |
| ART HIST 602 | Curatorial Studies Colloquium |
| ART HIST 603 | Mapping, Making, and Representing |
| ART HIST/ | Colonial Spaces |
| LCA 621 |  |

ART HIST/ History of Books and Print Culture
HISTORY/JOURN/ in Europe and North America
LIS 650

## RESIDENCE AND QUALITY OF WORK IN THE MAJOR

2.000 GPA in ART HIST and major courses
2.000 GPA on 15 upper-level major credits in residence ${ }^{2}$

15 credits in ART HIST taken on the UW-Madison campus
2 ART HIST courses numbered 300-699 are considered upper level in the major.

## EMPHASIS IN ASIAN ART HISTORY

Students with an interest in Asian art history may complete the art history major by completing the following requirements and the Residence \& Quality of Work Requirements above.

## ASIAN ART TRACK REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Foreign Language |  |  |
| Select one of the following: |  |  |
| Complete fourth unit of an Asian Language |  |  |
| Complete third unit of one Asian language AND second unit of an additional language |  |  |
| Asian Studies Courses |  |  |
| Select two courses in East Asian, South Asian, Southeast Asian, or Central Asian Studies (no language or Art History courses) |  |  |
| Asian Subfields |  |  |
| Select three courses in at least two subfields: |  |  |
| General |  |  |
| ART HIST 203 | Survey of Asian Art |  |
| ART HIST/ RELIG ST 373 | Great Cities of Islam |  |
| India |  |  |
| ART HIST 411 | Topics in Asian Art |  |
| ART HIST 205 | Global Arts |  |
| ART HIST/ RELIG ST 373 | Great Cities of Islam |  |
| China |  |  |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century |  |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present |  |
| ART HIST 371 | Chinese Painting |  |
| ART HIST 411 | Topics in Asian Art |  |
| Japan |  |  |
| ART HIST 411 | Topics in Asian Art |  |
| ART HIST 372 | Arts of Japan |  |
| ART HIST 375 | Later Japanese Painting and Woodblock Prints |  |

## Proseminar in Asian Art

Select one of the following:
ART HIST $575 \quad$ Proseminar in Japanese Art

## ART HIST 576 Proseminar in Chinese Art

| Non-Asian Art Courses (any level) |  |
| :--- | :---: |
| Select two courses |  |
| Introductory Course in Western Art |  |
| Select one of the following: |  |
| ART HIST 101 |  | | The Study of Art, Present and Past |  |
| :--- | :--- |
| ART HIST 201 | History of Western Art I: From <br> Pyramids to Cathedrals |
| ART HIST 202 | History of Western Art II: From <br> Renaissance to Contemporary |
| ART HIST 205 | Global Arts |

## HONORS IN THE MAJOR

Students may declare Honors in the Art History Major in consultation with the Art History undergraduate advisor.

## HONORS IN THE MAJOR IN ART HISTORY: REQUIREMENTS

To earn Honors in the Major in Art History, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in all ART HIST courses
- Plan and complete a concentration in a specific area or period, earning 6-8 additional intermediate- or advanced-level credits in ART HIST courses or related departments (e.g., history, literature) beyond the usual major or Asian track.
- Take the required 500-level proseminar (above) before beginning the Senior Honors Thesis
- Complete a two-semester Senior Honors Thesis in ART HIST 681 Senior Honors Thesis and ART HIST 682 Senior Honors Thesis, for a total of 6 credits, in the chosen area or concentration
- Present an oral report on work in an undergraduate Honors colloquium during the senior year.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| WorkAbroad/Study Away programs. |  |
| Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Skill in visual analysis of single images and comparative analysis of multiple images and objects, evaluating a range of elements such as form, color, light, proportion, viewpoint, material, and narrative structure.
2. Proficiency in interpreting images and objects in ways that take into account the historical contexts in which they were produced and received.
3. Consolidation of knowledge across a range of time and geography to reach an understanding of the ways in which art and its meaning are rooted in culture.
4. Ability to locate and enlist research resources in both print and digital form and assess the strengths and weaknesses of various types of resources.
5. Knowledge and skills to interpret images and objects in ways that consider a variety of theoretical perspectives.
6. Ability to assess and critique scholarly arguments and evaluate the strength of the visual and textual evidence presented.

## ADVISING AND CAREERS

## ADVISING

The Department of Art History individually mentors its majors toward careers in a wide range of fields. Our academic advisor and director of undergraduate studies are always available to discuss postdegree options. We also work closely with SuccessWorks at the College of Letters \& Science to help students best apply the knowledge and skills acquired in the art history major in conjunction with other certificates or majors. We encourage majors to seek information from art history faculty and advisors-as well as from L\&S Advising-about career paths and internships; preparation for the job search; and applying to graduate school. Both the department and L\&S also provide networking opportunities with professionals in the field (employers and alumni).

Letters \& Science graduates, and art history majors in particular, have unique perspectives, knowledge, and skills that make them highly desirable to today's employers.

Students who wish to continue on to graduate studies in art history or related fields, or who simply desire more advanced work in art history, are strongly encouraged to pursue Honors in the Major. Students should begin to plan honors work in art history with their honors advisor as early as possible in their careers and should check with the departmental undergraduate advisor at least once a year to seek guidance about planning the best possible Honors in the Major curriculum that reflects their special interests.

## Notes about the major requirements:

- Art history AP credits with a score of 4 or higher and 100 -level art history courses count only toward the nine course minimum but do not count toward distribution requirements.
- Courses at the 200-level count only toward the nine course minimum and 200-level requirements for the major (ART HIST 206 and ART HIST/AFROAMER 242 are exceptions).
- ART HIST/AFROAMER 242 is the only 200-level course that counts toward any content distribution requirements.
- All courses numbered between 200 and 680 count toward level requirements. 600-level courses generally count toward the 400-level requirement.
- Most courses at the 300 and 400 level, and some courses at the 600 level, count toward content distribution requirements. (Example: ART HIST 305 may count in each of the following requirement areas: 1. 300 level AND 2. Chronological-either Ancient to Medieval or Early Modern AND 3. Geographic-either CrossCultural Diaspora or Africa/Middle East)
- Proseminars generally do not satisfy distribution requirements.
- Special topics (including ART HIST 600 Special Topics in Art History) and study abroad courses may satisfy one or more distribution requirements. The following courses may satisfy distribution requirements even if they are not shown in Chronological, Geographic, or Theory and Method categories. In case of questions about how a course might count, students should consult the major advisor.
- Courses footnoted in the Requirements section may meet more than one are of Chronological distribution, Geographical distribution, or both. In nearly all cases, the degree audit (DARS) will select the most advantageous category for students to complete their requirement.
In the rare case that an adjustment is necessary, consult the major advisor.


## Career Resources:

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## Art History Department Resources

- Art history professional development webpage (https:// arthistory.wisc.edu/academics/undergrad/professionaldev)
- What to do with an art history degree? (http://arthistory.wisc.edu/ why-major-in-art-history.htm)
- Art history majors discuss the value of the degree (http:// arthistory.wisc.edu/testimonials.htm)
- Art history's internship course: ART HIST 697 Undergraduate Curatorial Studies Internship (Directed Study)

This directed study may serve as an elective for the new undergraduate certificate in Curatorial Studies, as an elective for the material culture certificate program, or for a specific stand-alone project. The goal is to give students credit for applied learning experiences in museums and other curatorial settings. Students must identify internship possibilities and have them approved for credit by the faculty member who will serve as instructor of record, and oversee the academic side of the internship.
The nature of the internship will vary according to the host institution, but to be accepted for credit, it must have a substantial research component. Examples include but are not limited to: assisting a curator or registrar with research for an exhibition or permanent collection display; producing wall texts and object labels in an exhibition or permanent collection display; researching and writing catalog entries or essays on an object or objects in an exhibition or permanent collection; preparing catalog entries for works in the permanent collection of a museum/historical society; assisting a curator preparing a dossier for acquisitions; researching conservation histories of objects; provenance research; preparing teaching materials associated with an exhibition or permanent collection either in print of online; preparing and giving public tours of exhibitions or permanent collections; participating in exhibition design. To fulfill a 3-credit internship, the student must average approximately 12 hours a week throughout the semester, including working at the host institution on individual projects, and performing any necessary research and writing outside the host institution. In addition, the student should meet with the faculty advisor for a minimum of 1 hour each month. Requires permission to work with faculty member to receive credit for internship project. 1-3 cr.

- Links to relevant career preparation information listed on professional association websites:

Career Alternatives for Art Historians (https://www3.nd.edu/~crosenbe/ jobs.html)
Careers by Major-Art \& Art History (https://www.utm.utoronto.ca/ careers/careers-by-major-art-art-history) (University of Toronto)

## PEOPLE

Professors Andrzejewski (chair), Cahill, Casid, Chopra, Dale, Drewal, Marshall, Martin, Phillips

Associate Professors McClure, Phillips-Court
Assistant Professors Brisman, Li, Pruitt
Adjunct Lecturer Fuller
Affiliate Professors Aylward, Clark, Kern, Nadler
Affiliate Associate Professor Abdu'Allah
Affiliate UW-Milwaukee Associate Professor Sen
Affiliate UW-Milwaukee Assistant Professors Benyamin, Moon

## WISCONSIN EXPERIENCE

The Department of Art History promotes an understanding of art, architecture, objects, and ideas worthy of close visual analysis to be local, hemispheric, transnational, and international, and existing both
within and outside of traditional institutions of display. In guiding our students to develop skills in visual analysis, close reading, historical contextualization, and communication and interpretation through writing about art, conducting research on objects in our museum collections, and organizing exhibitions, our department is committed to building an understanding of how humans perceive, create, and inhabit the world. Opportunities to work with and present collections to the public, both at the Chazen Museum and through internships at other Wisconsin institutions, afford our students the chance to connect with diverse audiences beyond the borders of campus.

## ART HISTORY, B.S.

## OVERVIEW

The art history major provides a foundation for answering key questions about what it means to be human as well as valuable skills for today's workplaces. A specialized focus on images, objects, and the built environment promotes critical and creative approaches to analysis, problem-solving, writing and visual communication in a variety of media. Interdisciplinary collaborations encourage aesthetic, historical, economic, and ethical questions in order to produce new knowledge, sophisticated readers, engaged writers, critical viewers, independent thinkers, and confident cultural citizens who are well prepared to thrive in global society.

Through innovative research, teaching, and outreach activities, the Department of Art History takes a leading role in promoting visual literacy, emphasizing careful attention to continuities and differences across human history and world cultures. Examining expressive forms, from artifacts to new media, the department explores the ways in which art and visual and material culture are fully integrated into larger cultural histories.

## STUDY ABROAD

The department strongly encourages art history majors to participate in study abroad programs. Students gain firsthand experience of other cultures and languages and have the opportunity to study major artistic monuments. Credit for appropriate coursework can be applied toward the major after arrangements have been made with the study abroad program, or, in the case of non-UW study abroad programs, the Office of Admissions (http://www.admissions.wisc.edu/ equivalencies). For more information, see the Study Abroad website (http://www.studyabroad.wisc.edu).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as
needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |

## Coursework

Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90 th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS IN THE MAJOR FOREIGN LANGUAGE

Note: A unit is one year of high school work or one semester/term of college work.

1. Complete the fourth unit of a foreign language; or
2. Complete the third unit of a foreign language and the second unit of an additional foreign language

## LEVEL REQUIREMENTS

Nine (9) courses in ART HIST as follows:

| 200-level ART HIST (two required) |  |
| :--- | :--- |
| Code | $\begin{array}{l}\text { Title } \\ \text { ART HIST 104 }\end{array}$ |
| The Art of Diversity: Race and |  |
| Representation in the Art and Visual |  |
| Culture of the United States |  |$]$ Credits


| 300-level ART |  | HIST (three required) |
| :--- | :--- | :--- |
| Code | Title | Credits |
| ART HIST/ | The Art and Archaeology of Ancient |  |
| CLASSICS 300 | Greece |  |
| ART HIST 301 | Myths, Loves, and Lives in Greek <br> Vases |  |
| ART HIST 302 | Greek Sculpture |  |


| ART HIST/ CLASSICS 304 | The Art and Archaeology of Ancient Rome |
| :---: | :---: |
| ART HIST 305 | History of Islamic Art and Architecture |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present |
| ART HIST 310 | Early Christian and Byzantine Art |
| ART HIST 318 | Romanesque and Gothic Art and Architecture |
| ART HIST 320 | Italian Renaissance Art |
| ART HIST 321 | Italian Art: 1250-1400 |
| ART HIST 322 | Italian Art from Donatello to Leonardo da Vinci, 1400-1500 |
| ART HIST 323 | From Michelangelo \& Raphael to Titian: The Arts in 16th Century Italy |
| ART HIST 330 | The Painting \& Graphic Arts of Germany 1350-1530 |
| ART HIST 331 | Angels, Demons, and Nudes: Early Netherlandish Painting from Bosch to Bruegel |
| ART HIST 332 | Northern Painting and Graphics from Bosch and Holbein to Bruegel |
| ART HIST 333 | Netherlandish Painting of the 17th Century |
| ART HIST 335 | Study Abroad in Ancient/Medieval Art |
| ART HIST 336 | Study Abroad in Renaissance/ Baroque/Northern Art |
| ART HIST 337 | Study Abroad in 18th-20th Century Art |
| ART HIST 338 | Study Abroad in African/Asian Art |
| ART HIST 341 | Italian Baroque Art |
| ART HIST 346 | British Art and Society from the Eighteenth Century to the Present |
| ART HIST 350 | 19th Century Painting in Europe |
| ART HIST 351 | 20th Century Art in Europe |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present |
| ART HIST 355 | History of Photography |
| ART HIST 358 | European Architecture: The Modern Movements |
| ART HIST/ <br> AMERIND 359 | American Indian Art History: Contemporary Issues |
| ART HIST 360 | Early Modern Art of Northern Europe: Renaissances and Reformations |
| ART HIST/DS 363 | American Decorative Arts and Interiors: 1620-1840 |
| ART HIST 364 | History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present |
| ART HIST 365 | The Concept of Contemporary Art |
| ART HIST 367 | American Architecture: Colonial and Federal |


| ART HIST 368 | American Architecture: The 19th Century |  |
| :---: | :---: | :---: |
| ART HIST 371 | Chinese Painting |  |
| ART HIST 372 | Arts of Japan |  |
| ART HIST/ RELIG ST 373 | Great Cities of Islam |  |
| ART HIST 375 | Later Japanese Painting and Woodblock Prints |  |
| ART HIST/ LCA 379 | Cities of Asia |  |
| ART HIST 390 | Pre-Columbian Art |  |
| 400-level A | HIST (two required) |  |
| Code | Title | Credits |
| ART HIST 405 | Cities and Sanctuaries of Ancient Greece |  |
| ART HIST 407 | Topics in Nineteenth Century Art |  |
| ART HIST 408 | Topics in Twentieth-Century Art |  |
| ART HIST 411 | Topics in Asian Art |  |
| ART HIST 412 | Topics in African and African Diaspora Art History |  |
| ART HIST 413 | Art and Architecture in the Age of the Caliphs |  |
| ART HIST/ <br> MEDIEVAL 415 | Topics in Medieval Art |  |
| ART HIST 420 | Topics in Italian Renaissance Art |  |
| ART HIST 425 | Race and Gender in Italian Early Modern Art |  |
| ART HIST/ LCA 428 | Visual Cultures of South Asia |  |
| ART HIST 430 | Topics in Visual Culture |  |
| ART HIST 431 | Topics in Theory |  |
| ART HIST 432 | Multiculturalism and the New Museology |  |
| ART HIST 433 | Sign, Symbol, Stereotype: Native Icons Revealed |  |
| ART HIST 435 | Study Abroad in Ancient/Medieval Art |  |
| ART HIST 436 | Study Abroad in Renaissance/ Baroque/Northern Art |  |
| ART HIST 437 | Study Abroad in 18th-20th Century Art |  |
| ART HIST 438 | Study Abroad in African/Asian Art |  |
| ART HIST 440 | Art and Power in the Arab World |  |
| ART HIST 449 | Topics in Architectural History |  |
| ART HIST 454 | Art in Germany, 1900-1945 |  |
| ART HIST 457 | History of American Vernacular Architecture and Landscapes |  |
| ART HIST 463 | Topics in American Material Culture |  |
| ART HIST/DS/ HISTORY 464 | Dimensions of Material Culture |  |
| ART HIST 468 | Frank Lloyd Wright |  |
| ART HIST 469 | Interdisciplinary Studies in the Arts |  |
| ART HIST 475 | Japanese Ceramics and Allied Arts |  |


| ART HIST/ RELIG ST 478 | Art and Religious Practice in Medieval Japan |  |
| :---: | :---: | :---: |
| ART HIST 479 | Art and History in Africa |  |
| 500-level ART HIST (one required) |  |  |
| Code | Title | Credits |
| ART HIST 500 | Proseminar: Special Topics in Art History |  |
| ART HIST 505 | Proseminar in Ancient Art |  |
| ART HIST 506 | Curatorial Studies Exhibition Practice |  |
| ART HIST 515 | Proseminar in Medieval Art |  |
| ART HIST 525 | Proseminar in Italian Renaissance <br> Art |  |
| ART HIST 535 | Proseminar in Northern European Painting |  |
| ART HIST 555 | Proseminar in 19th Century European Art |  |
| ART HIST 556 | Proseminar in 20th Century European Art |  |
| ART HIST 563 | Proseminar in Material Culture |  |
| ART HIST 565 | Proseminar in American Art |  |
| ART HIST 567 | Proseminar in American Architecture |  |
| ART HIST 569 | Interdisciplinary Studies in the Arts |  |
| ART HIST 575 | Proseminar in Japanese Art |  |
| ART HIST 576 | Proseminar in Chinese Art |  |
| ART HIST 579 | Proseminar in African Art |  |
| Electives to meet minimum nine courses required |  |  |
| Code | Title | Credits |
| ART HIST 100-699 |  |  |
| CHRONOLOGICAL DISTRIBUTION |  |  |
| Of the nine required ART HIST courses, at least one course from each area: |  |  |
| Ancient to Medieval |  |  |
| Code | Title | Credits |
| ART HIST/ CLASSICS 300 | The Art and Archaeology of Ancient Greece |  |
| ART HIST 301 | Myths, Loves, and Lives in Greek Vases |  |
| ART HIST 302 | Greek Sculpture |  |
| ART HIST/ CLASSICS 304 | The Art and Archaeology of Ancient Rome |  |
| ART HIST 305 | History of Islamic Art and Architecture ${ }^{1}$ |  |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century |  |
| ART HIST 310 | Early Christian and Byzantine Art |  |
| ART HIST 318 | Romanesque and Gothic Art and Architecture |  |
| ART HIST 321 | Italian Art: 1250-1400 |  |
| ART HIST 335 | Study Abroad in Ancient/Medieval Art |  |
| ART HIST 371 | Chinese Painting ${ }^{1}$ |  |


| ART HIST 372 | Arts of Japan ${ }^{1}$ |
| :---: | :---: |
| ART HIST/ LCA 379 | Cities of Asia ${ }^{1}$ |
| ART HIST 390 | Pre-Columbian Art |
| ART HIST 405 | Cities and Sanctuaries of Ancient Greece |
| ART HIST 413 | Art and Architecture in the Age of the Caliphs |
| ART HIST/ <br> MEDIEVAL 415 | Topics in Medieval Art |
| ART HIST 435 | Study Abroad in Ancient/Medieval Art |
| ART HIST 440 | Art and Power in the Arab World ${ }^{1}$ |
| ART HIST 475 | Japanese Ceramics and Allied Arts 1 |
| ART HIST/ RELIG ST 478 | Art and Religious Practice in Medieval Japan |

1 Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information.

| Early Modern (Circa 1400-Circa 1800) |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ART HIST 305 | History of Islamic Art and Architecture ${ }^{1}$ |  |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present ${ }^{1}$ |  |
| ART HIST 320 | Italian Renaissance Art |  |
| ART HIST 322 | Italian Art from Donatello to Leonardo da Vinci, 1400-1500 |  |
| ART HIST 323 | From Michelangelo \& Raphael to Titian: The Arts in 16th Century Italy |  |
| ART HIST 330 | The Painting \& Graphic Arts of Germany 1350-1530 |  |
| ART HIST 331 | Angels, Demons, and Nudes: Early Netherlandish Painting from Bosch to Bruegel |  |
| ART HIST 332 | Northern Painting and Graphics from Bosch and Holbein to Bruegel |  |
| ART HIST 333 | Netherlandish Painting of the 17th Century |  |
| ART HIST 336 | Study Abroad in Renaissance/ Baroque/Northern Art |  |
| ART HIST 341 | Italian Baroque Art |  |
| ART HIST 360 | Early Modern Art of Northern Europe: Renaissances and Reformations |  |
| ART HIST/DS 363 | American Decorative Arts and Interiors: 1620-1840 ${ }^{1}$ |  |
| ART HIST 364 | History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present ${ }^{1}$ |  |
| ART HIST 371 | Chinese Painting ${ }^{1}$ |  |
| ART HIST 372 | Arts of Japan ${ }^{1}$ |  |


| ART HIST/ <br> RELIG ST 373 | Great Cities of Islam |
| :--- | :--- |
| ART HIST 375 | Later Japanese Painting and <br> Woodblock Prints |
| ART HIST/ <br> LCA 379 | Cities of Asia 1 |
| ART HIST 420 | Topics in Italian Renaissance Art |
| ART HIST 425 | Race and Gender in Italian Early <br> Modern Art |
| ART HIST 436 | Study Abroad in Renaissance/ <br> Baroque/Northern Art |
| ART HIST 475 | Japanese Ceramics and Allied Arts <br> 1 |
| ART HIST 479 | Art and History in Africa |
| Course is eligible fulfill more than one Chronological or Geographical |  |
| area, but that course may only satisfy one Chronological and one |  |
| Geographical area. See Advising and Careers section for more |  |
| information. |  |

Modern (Circa 1800-Circa 1945)
Code Title Credits

ART HIST 308 Later Chinese Art: From the Tenth Century to the Present ${ }^{1}$

| ART HIST 337 | Study Abroad in 18th-20th Century <br> Art |
| :--- | :--- |
| ART HIST 346 | British Art and Society from the <br> Eighteenth Century to the Present ${ }^{1}$ |
| ART HIST 350 | 19th Century Painting in Europe | | ART HIST 351 | 20th Century Art in Europe |
| :--- | :--- |
| ART HIST 354 | Cross-Cultural Arts Around the <br> Atlantic Rim: 1800 to the Present ${ }^{1}$ |
| ART HIST 355 | History of Photography ${ }^{1}$ |
| ART HIST 358 | European Architecture: The Modern <br> Movements |

ART HIST/DS 363 American Decorative Arts and Interiors: 1620-1840 ${ }^{1}$
ART HIST 364 History of American Art: Art,
Material Culture, and Constructions of Identity, 1607-present ${ }^{1}$
ART HIST 367 American Architecture: Colonial and Federal

| ART HIST 368 | American Architecture: The 19th <br> Century |
| :--- | :--- |
| ART HIST 371 | Chinese Painting $^{1}$ |
| ART HIST 372 Arts of Japan $^{1}$ |  |
| ART HIST/ <br> LCA 379 | Cities of Asia $^{1}$ |
| ART HIST 407 | Topics in Nineteenth Century Art |
| ART HIST 408 | Topics in Twentieth-Century Art |
| ART HIST/ | Visual Cultures of South Asia |
| LCA 428 |  |

ART HIST $437 \quad$ Study Abroad in 18th-20th Century
Art
ART HIST $454 \quad$ Art in Germany, 1900-1945
ART HIST 457 History of American Vernacular Architecture and Landscapes ${ }^{1}$

ART HIST 463
ART HIST 468
ART HIST 475

Topics in American Material Culture
Frank Lloyd Wright
Japanese Ceramics and Allied Arts
1
Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information.

| Contemporary (Post 1945) |
| :--- |
| CodeTitle <br> ART HIST 308 |
| Later Chinese Art: From the Tenth |
| Century to the Present ${ }^{1}$ |$\quad$ Credits


| ART HIST 367 | American Architecture: Colonial and <br> Federal |
| :--- | :--- |
| ART HIST 368 | American Architecture: The 19th <br> Century |
| ART HIST 371 | Chinese Painting $^{1}$ |
| ART HIST 372 | Arts of Japan $^{1}$ | ART $^{1}$| ARTies of Asia |
| :--- |

ART HIST $479 \quad$ Art and History in Africa
1 Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one

Geographical area. See Advising and Careers section for more information.

## GEOGRAPHIC DISTRIBUTION

Of the nine required ART HIST courses, at least one course from three of these five areas:

Cross-Cultural/Diaspora

| Code | Title Credits |
| :---: | :---: |
| ART HIST/ <br> AFROAMER 242 | Introduction to Afro-American Art |
| ART HIST 305 | History of Islamic Art and Architecture ${ }^{1}$ |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present ${ }^{1}$ |
| ART HIST/ RELIG ST 373 | Great Cities of Islam |
| ART HIST/ LCA 379 | Cities of Asia ${ }^{1}$ |
| ART HIST 412 | Topics in African and African Diaspora Art History ${ }^{1}$ |
| ART HIST 413 | Art and Architecture in the Age of the Caliphs ${ }^{1}$ |
| ART HIST 440 | Art and Power in the Arab World ${ }^{1}$ |
| ART HIST/ | Selected Topics in African Diaspora |
| AFROAMER 643 | Art History |
| 1 Course is eligible area, but that cou Geographical are information. | fulfill more than one Chronological or Geographical rse may only satisfy one Chronological and one a. See Advising and Careers section for more |


| Africa/Middle East |
| :--- |
| Code <br> ART HIST 305 |
| Title <br> History of Islamic Art and <br> Architecture ${ }^{1}$ |
| ART HIST 338 | | Study Abroad in African/Asian Art |
| :--- |
| ART HIST/ <br> RELIG ST 373 |
| ART HIST 412 | | Great Cities of Islam |
| :--- |
| Topics in African and African |
| Diaspora Art History ${ }^{1}$ |

## Asia

Code Title
Credits
Early Chinese Art: From Antiquity to the Tenth Century
ART HIST 308 Later Chinese Art: From the Tenth Century to the Present
ART HIST 338 Study Abroad in African/Asian Art

| ART HIST 371 | Chinese Painting |
| :---: | :---: |
| ART HIST 372 | Arts of Japan |
| ART HIST/ RELIG ST 373 | Great Cities of Islam |
| ART HIST 375 | Later Japanese Painting and Woodblock Prints |
| ART HIST/ LCA 379 | Cities of Asia ${ }^{1}$ |
| ART HIST 411 | Topics in Asian Art |
| ART HIST/ LCA 428 | Visual Cultures of South Asia |
| ART HIST 475 | Japanese Ceramics and Allied Arts |
| ART HIST/ RELIG ST 478 | Art and Religious Practice in Medieval Japan |

1 Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information.

Europe

| Code | Title | Credits |
| :---: | :---: | :---: |
| ART HIST/ CLASSICS 300 | The Art and Archaeology of Ancient Greece |  |
| ART HIST 301 | Myths, Loves, and Lives in Greek Vases |  |
| ART HIST 302 | Greek Sculpture |  |
| ART HIST/ CLASSICS 304 | The Art and Archaeology of Ancient Rome |  |
| ART HIST 310 | Early Christian and Byzantine Art |  |
| ART HIST 318 | Romanesque and Gothic Art and Architecture |  |
| ART HIST 320 | Italian Renaissance Art |  |
| ART HIST 321 | Italian Art: 1250-1400 |  |
| ART HIST 322 | Italian Art from Donatello to Leonardo da Vinci, 1400-1500 |  |
| ART HIST 323 | From Michelangelo \& Raphael to Titian: The Arts in 16th Century Italy |  |
| ART HIST 330 | The Painting \& Graphic Arts of Germany 1350-1530 |  |
| ART HIST 331 | Angels, Demons, and Nudes: Early Netherlandish Painting from Bosch to Bruegel |  |
| ART HIST 332 | Northern Painting and Graphics from Bosch and Holbein to Bruegel |  |
| ART HIST 333 | Netherlandish Painting of the 17th Century |  |
| ART HIST 341 | Italian Baroque Art |  |
| ART HIST 346 | British Art and Society from the Eighteenth Century to the Present |  |
| ART HIST 350 | 19th Century Painting in Europe |  |
| ART HIST 351 | 20th Century Art in Europe |  |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present ${ }^{1}$ |  |
| ART HIST 355 | History of Photography ${ }^{1}$ |  |


| ART HIST 358 | European Architecture: The Modern Movements |
| :---: | :---: |
| ART HIST 360 | Early Modern Art of Northern Europe: Renaissances and Reformations |
| ART HIST 405 | Cities and Sanctuaries of Ancient Greece |
| ART HIST 407 | Topics in Nineteenth Century Art |
| ART HIST 408 | Topics in Twentieth-Century Art |
| ART HIST/ MEDIEVAL 415 | Topics in Medieval Art |
| ART HIST 420 | Topics in Italian Renaissance Art |
| ART HIST 425 | Race and Gender in Italian Early Modern Art |
| ART HIST 454 | Art in Germany, 1900-1945 |
| Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information. |  |
| Code | Title Credits |
|  | History of Photography ${ }^{1}$ |
| ART HIST/ AMER IND 359 | American Indian Art History: Contemporary Issues |

ART HIST/DS 363 American Decorative Arts and Interiors: 1620-1840
ART HIST 364 History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present
ART HIST 365 The Concept of Contemporary Art
ART HIST 367 American Architecture: Colonial and Federal
ART HIST 368 American Architecture: The 19th Century
ART HIST $390 \quad$ Pre-Columbian Art
ART HIST 433 Sign, Symbol, Stereotype: Native Icons Revealed
ART HIST $457 \quad$ History of American Vernacular Architecture and Landscapes
ART HIST 463 Topics in American Material Culture
ART HIST 468 Frank Lloyd Wright
1 Course is eligible fulfill more than one Chronological or Geographical area, but that course may only satisfy one Chronological and one Geographical area. See Advising and Careers section for more information.

## THEORY AND METHOD DISTRIBUTION

Of the nine required ART HIST courses, at least one course from:

| Code | Title | Credits |
| :---: | :--- | :---: |
| ART HIST 354 | Cross-Cultural Arts Around the <br> Atlantic Rim: 1800 to the Present |  |
| ART HIST 355 | History of Photography |  |
| ART HIST 430 | Topics in Visual Culture |  |
| ART HIST 431 | Topics in Theory |  |


| ART HIST 432 | Multiculturalism and the New <br> Museology |
| :--- | :--- |
| ART HIST 449 | Topics in Architectural History |
| ART HIST 463 | Topics in American Material Culture |
| ART HIST/DS/ | Dimensions of Material Culture |
| HISTORY 464 |  |
| ART HIST 469 | Interdisciplinary Studies in the Arts |
| ART HIST 601 | Introduction to Museum Studies I |
| ART HIST 602 | Introduction to Museum Studies II |
| ART HIST 603 | Curatorial Studies Colloquium |
| ART HIST/ | Mapping, Making, and Representing |
| LCA 621 | Colonial Spaces |
| ART HIST/ | History of Books and Print Culture |
| HISTORY/JOURN/ in Europe and North America |  |
| LIS 650 |  |

## RESIDENCE AND QUALITY OF WORK IN THE MAJOR

2.000 GPA in ART HIST and major courses
2.000 GPA on 15 upper-level major credits in residence ${ }^{2}$

15 credits in ART HIST taken on the UW-Madison campus
2 ART HIST courses numbered 300-699 are considered upper level in the major.

## EMPHASIS IN ASIAN ART HISTORY

Students with an interest in Asian art history may complete the art history major by completing the following requirements and the Residence \& Quality of Work Requirements above.

## ASIAN ART TRACK REQUIREMENTS

| Code |
| :--- |
| Foreign Language |
| Select one of the following: |
| Complete fourth unit of an Asian Language |
| Complete third unit of one Asian language AND second |
| unit of an additional language |
| Asian Studies Courses |
| Select two courses in East Asian, South Asian, |
| Southeast Asian, or Central Asian Studies (no language |
| or Art History courses) |
| Asian Subfields |
| Select three courses in at least two subfields: |
| General |
| ART HIST 203 |
| ART HIST/ |
| RELIG ST 373 Grear Cities of Asian Art <br> India  <br> ART HIST 411 Topics in Asian Art <br> ART HIST 205 Global Arts <br> ART HIST/ Great Cities of Islam <br> RELIG ST 373  <br> China  <br> ART HIST 307 Early Chinese Art: From Antiquity to <br> the Tenth Century  |


| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present |
| :---: | :---: |
| ART HIST 371 | Chinese Painting |
| ART HIST 411 | Topics in Asian Art |
| Japan |  |
| ART HIST 411 | Topics in Asian Art |
| ART HIST 372 | Arts of Japan |
| ART HIST 375 | Later Japanese Painting and Woodblock Prints |
| Proseminar in Asian Art |  |
| Select one of the following: |  |
| ART HIST 575 | Proseminar in Japanese Art |
| ART HIST 576 | Proseminar in Chinese Art |
| Non-Asian Art Courses (any level) |  |
| Select two courses |  |
| Introductory Course in Western Art |  |
| Select one of the following: |  |
| ART HIST 101 | The Study of Art, Present and Past |
| ART HIST 201 | History of Western Art I: From Pyramids to Cathedrals |
| ART HIST 202 | History of Western Art II: From Renaissance to Contemporary |
| ART HIST 205 | Global Arts |

## HONORS IN THE MAJOR

Students may declare Honors in the Art History Major in consultation with the Art History undergraduate advisor.

## HONORS IN THE MAJOR IN ART HISTORY: REQUIREMENTS

To earn Honors in the Major in Art History, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in all ART HIST courses
- Plan and complete a concentration in a specific area or period, earning 6-8 additional intermediate- or advanced-level credits in ART HIST courses or related departments (e.g., history, literature) beyond the usual major or Asian track.
- Take the required 500-level proseminar (above) before beginning the Senior Honors Thesis
- Complete a two-semester Senior Honors Thesis in ART HIST 681 Senior Honors Thesis and ART HIST 682 Senior Honors Thesis, for a total of 6 credits, in the chosen area or concentration
- Present an oral report on work in an undergraduate Honors colloquium during the senior year.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
\(\left.$$
\begin{array}{ll}\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online } \\
\text { formats and credits earned in UW-Madison Study }\end{array}
$$ <br>

Abroad/Study Away programs.\end{array}\right\}\)| Quality of $\quad$Undergraduate students must maintain the minimum <br> Wrade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
| :--- |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## HOW TO GET IN

Students considering art history as a major should come to the department for advising as early as possible in their undergraduate careers. Upon declaration, students are strongly encouraged to meet regularly with the undergraduate program advisor to ensure timely progress toward completion of the degree. Annual meetings with the director of undergraduate studies are also highly encouraged. More detailed information can be found at Declaring the Art History Major (https://arthistory.wisc.edu/academics/undergrad/advising).

## LEARNING OUTCOMES

1. Ability to employ techniques for visual analysis (examining features such as materials, proportion, light, color, form and narrative structure) of single images and for comparative analysis of multiple images and objects.
2. Proficiency in interpreting images/objects in ways that take into account the historical contexts in which they were produced and received.
3. Consolidation of knowledge across a range of time and geography to reach an understanding of the ways in which art and its meaning are rooted in culture.
4. Ability to locate and enlist research resources in both print and digital form and assess the strengths and weaknesses of various types of resources.
5. Knowledge and skills necessary to interpret images/objects in ways that consider a variety of theoretical perspectives.
6. Ability to assess and critique scholarly arguments and evaluate the strength of the visual and textual evidence presented.
7. Skills that prepare our graduates to become effective and impactful communicators in both written and oral form in ways that acknowledge diverse audiences in an increasingly global society.

## ADVISING AND CAREERS

## ADVISING

The Department of Art History individually mentors its majors toward careers in a wide range of fields. Our academic advisor and director of undergraduate studies are always available to discuss postdegree options. We also work closely with SuccessWorks at the College of Letters \& Science to help students best apply the knowledge and skills acquired in the art history major in conjunction with other certificates or majors. We encourage majors to seek information from art history
faculty and advisors-as well as from L\&S Advising-about career paths and internships; preparation for the job search; and applying to graduate school. Both the department and L\&S also provide networking opportunities with professionals in the field (employers and alumni).

Letters \& Science graduates, and art history majors in particular, have unique perspectives, knowledge, and skills that make them highly desirable to today's employers.

Students who wish to continue on to graduate studies in art history or related fields, or who simply desire more advanced work in art history, are strongly encouraged to pursue Honors in the Major. Students should begin to plan honors work in art history with their honors advisor as early as possible in their careers and should check with the departmental undergraduate advisor at least once a year to seek guidance about planning the best possible Honors in the Major curriculum that reflects their special interests.

## Notes about the major requirements:

- Art history AP credits with a score of 4 or higher and 100-level art history courses count only toward the nine course minimum but do not count toward distribution requirements.
- Courses at the 200-level count only toward the nine course minimum and 200-level requirements for the major (ART HIST 206 and ART HIST/AFROAMER 242 are exceptions).
- ART HIST/AFROAMER 242 is the only 200-level course that counts toward any content distribution requirements.
- All courses numbered between 200 and 680 count toward level requirements. 600-level courses generally count toward the 400-level requirement.
- Most courses at the 300 and 400 level, and some courses at the 600 level, count toward content distribution requirements.
(Example: ART HIST 305 may count in each of the following requirement areas: 1. 300 level AND 2. Chronological-either Ancient to Medieval or Early Modern AND 3. Geographic-either CrossCultural Diaspora or Africa/Middle East)
- Proseminars generally do not satisfy distribution requirements.
- Special topics (including ART HIST 600 Special Topics in Art History) and study abroad courses may satisfy one or more distribution requirements. The following courses may satisfy distribution requirements even if they are not shown in Chronological, Geographic, or Theory and Method categories. In case of questions about how a course might count, students should consult the major advisor.
- Courses footnoted in the Requirements section may meet more than one are of Chronological distribution, Geographical distribution, or both. In nearly all cases, the degree audit (DARS) will select the most advantageous category for students to complete their requirement. In the rare case that an adjustment is necessary, consult the major advisor.


## Career Resources:

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## Art History Department Resources

- Art history professional development webpage (https:// arthistory.wisc.edu/academics/undergrad/professionaldev)
- What to do with an art history degree? (http://arthistory.wisc.edu/ why-major-in-art-history.htm)
- Art history majors discuss the value of the degree (http:// arthistory.wisc.edu/testimonials.htm)
- Art history's internship course: ART HIST 697 Undergraduate Curatorial Studies Internship (Directed Study)

This directed study may serve as an elective for the new undergraduate certificate in Curatorial Studies, as an elective for the material culture certificate program, or for a specific stand-alone project. The goal is to give students credit for applied learning experiences in museums and other curatorial settings. Students must identify internship possibilities and have them approved for credit by the faculty member who will serve as instructor of record, and oversee the academic side of the internship. The nature of the internship will vary according to the host institution, but to be accepted for credit, it must have a substantial research component. Examples include but are not limited to: assisting a curator or registrar with research for an exhibition or permanent collection display; producing wall texts and object labels in an exhibition or permanent collection display; researching and writing catalog entries or essays on an object or objects in an exhibition or permanent collection; preparing catalog entries for works in the permanent collection of a museum/historical society; assisting a curator preparing a dossier for acquisitions; researching conservation histories of objects; provenance research; preparing teaching materials associated with an exhibition or permanent collection either in print of online; preparing and giving public tours of exhibitions or permanent collections; participating in exhibition design. To fulfill a 3 -credit internship, the student must average approximately 12 hours a week throughout the semester, including working at the host institution on individual projects, and performing any necessary research and writing outside the host institution. In addition, the student should meet with the faculty advisor for a minimum of 1 hour each month. Requires permission to work with faculty member to receive credit for internship project. 1-3 cr.

- Links to relevant career preparation information listed on professional association websites:

Career Alternatives for Art Historians (https://www3.nd.edu/~crosenbe/ jobs.html)

Careers by Major-Art \& Art History (https://www.utm.utoronto.ca/ careers/careers-by-major-art-art-history) (University of Toronto)

## PEOPLE

Professors Andrzejewski (chair), Cahill, Casid, Chopra, Dale, Drewal, Marshall, Martin, Phillips

Associate Professors McClure, Phillips-Court
Assistant Professors Brisman, Li, Pruitt
Adjunct Lecturer Fuller
Affiliate Professors Aylward, Clark, Kern, Nadler
Affiliate Associate Professor Abdu'Allah
Affiliate UW-Milwaukee Associate Professor Sen
Affiliate UW-Milwaukee Assistant Professors Benyamin, Moon

## WISCONSIN EXPERIENCE

The Department of Art History promotes an understanding of art, architecture, objects, and ideas worthy of close visual analysis to be local, hemispheric, transnational, and international, and existing both within and outside of traditional institutions of display. In guiding our students to develop skills in visual analysis, close reading, historical contextualization, and communication and interpretation through writing about art, conducting research on objects in our museum collections, and organizing exhibitions, our department is committed to building an understanding of how humans perceive, create, and inhabit the world. Opportunities to work with and present collections to the public, both at the Chazen Museum and through internships at other Wisconsin institutions, afford our students the chance to connect with diverse audiences beyond the borders of campus.

## ART HISTORY, CERTIFICATE

Effective fall 2018, undergraduate students at the University of Wisconsin-Madison are eligible to declare the certificate in art history. More information about the program is forthcoming. For information about the certificate and declaring, please contact the Department of Art History.

## HOW TO GET IN

Students interested in the certificate in art history should contact the Department of Art History to set up an advising appointment and to declare the certificate.

Students declared in the art history major are not eligible to declare the art history certificate.

## REQUIREMENTS

## REQUIREMENTS FOR THE CERTIFICATE

Total credits required for certificate completion: 12

| One Intermediate Survey Course |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select from: |  |  |
| ART HIST/ CLASSICS 300 | The Art and Archaeology of Ancient Greece | 3-4 |
| ART HIST 301 | Myths, Loves, and Lives in Greek Vases | 3-4 |
| ART HIST 302 | Greek Sculpture | 3-4 |
| ART HIST/ CLASSICS 304 | The Art and Archaeology of Ancient Rome | 3-4 |
| ART HIST 305 | History of Islamic Art and Architecture | 3 |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century | 3 |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present | 3 |
| ART HIST 310 | Early Christian and Byzantine Art | 3-4 |
| ART HIST 318 | Romanesque and Gothic Art and Architecture | 3-4 |
| ART HIST 320 | Italian Renaissance Art | 3-4 |
| ART HIST 321 | Italian Art: 1250-1400 | 3-4 |
| ART HIST 322 | Italian Art from Donatello to Leonardo da Vinci, 1400-1500 | 3-4 |
| ART HIST 323 | From Michelangelo \& Raphael to Titian: The Arts in 16th Century Italy | 3-4 |
| ART HIST 330 | The Painting \& Graphic Arts of Germany 1350-1530 | 3-4 |
| ART HIST 331 | Angels, Demons, and Nudes: Early Netherlandish Painting from Bosch to Bruegel | 3-4 |
| ART HIST 332 | Northern Painting and Graphics from Bosch and Holbein to Bruegel | 3-4 |
| ART HIST 333 | Netherlandish Painting of the 17th Century | 3-4 |
| ART HIST 335 | Study Abroad in Ancient/Medieval Art | 1-6 |
| ART HIST 336 | Study Abroad in Renaissance/ Baroque/Northern Art | 1-6 |
| ART HIST 337 | Study Abroad in 18th-20th Century Art | 1-6 |
| ART HIST 338 | Study Abroad in African/Asian Art | 1-6 |
| ART HIST 341 | Italian Baroque Art | 3-4 |
| ART HIST 346 | British Art and Society from the Eighteenth Century to the Present | 3-4 |
| ART HIST 350 | 19th Century Painting in Europe | 3-4 |
| ART HIST 351 | 20th Century Art in Europe | 3-4 |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present | 3-4 |
| ART HIST 355 | History of Photography | 3 |
| ART HIST 358 | European Architecture: The Modern Movements | 3-4 |
| ART HIST/ AMER IND 359 | American Indian Art History: Contemporary Issues | 3 |
| ART HIST 360 | Early Modern Art of Northern Europe: Renaissances and Reformations | 3 |


| ART HIST/DS 363 | American Decorative Arts and <br> Interiors: 1620-1840 | $3-4$ |
| :--- | :--- | ---: |
| ART HIST 364 | History of American Art: Art, <br> Material Culture, and Constructions <br> of Identity, 1607-present | $3-4$ |
| ART HIST 365 | The Concept of Contemporary Art |  |
| ART HIST 367 | American Architecture: Colonial and <br> Federal | $3-4$ |
| ART HIST 368 | American Architecture: The 19th <br> Century | $3-4$ |
| ART HIST 371 | Chinese Painting | $3-4$ |
| ART HIST 372 | Arts of Japan | $3-4$ |
| ART HIST/ | Great Cities of Islam | $3-4$ |
| RELIG ST 373 | Later Japanese Painting and | 3 |
| ART HIST 375 | Woodblock Prints | $3-4$ |
| ART HIST/LCA 379 | Cities of Asia | $3-4$ |
| ART HIST 390 | Pre-Columbian Art | 3 |

## One Area Focus Course

Code Title Credits

Select from:

| ART HIST 405 | Cities and Sanctuaries of Ancient <br> Greece | 3 |
| :--- | :--- | :---: |
| ART HIST 407 | Topics in Nineteenth Century Art | $3-4$ |
| ART HIST 408 | Topics in Twentieth-Century Art | $3-4$ |
| ART HIST 411 | Topics in Asian Art | $3-4$ |
| ART HIST 412 | Topics in African and African | $3-4$ |
|  | Diaspora Art History |  |

ART HIST $413 \quad$ Art and Architecture in the Age of 3 the Caliphs
ART HIST/ Topics in Medieval Art 3

| MEDIEVAL 415 |  | 3 |
| :--- | :--- | :--- |
| ART HIST 420 | Topics in Italian Renaissance Art |  |


| ART HIST 425 | Race and Gender in Italian Early <br> Modern Art | 3 |
| :--- | :--- | :--- |

ART HIST/LCA 428 Visual Cultures of South Asia 3
ART HIST 431 Topics in Theory 3
ART HIST $432 \quad$ Multiculturalism and the New 3-4

|  | Museology |  |
| :--- | :--- | :--- |
| ART HIST 433 | Sign, Symbol, Stereotype: Native |  |

ART HIST 435 Study Abroad in Ancient/Medieval 1-6

|  | Art |  |
| :--- | :--- | :--- |
| ART HIST 436 | Study Abroad in Renaissance/ | 1-6 |

Baroque/Northern Art
ART HIST 437 Study Abroad in 18th-20th Century 1-6

Art
ART HIST $438 \quad$ Study Abroad in African/Asian Art 1-6
ART HIST $440 \quad$ Art and Power in the Arab World 3
ART HIST 449 Topics in Architectural History 3
ART HIST $454 \quad$ Art in Germany, 1900-1945 3-4
ART HIST $457 \quad 3$

Architecture and Landscapes

| ART HIST 463 | Topics in American Material Culture | 3-4 |
| :---: | :---: | :---: |
| ART HIST/DS/ HISTORY 464 | Dimensions of Material Culture | 3 |
| ART HIST 468 | Frank Lloyd Wright | 3-4 |
| ART HIST 469 | Interdisciplinary Studies in the Arts | 1-4 |
| ART HIST 475 | Japanese Ceramics and Allied Arts | 3 |
| ART HIST/ RELIG ST 478 | Art and Religious Practice in Medieval Japan | 3 |
| ART HIST 479 | Art and History in Africa | 3-4 |
| ART HIST 600 | Special Topics in Art History | 3 |
| ART HIST 603 | Curatorial Studies Colloquium | 3 |
| ART HIST/LCA 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| ART HIST/ <br> AFROAMER 643 | Selected Topics in African Diaspora Art History | 3 |
| ART HIST/HISTORY/ JOURN/LIS 650 | History of Books and Print Culture in Europe and North America | 3 |
| One Pro-Seminar <br> Code <br> Select from: | Title | Credits |
| ART HIST 500 | Proseminar: Special Topics in Art History | 3 |
| ART HIST 505 | Proseminar in Ancient Art | 3 |
| ART HIST 506 | Curatorial Studies Exhibition Practice | 3 |
| ART HIST 515 | Proseminar in Medieval Art | 3 |
| ART HIST 525 | Proseminar in Italian Renaissance Art | 3 |
| ART HIST 535 | Proseminar in Northern European Painting | 3 |
| ART HIST 555 | Proseminar in 19th Century European Art | 3 |
| ART HIST 556 | Proseminar in 20th Century European Art | 3 |
| ART HIST 565 | Proseminar in American Art | 3 |
| ART HIST 567 | Proseminar in American Architecture | 3 |
| ART HIST 569 | Interdisciplinary Studies in the Arts | 1-4 |
| ART HIST 575 | Proseminar in Japanese Art | 3 |
| ART HIST 576 | Proseminar in Chinese Art | 3 |
| ART HIST 579 | Proseminar in African Art | 3 |

## Additional Credits to Reach the 12-Credit Total Code Title

Credits
Select from:

| ART HIST 101 | The Study of Art, Present and Past | 4 |
| :--- | :--- | ---: |
| ART HIST 103 | Topics in Art History | $3-4$ |
| ART HIST 104 | The Art of Diversity: Race and <br> Representation in the Art and Visual <br> Culture of the United States | $3-4$ |
| ART HIST 105 | Introductory Topics in Art History | 3 |
| ART HIST 201 | History of Western Art I: From <br> Pyramids to Cathedrals | 4 |
| ART HIST 202 | History of Western Art II: From <br> Renaissance to Contemporary | 4 |


| ART HIST 203 | Survey of Asian Art | $3-4$ |
| :--- | :--- | ---: |
| ART HIST/ | Introduction to Visual Cultures | 3 |
| AFROAMER 204 |  | 4 |
| ART HIST 205 | Global Arts | $3-4$ |
| ART HIST 206 | Survey of Photography: 1839 to <br> 1989 | 3 |
| ART HIST 210 | A History of the World in 20 <br> Buildings | 4 |
| ART HIST 227 | The Ends of Modernism | 4 |
| ART HIST/ | Introduction to African Art and | 3 |
| AFROAMER 241 | Architecture | 3 |
| ART HIST/ | Introduction to Afro-American Art | 3 |
| AFROAMER 242 | Introduction to Museum Studies I | 3 |
| ART HIST 601 | Introduction to Museum Studies II | 3 |
| ART HIST 602 | Senior Honors Thesis | 3 |
| ART HIST 681 | Senior Honors Thesis | $3-6$ |
| ART HIST 682 | Senior Thesis | $3-6$ |
| ART HIST 691 | Senior Thesis | $1-3$ |
| ART HIST 692 | Undergraduate Curatorial Studies | $2-3$ |
| ART HIST 697 | Internship (Directed Study) | $1-3$ |
| ART HIST 698 | Directed Study | 3 |
| ART HIST 699 | Directed Study | 3 |

or any ART HIST courses listed above but not used to meet one of the requirements above

## RESIDENCE AND QUALITY OF WORK

At least 6 credits must be earned in residence.
A 2.000 cumulative GPA is required in all courses counting toward the certificate.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Describe objects and images accurately; identify different stylistic characteristics and media; recall artists and art movements; analyze images.
2. Interpret art in context of deeper historical knowledge of specific cultures, acquire critical reading skills, integrate research.
3. Apply critical reading and writing skills, produce original interpretations, make plausible arguments based on visual and historical evidence, acquire sophisticated research abilities; formal oral presentation skills.

## ADVISING AND CAREERS

Students interested in declaring the certificate in art history should come to the department for advising as early as possible. Upon declaring the major, students will be assigned an academic advisor.

## PEOPLE

Professors Andrzejewski (chair), Cahill, Casid, Chopra, Dale, Drewal, Marshall, Martin, Phillips

Associate Professors McClure, Phillips-Court
Assistant Professors Brisman, Li, Pruitt
Adjunct Lecturer Fuller
Affiliate Professors Aylward, Clark, Kern, Nadler
Affiliate Associate Professor Abdu'Allah

Affiliate UW-Milwaukee Associate Professor Sen

Affiliate UW-Milwaukee Assistant Professors Benyamin, Moon

## MATERIAL CULTURE STUDIES, CERTIIICATE

The certificate in material culture studies has two interrelated goals. First, students will become acquainted with the field of material culture studies and its methodologies. They will learn what kinds of objects are considered in the study of material culture (from small, intimate artifacts of daily life to large cultural landscapes) and how scholars and professionals from different fields and in different contexts enlist material culture in their research and activities. They will gain an appreciation for the information artifacts can provide. They will learn the kinds of questions that can be asked of objects and the kind of information that artifacts can show us. They will become familiar with (and able to distinguish between) descriptive and interpretive components of material culture study, and gain an awareness of the variety of methods. Second, students will gain an appreciation for the ways that "things" help us to connect to the world and see it in a new way, and the ways "things" give meaning to our lives and the lives of those around us.

## HOW TO GET IN

Students are required to declare the material culture studies certificate with the program's certificate faculty director, Professor Ann Smart Martin. Students are strongly urged to meet with the faculty director at their earliest convenience to declare the certificate. Professor Smart Martin can be reached at asmartin@wisc.edu or by phone at 608-263-5684 to set up an appointment.

## REQUIREMENTS

## CERTIFICATE REQUIREMENTS

The Material Culture Studies Certificate Program requires that students complete 13 credits, which includes the two core courses and two elective courses from the list below. An internship/practicum experience is recommended, but not required.

## GOAL OF CERTIFICATE REQUIREMENTS

The goal of the certificate requirements is to provide students with a set of interdisciplinary skills, including the development of visual literacy,
and an understanding of specific methods and theories of material culture analysis as they are most often practiced. A student might select electives to specialize in a particular geographic area of study or type of object, or to provide maximum depth in a certain period of time.

## QUALITY OF WORK AND RESIDENCY REQUIREMENTS

A cumulative 2.000 GPA required for all certificate coursework. 7 credits, counting for the certificate, taken in residence at UW-Madison.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Core Courses (select two): |  |  |
| ART HIST/ANTHRO/ DS/HISTORY/ LAND ARC 264 | Dimensions of Material Culture ${ }^{1}$ | 4 |
| ART HIST 563 | Proseminar in Material Culture ${ }^{2}$ | 3 |
| Electives: |  |  |
| Select at least two cour | urses to reach 13 credit minimum: ${ }^{3}$ | 6 |
| ANTHRO 212 | Principles of Archaeology | 3 |
| ANTHRO/ <br> AMER IND 354 | Archaeology of Wisconsin | 3 |
| ANTHRO/ AMER IND 355 | Archaeology of Eastern North America | 3 |
| ANTHRO 370 | Field Course in Archaeology | 3-6 |
| ANTHRO 391 | Bones for the Archaeologist | 3 |
| ANTHRO 696 | Archaeological Methods of Curation | 1-3 |
| ART HIST/ CLASSICS 300 | The Art and Archaeology of Ancient Greece | 3-4 |
| ART HIST/ CLASSICS 304 | The Art and Archaeology of Ancient Rome | 3-4 |
| ART HIST 305 | History of Islamic Art and Architecture | 3 |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century | 3 |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present | 3 |
| ART HIST/DS 363 | American Decorative Arts and Interiors: 1620-1840 | 3-4 |
| ART HIST 364 | History of American Art: Art, Material Culture, and Constructions of Identity, 1607-present | 3-4 |
| ART HIST 413 | Art and Architecture in the Age of the Caliphs | 3 |
| ART HIST/LCA 428 | Visual Cultures of South Asia | 3 |
| ART HIST 457 | History of American Vernacular Architecture and Landscapes | 3 |
| ART HIST 463 | Topics in American Material Culture | 3-4 |
| ART HIST 468 | Frank Lloyd Wright | 3-4 |
| ART HIST 475 | Japanese Ceramics and Allied Arts | 3 |
| ART HIST/ RELIG ST 478 | Art and Religious Practice in Medieval Japan | 3 |
| ART HIST 506 | Curatorial Studies Exhibition Practice (Both 601 \& 602) | 3 |
| ART HIST 601 | Introduction to Museum Studies I (Must complete both 601 \& 602) | 3 |
| ART HIST 602 | Introduction to Museum Studies II (Must complete both 601 \& 602) | 3 |


| ART HIST/HISTORY/ JOURN/LIS 650 | History of Books and Print Culture in Europe and North America | 3 |
| :---: | :---: | :---: |
| DS 355 | History of Fashion, 1400-Present | 3 |
| DS 360 | Global Perspectives on Design and Culture | 3 |
| DS 420 | Twentieth Century Design | 3 |
| DS 421 | History of Architecture and Interiors I: Antiquity through 18th Century | 3 |
| DS 422 | History of Architecture \& Interiors II: 19th and 20th Centuries | 3 |
| DS 430 | History of Textiles | 3 |
| DS 642 | Taste | 3 |
| DS/FOLKLORE 655 | Comparative World Dress | 3 |
| FOLKLORE 320 | Folklore of Wisconsin | 3 |
| FOLKLORE 439 | Foodways | 3 |
| FOLKLORE/LIS 490 | Field Methods and the Public Presentation of Folklore | 3 |
| FOLKLORE/ MUSIC 535 | American Folk and Vernacular Music | 3 |
| FOLKLORE/ ANTHRO/MUSIC/ THEATRE 539 | The Folklore of Festivals and Celebrations | 3 |
| FOLKLORE 540 | Local Culture and Identity in the Upper Midwest | 3 |
| FOLKLORE/ ANTHRO 639 | Field School: Ethnography of Wisconsin Festivals | -8 |
| FOLKLORE/DS 655 | Comparative World Dress | 3 |
| GEOG/URB R PL 305 | Introduction to the City | -4 |
| GEOG 342 | Geography of Wisconsin | 3 |
| GEOG 508 | Landscape and Settlement in the North American Past | 3 |
| HIST SCI 222 | Technology and Social Change in History | 3 |
| HIST SCI 337 | History of Technology | 3 |
| JOURN/ HISTORY 560 | History of Mass Communication | 4 |
| LAND ARC 260 | History of Landscape Architecture | 3 |
| LAND ARC 677 | Cultural Resource Preservation and Landscape History | 3 |
| SCAND ST 284 | The "Scandinavian Modern" Phenomenon in Arts and Literature | 3 |
| SCAND ST 296 | The Scandinavian Heritage in America | 3 |
| SCAND ST/ <br> FOLKLORE 440 | Scandinavian American Folklore | 3 |
| THEATRE 327 | History of Costume for the Stage | 3 |
| Prerequisite: no prerequisites. Course is rotated among teams of two faculty members from the core material culture staff. The course explores the field of material culture, introducing the range of approaches and topics within it. Faculty, staff, and professionals from different disciplines and fields are invited to discuss their work and perspective, and discuss current literature. |  |  |
| The intent of this requirement is to have an intensive small-size seminar to teach the methods used by material culture scholars, a |  |  |

set of tools for analysis, hands-on training and more familiarity with material culture theories, themes and objects.
Choices should be clustered around a focus. For example, one strategy is to take a range of courses related to a specific geographic area, specialization, or time period. Other students may choose to pursue a cluster of courses that emphasizes nationally emerging specializations within the field of material culture including courses related to museums/exhibitions, historic preservation, archival technology, or product design. Students should work with a material culture faculty member to develop this focus. Other courses can be selected as electives from traditional disciplinary approaches and content, but must be approved by the chair of the Material Culture Advisory Committee. Students must work closely with both their advisor within their home major and an advisor among material culture advisors to assure that both major and certificate requirements are fulfilled.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Acquisition of skills to describe and analyze objects of multiple types, scales and media that constitute the material world across time and space.
2. Understanding of the complex and multiple ways that objects and people relate in both the past and in the present using trans-disciplinary perspectives.
3. Ability to interpret and otherwise make meaning from objects using methods and theories from multiple disciplines including but not limited to art history, archaeology, anthropology, design, folklore/folklife studies, geography, history, literary studies, landscape history, and science studies.
4. Discernment of the importance of materiality and making in the production and shaping of culture.
5. Fluency in using research resources and tools appropriate for specific kinds of objects.
6. Demonstration of particular skills for object-based research projects, as well as online and in-person exhibitions, using objects and collections to prepare students for careers that include positions in museums, archives, and other professional contexts.
7. Coherent presentation of ideas in multiple media (oral, visual, digital, and written).

## ADVISING AND CAREERS

## ADVISING

All students should meet with the certificate's faculty director (Professor Ann Smart Martin, 205 Conrad A. Elvehjem Building; asmartin@wisc.edu (asmartin@wisc.edu) 608-263-5684) at or near the beginning of work on the certificate. At that meeting, students work with the director to outline
their course of study, and to match a course plan with their interests. After a plan is in place, students are encouraged to stay in regular contact with the undergraduate program advisor (Teddy Kaul, 222 Conrad A. Elvehjem Building; ejkaul@wisc.edu; 608-263-2373) as they continue through the program. Each term the program's director or advisor will contact all certificate students, asking those nearing completion of their certificate coursework to send a notification that includes an estimate of when they will be completing the certificate requirements. For more information about the certificate and contact information for the advisor, see the program website (http://materialculture.wisc.edu).

## CAREERS: WHAT CAN MATERIAL CULTURE DO FOR YOU? LIFE-PRACTICE AND CAREERS

Interdisciplinary practice is central to material culture analysis. Significant engagement with material culture can have a noteworthy positive effect on students from a wide range of majors in their preparation for future careers. Understanding principles of design, analyzing the cultural meaning of physical objects, and gaining knowledge of varied systems of making, distributing, and using artifacts and consumer goods throughout history are all broadly applicable learning outcomes. The curricula of the $21^{\text {st }}$ century often place extra value on science and technology, to the detriment of the study of the arts and humanities. The Material Culture Program helps integrate these and other disparate spheres into a university education. One undergraduate student summed it thus:

I ended up being able to use what I learned in material culture for my research in human computer interaction and design. I think having a background in material culture strengthened my skills as a user experience designer (which is what I will be doing at Intel after graduation).

Erica Lewis, 2016
Undergraduate certificate student
Engineering/Materials Design
Other material culture certificate holders have gone on to careers in museums, galleries, historic sites, historic preservation, digital media, design practice, universities, and business. Another former student comments:

Having worked in museums large and small, in education, exhibition design and development, collections, and interpretation - I draw on my background in Material Culture on a daily basis. As a historian, the practice of reading and contextualizing objects as primary sources is essential. But even more than an academic approach, the empathy one develops when learning to understand the world through the stuff of daily life is invaluable to the interdisciplinary collaboration of today's workplace.

Anna Altschwager, 2004
Assistant Director, Guest Experience
Old World Wisconsin

## PEOPLE

## CORE FACULTY

Ann Smart Martin, Stanley and Polly Stone Professor, Art History

## Anna V. Andrzejewski, Professor, Art History

Sarah Carter, Chipstone Fellow and Lecturer in Material Culture; Curator and Director of Research, Chipstone Foundation

Janet Gilmore, Associate Professor, Landscape Architecture
Sherry Harlacher, Director, Center for Design and Material Culture; Pleasant Rowland Distinguished Director of Helen Louise Allen Textile Collection

Catherine M. Jackson, Assistant Professor History of Science, History
Yuhang Li, Assistant Professor, Art History
Marina Moskowitz, Lynn and Gary Mecklenburg Chair in Textiles, Material Culture and Design

Mark Nelson, Professor, Design Studies
Lynn K. Nyhart, Vilas-Bablitch-Kelch Distinguished Achievement Professor, History

Jennifer Pruitt, Assistant Professor, Art History
Sissel Schroeder, Professor, Anthropology
Jonathan Senchyne, Assistant Professor, Library and Information Studies
Sarah Thal, Professor, History
Lee Palmer Wandel, Professor, History

## AFFILIATE FACULTY

William Aylward, Professor, Classics
Nicholas Cahill, Professor, Art History
Preeti Chopra, Associate Professor, Art History
Susan Cook, Director, School of Music
Thomas Dale, Professor, Art History
Sam F. Dennis, Jr, Associate Professor, Landscape Architecture
Henry Drewal, Professor, Art History
Colleen Dunlavy, Professor, Department of History
Nan Enstad, Professor, Department of History
Jonathan Mark Kenoyer, Professor, Anthropology
James Leary, Emeritus Professor, Comparative Literature and Folklore Studies

Tom Loeser, Professor, Art
Quitman Phillips, Professor, Art History
Jung-hye Shin, Associate Professor, Design Studies

Sarah Carter, Chipstone Fellow and Lecturer in Material Culture; Curator and Director of Research, Chipstone Foundation

Sherry Harlacher, Director, Center for Design and Material Culture; Pleasant Rowland Distinguished Director of Helen Louise Allen Textile Collection

Russell Panczenko, Director, Chazen Museum of Art

Jon Prown, Director, Chipstone Foundation
Maria Saffiotti Dale, Curator, Chazen Museum of Art

## ASIAN AMERICAN STUDIES PROGRAM

The Program in Asian American Studies is an interdisciplinary research, arts and teaching program that focuses on Asian Americans and Asian immigrants in the U.S., both historically and in contemporary society. The certificate program provides students with an opportunity to develop a sustained intellectual focus on Asian American racial formation, communities, and culture.

Courses offered by the program and through other departments incorporate the perspective of a variety of disciplines: anthropology, communication arts, cultural studies dance, education, English, ethnic studies, film, history, human development and family studies, journalism, literature, media, political science, popular culture, psychology, sociology, theatre, and visual arts. New course topics are introduced each year Examples of past topics include: Asian American History, Asian American Literature, Asian American Women Writers, Asian Americans in the Midwest, Hmong American Studies, Contemporary Legal Issues in Asian American Communities, Mixed Race Asian Americans, Asian American Cultural Politics, Southeast Asian Americans in U.S. Schools, Asian American Dance, Asian Americans \& Media, Afro-Asian Improvisational Dance, Psychology of Hmong Americans, and community-based research and service-learning courses.

All program courses fulfill the ethnic studies requirement and breadth requirements in the appropriate divisions.

## DEGREES/MAJORS/CERTIFICATES

- Asian American Studies, Certificate (p. 422)


## PEOPLE

Ian Baird (Geography)
Leslie Bow (English/Asian American Studies)
Shelly Chan (History)
Cindy I-Fen Cheng (History/Asian American Studies)
Peggy Choy (Dance/Asian American Studies)
Michael Cullinane (Center for Southeast Asian Studies)
Joan H Fujimura (Sociology)
Alberta L Gloria (Counseling Psychology)
Maya Holtzman (McNair/SROP Programs)
Florence Hsia (History)
Gabe Javier (Multicultural Student Center)
Victor Jew (Asian American Studies)
Stacey Lee (Educational Policy Studies)

Lori Kido Lopez (Communication Arts)
Marlys Macken (Linguistics)
Ella Mae Matsumura (Business)
Jan Miyasaki (Asian American Studies)
Nhung Nguyen (Asian American Studies)
Pamela Oliver (Sociology)
Linda Park (Medicine and Public Health)
Eden Inoway-Ronnie (Academic Affairs)
Hement Shah (Journalism and Mass Communication)
Michael Thorton (Afro-American Studies)
Lillian Tong (WISCIENCE)
Lynette Uttal (Counseling Psychology)
Morris Young (English)
Timothy Yu (English/Asian American Studies)

## ASIAN AMERICAN STUDIES, CERTIFICATE

The Program in Asian American Studies is an interdisciplinary research, arts, and teaching program that focuses on Asian Americans, both historically and in contemporary society. The certificate program provides students with an opportunity to develop a sustained intellectual focus on Asian American racial formation, communities, history, and culture.

Courses offered by the program and through other departments incorporate the perspective of a variety of disciplines: communication arts, dance, education, English, ethnic studies, film, history, human development and family studies, journalism, literature, media, popular culture, social work, sociology, theatre, and visual arts. New course topics are introduced each year. Examples of past topics include: Asian American Activism, Asian American History, Asian American Literature, Asian American Women Writers, Asian Americans in the Midwest, Hmong American Studies, Contemporary Legal Issues in Asian American Communities, Mixed Race Asian Americans, Southeast Asian Americans in U.S. Schools, Asian Americans and Media, Afro-Asian Improvisational Dance, Psychology of Hmong Americans, and community-based research and service-learning courses.

Many program courses fulfill the ethnic studies requirement and breadth requirements in the appropriate divisions.

## HOW TO GET IN

For more information or to declare a certificate, please contact Nhung Nguyen, program administrator, at asianamerican@letsci.wisc.edu or 608-263-2976. Students may also contact Director Cindy I-Fen Cheng at cicheng@wisc.edu

Download a certificate declaration form here (https:// asianamerican.wisc.edu/certificate).

## REQUIREMENTS

Students gain knowledge about specific ethnic groups, socioeconomic political histories, cultures, and contemporary issues through an Asian American lens

## 15 CREDITS ARE REQUIRED, TO INCLUDE:

| Code | Title | Credits |
| :---: | :---: | :---: |
| ASIAN AM 101 | Introduction to Asian American Studies | 3 |
| Core - 9 credits from: |  | 9 |
| ASIAN AM/ DANCE 121 | Asian American Movement |  |
| ASIAN AM/ <br> ENGL 150 | Literature \& Culture of Asian America |  |
| ASIAN AM/ HISTORY 160 | Asian American History: Movement and Dislocation |  |
| ASIAN AM/ HISTORY 161 | Asian American History: Settlement and National Belonging |  |
| ASIAN AM 240 | Topics in Asian American Studies |  |
| ASIAN AM/ ENGL 270 | A Survey of Asian American Literature |  |
| ASIAN AM/ COM ARTS 420 | Asian Americans and Media |  |
| ASIAN AM/ <br> ENGL 462 | Topic in Asian American Literature |  |
| ASIAN AM/ENGL/ GEN\&WS 464 | Asian American Women Writers |  |
| ASIAN AM/ <br> ENGL 465 | Asian American Poetry |  |
| ASIAN AM 540 | Special Topics |  |
| ASIAN AM 560 | Humanities Topics |  |
| Comparative course - | 3 credits from: | 3 |


| ASIAN AM/ | Introduction to Comparative US |
| :--- | :--- |
| AFROAMER/ | Ethnic and American Indian Studies |
| AMER IND/ |  |
| CHICLA/ |  |
| FOLKLORE 102 |  |
| ASIAN AM/ | Ethnic Movements in the United |
| SOC 220 | States |
| ASIAN AM 240 | Topics in Asian American Studies |
| ASIAN AM/ | Southeast Asian Refugees of the |
| HISTORY/ | "Cold" War |
| LCA 246 |  |
| ASIAN AM/ | Chinese Migrations since 1500 |
| E A STDS/ |  |
| HISTORY 276 |  |

ASIAN AM/
ASIAN AM/ Mutual Perceptions of Racial
AFROAMER 443 Minorities
ASIAN AM/ENGL/ Race and Sexuality in American
GEN\&WS 463 Literature
ASIAN AM 540 Special Topics
ASIAN AM 560 Humanities Topics
ASIAN AM/ Mass Media and Minorities
JOURN 662
HISTORY/GEOG/ Introduction to Southeast Asia:
LCA/POLI SCI/ Vietnam to the Philippines
SOC 244
HDFS 474 Racial Ethnic Families in the U.S.
Total Credits

## RESIDENCE \& QUALITY OF WORK

2.750 GPA on all certificate approved courses

8 credits in the certificate, in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## ADVISING AND CAREERS

Please contact the director of Asian American studies to set up an advising appointment.

## PEOPLE

Ian Baird (Geography)
Leslie Bow (English/Asian American Studies)
Shelly Chan (History)
Cindy I-Fen Cheng (History/Asian American Studies)
Peggy Choy (Dance/Asian American Studies)
Michael Cullinane (Center for Southeast Asian Studies)
Joan H Fujimura (Sociology)
Alberta L Gloria (Counseling Psychology)
Maya Holtzman (McNair/SROP Programs)
Florence Hsia (History)
Gabe Javier (Multicultural Student Center)
Victor Jew (Asian American Studies)
Stacey Lee (Educational Policy Studies)
Lori Kido Lopez (Communication Arts)
Marlys Macken (Linguistics)
Ella Mae Matsumura (Business)
Jan Miyasaki (Asian American Studies)
Nhung Nguyen (Asian American Studies)
Pamela Oliver (Sociology)
Linda Park (Medicine and Public Health)
Eden Inoway-Ronnie (Academic Affairs)
Hement Shah (Journalism and Mass Communication)
Michael Thorton (Afro-American Studies)
Lillian Tong (WISCIENCE)
Lynette Uttal (Counseling Psychology)
Morris Young (English)
Timothy Yu (English/Asian American Studies)

## ASIAN LANGUAGES AND CULTURES

The Department of Asian Languages and Cultures (ALC) at UW-Madison was established on July 1, 2016 merging the preexisting departments of East Asian Languages \& Literature (EALL) and Languages \& Cultures of Asia (LCA).

ALC is student-centered and driven by research that is integrated into the classroom. With thematic foci in Asian languages, linguistics and literature, Asian cultural studies, religions of Asia, and critical issues in contemporary Asia, we aim to teach students how to recognize and critically analyze the realities of past and present "Asia" as a region that
is crucial to the global flows of people, materials, and ideas through its own rich complexity with deep interconnection across multiple domains. At the same time, within this context of connections across Asia, we also seek to promote deep learning and knowledge of particular languages, time periods, and places, since in order to understand transasian regional and global networks, our students also need to acquire specific cultural and linguistic competencies.

We encourage students to study Asia in a regional and comparative frame while cultivating scholarly capacities in particular aspects of Asian culture. To that end, we offer multiple degree options at the B.A. level, reflecting departmental research strengths that allow students to approach the study of Asian cultures, languages, media, religions, and critical social issues from a variety of perspectives. We seek to enhance both teaching and research through collaborations within the department and beyond, with particular emphasis on the development of robust connections with scholars at our peer institutions throughout Asia.

## UNDERGRADUATE MAJORS

Chinese (p. 432)
Japanese (p. 448)
Asian Languages and Cultures (https://alc.wisc.edu/undergraduate-majors/asian-languages-and-cultures)
A new undergraduate degree program in Asian Languages and Cultures will commence Fall 2019. The plan includes multiple options, such as East Asian Studies, South Asian Studies, Southeast Asian Studies, as well as a non-region-specific "Trans-Asian" option. Students interested in learning more about the program requirements can meet with the undergraduate advisor Rachel Weiss (rweiss@wisc.edu) for more information.

## UNDERGRADUATE CERTIFICATES

Chinese (p. 429) Professional Communication (p. 429) Japanese Professional Communication (p. 444)

## DEGREES/MAJORS/CERTIFICATES

- Asian Languages and Cultures, B.A. (p. 426)
- Asian Languages and Cultures, B.S. (p. 427)
- Chinese Professional Communications, Certificate (p. 429)
- Chinese, B.A. (p. 432)
- Chinese, B.S. (p. 438)
- Japanese Professional Communication, Certificate (p. 444)
- Japanese, B.A. (p. 448)
- Japanese, B.S. (p. 454)
- Languages and Cultures of Asia, B.A. (p. 459)
- Languages and Cultures of Asia, B.S. (p. 459)


## PEOPLE

## FACULTY

Asian Languages and Cultures is home to nearly twenty faculty whose research and teaching specialities range from medical humanities in India, the Hinduist roots of yoga, or inflecting contemporary mindfulness practice with insights from Tibetan buddhism, to human rights in Thailand - from Chinese ghost stories, traditional Sinology, and mathematically inflected Chinese philology, to sociolinguistics, discourse analysis, and pragmatics in Mandarin, Japanese, Korean, and

Indonesian - and from critical reading of late-Heian tale fiction, early modern Japanese comedic narratives, and haiku, to manga, anime, and Japanese counterculture.

## EAST ASIA

Charo D'Etcheverry (http://alc.wisc.edu/about/faculty/charo-detcheverry)
(Associate Professor). Area: Classical Japanese Literature
Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern) (Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

Byung-jin Lim (http://alc.wisc.edu/about/faculty/byung-jin-lim) (Associate Professor) .Area: Korean Language and Linguistics, Second / Foreign Language Acquisition, Korean Language Textbook Development

Junko Mori (http://alc.wisc.edu/about/faculty/steve-ridgely) (Professor). Area: Japanese Linguistics, Applied Linguistics, Sociolinguistics

Takako Nakakubo (http://alc.wisc.edu/about/faculty/takako-nakakubo) (Faculty Associate). Area: Second Language Acquisition of Japanese, Japanese Pedagogy

William Nienhauser (http://alc.wisc.edu/about/faculty/williamnienhauser) (Professor). Area: Early Traditional Chinese Fiction and History; early poetry (Du Fu and Tao Qian)

Steve Ridgely (http://alc.wisc.edu/about/faculty/steve-ridgely) (Associate Professor). Area: Modern Japanese Literature, Pop culture, TransAsian studies

Hongming Zhang (http://alc.wisc.edu/about/faculty/hongming-zhang) (Professor). Area: Chinese Linguistics; History of Chinese Language; Teaching Chinese as a Second Language

Weihua Zhu (http://alc.wisc.edu/about/faculty/weihua-zhu) (Assistant Professor). Area: Chinese Language, Pedagogy and Second Language Acquisition

## SOUTH ASIA

Gudrun Bühnemann (http://alc.wisc.edu/about/faculty/gudrun-b \%C3\%BChnemann) (Professor). Area: Sanskrit Language and Literature; Buddhism in India and Nepal; Hinduism; Tantrism; Yoga Studies

Anthony Cerulli (http://alc.wisc.edu/about/faculty/anthony-cerulli) (Associate Professor). Area: Theory and Method in the Study of Religion in South Asia; History of Medicine in India; Sanskrit Language and Literature; Kerala History and Culture; Malayalam Language.

John D. Dunne (http://alc.wisc.edu/about/faculty/john-d-dunne) (Professor). Area: Buddhist Philosophy and Contemplative Practice; Religious Studies; Cognitive Science of Religion

## SOUTHEAST ASIA

Erlin Barnard (http://alc.wisc.edu/about/faculty/erlin-barnard) (Faculty Associate) Area: Indonesian Language, Language Pedagogy; Materials Development; Second Language Acquisition

Tyrell Haberkorn (Associate Professor) Area: Violence, Human Rights, Sovereignty, Arbitrary Detention, Land Rights, Agrarian Struggle, Historiographies of Repression, Gender Studies, Socialism, Dissident Literature, Southeast Asia (Thailand).

## LANGUAGE INSTRUCTORS

Language instructors (http://alc.wisc.edu/about/language-instructors) are an integral part of our department, teaching more than 14 languages during the academic year from East (Chinese, Japanese, Korean), South (Hindi, Persian, Sanskrit, Tibetan, Urdu), Southeast (Burmese, Filipino, Hmong, Indonesian, Thai, Vietnamese) Asian Languages.

## UNDERGRADUATE ADVISOR

Undergraduate Advisor:
email Rachel Weiss (rweiss@wisc.edu)
1244 Van Hise Hall
608-890-0138

## STAFF

Department Administrator: email A (tenealon@wisc.edu)lyson Amenda (amenda@wisc.edu)
1240 Van Hise Hall
608-262-0524
Financial Specialist:
email Haiyan Wei (haiyanwei@wisc.edu)
1238 Van Hise Hall
608-890-0138

## RESOURCES AND SCHOLARSHIPS

## DEPARTMENT SCHOLARSHIPS

## Cameron G. Keith Memorial Scholarship

This award is given annually to two undergraduate students studying Japanese. This award is annouced during the fall semester, and eligible students may apply. The criteria are: Japanese major, junior or senior standing, cumulative GPA of 3.5 or above, currently taking Japanese, and plan to go into a Japanese related profession. Cameron G. Keith was an East Asian Studies and Economics studies major at UW-Madison who studied abroad in Japan, and later in Nepal. In his memory, the Keith family established these funds in memory of his interest in the region.

[^13]
## Chou Kuo-p'ing Book Award

Several awards will be given each year to undergraduate students who are studying and will continue to study Chinese during the following
semester. This award is made possible through a donation by Professor Emerita Chou Kuo-p'ing, the founder of the Chinese program here at the University of Wisconsin-Madison. Professor Chou, a dedicated teacher, devoted her entire career to teaching, promoting and developing Chinese studies in Wisconsin. Professor Chou was very active during her teaching career, and often helped financially disadvantaged students, especially those who excelled in their academic careers despite economic difficulties. Although this award is based mainly on the applicant's academic performance, special consideration is given to those who are financially disadvantaged in order to carry on this tradition.

## Lawrence Louey Merit Scholarship

The Lawrence Louey Merit Scholarship is an annual competition recognizing an undergraduate Chinese major in the Department of Asian Languages and Cultures with a \$1000 award. Eligibility: You must be a graduating senior with a GPA above 3.75 and have taken at least three years of Chinese. An application is required for consideration, including a brief career plan, as well as a research paper from one of your major field courses.

## OTHER CAMPUS RESOURCES

Scholarships@UW-Madison (https://scholarships.wisc.edu/ Scholarships)
This is the primary campus wide portal for applicants, current students, and everyone looking for scholarship opporunities on campus.

Undergraduate Academic Awards Office (https:// awards.advising.wisc.edu)
We help UW-Madison undergraduates and recent graduates pursue nationally competitive scholarships (https://awards.advising.wisc.edu/scholarships/ nationally-competitive) and campus-wide awards (https:// awards.advising.wisc.edu/scholarships/campus-wide) for research, service and leadership-activities at the heart of the Wisconsin Experience. We can help you:

- Find scholarship opportunities that match your goals and interests
- Navigate the scholarship application process
- Review scholarship essays
- Prepare for national scholarship interviews

Contact us (https://awards.advising.wisc.edu/schedule-anappointment) to schedule an appointment to discuss which opportunities are right for you.

[^14]Preference will be given to applicants with a high level of academic ability and with previous language training. Academic Year and Summer FLAS awards are two separate competitions requiring two separate and complete applications.

## NATIONAL SCHOLARSHIPS

Boren Scholarships (http://borenawards.org)
These scholarships provide up to $\$ 20,000$ to U.S. undergraduate students to study abroad in areas of the world that are critical to U.S. interests and underrepresented in study abroad, including Africa, Asia, Central \& Eastern Europe, Eurasia, Latin America, and the Middle East. The countries of Western Europe, Canada, Australia, and New Zealand are excluded. (Full list of preferred countries (http://borenawards.org/ boren_scholarship/preferences.html)) Additionally, all programs must include formal study of an appropriate foreign language. (Full list of preferred languages (http://borenawards.org/boren_scholarship/ preferences.html)). Undergraduates with questions about the Boren Scholarship (https://www.borenawards.org/scholarships/program-basics/boren-scholarship-basics) should contact Matt Geisler (mdgeisler@studyabroad.wisc.edu), Associate Director of International Academic Programs.

## Critical Language Scholarship Program (http://www.clscholarship.org)

The CLS program is part of the U.S. Department of State, Bureau of Educational and Cultural Affairs. It is a fully-funded overseas intensive language and cultural immersion program for American undergraduate and graduate students. With the goal of broadening the base of Americans studying and mastering critical languages and to build relationships between the people of the United States and other countries, CLS provides opportunities to a diverse range of students from across the United States at every level of language learning.

The fourteen CLS languages are: Arabic, Azerbaijani, Bangla, Chinese, Hindi, Indonesian, Japanese, Korean, Persian, Punjabi, Russian, Swahili, Turkish, and Urdu.

The CLS Program seeks participants with diverse interests, from a wide variety of fields of study, backgrounds and career paths, with the purpose of representing the full diversity of the United States. Thus, students from all academic disciplines, including business, engineering, law, medicine, science, social sciences, arts and humanities are encouraged to apply.

[^15]

A new undergraduate program in Asian Languages and Cultures is under development. The plan includes multiple options, such as East Asian studies, South Asian studies, and Southeast Asian studies, as well as a non-region-specific "Trans-Asian" option. These new programs will
commence in fall 2019. Students interested in learning more about the program requirements can meet with the undergraduate advisor. Contact Rachel Weiss, rweiss@wisc.edu, for more information.

## PEOPLE

## FACULTY

Asian Languages and Cultures is home to nearly twenty faculty whose research and teaching specialities range from medical humanities in India, the Hinduist roots of yoga, or inflecting contemporary mindfulness practice with insights from Tibetan buddhism, to human rights in Thailand - from Chinese ghost stories, traditional Sinology, and mathematically inflected Chinese philology, to sociolinguistics, discourse analysis, and pragmatics in Mandarin, Japanese, Korean, and Indonesian - and from critical reading of late-Heian tale fiction, early modern Japanese comedic narratives, and haiku, to manga, anime, and Japanese counterculture.

## EAST ASIA

Charo D'Etcheverry (http://alc.wisc.edu/about/faculty/charo-detcheverry) (Associate Professor). Area: Classical Japanese Literature

Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern) (Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

Byung-jin Lim (http://alc.wisc.edu/about/faculty/byung-jin-lim) (Associate Professor) .Area: Korean Language and Linguistics, Second / Foreign Language Acquisition, Korean Language Textbook Development

Junko Mori (http://alc.wisc.edu/about/faculty/steve-ridgely) (Professor). Area: Japanese Linguistics, Applied Linguistics, Sociolinguistics

Takako Nakakubo (http://alc.wisc.edu/about/faculty/takako-nakakubo) (Faculty Associate). Area: Second Language Acquisition of Japanese, Japanese Pedagogy

William Nienhauser (http://alc.wisc.edu/about/faculty/williamnienhauser) (Professor). Area: Early Traditional Chinese Fiction and History; early poetry (Du Fu and Tao Qian)

Steve Ridgely (http://alc.wisc.edu/about/faculty/steve-ridgely) (Associate Professor). Area: Modern Japanese Literature, Pop culture, TransAsian studies

Hongming Zhang (http://alc.wisc.edu/about/faculty/hongming-zhang) (Professor). Area: Chinese Linguistics; History of Chinese Language; Teaching Chinese as a Second Language

Weihua Zhu (http://alc.wisc.edu/about/faculty/weihua-zhu) (Assistant Professor). Area: Chinese Language, Pedagogy and Second Language Acquisition

## SOUTH ASIA

Gudrun Bühnemann (http://alc.wisc.edu/about/faculty/gudrun-b \%C3\%BChnemann) (Professor). Area: Sanskrit Language and Literature; Buddhism in India and Nepal; Hinduism; Tantrism; Yoga Studies

Anthony Cerulli (http://alc.wisc.edu/about/faculty/anthony-cerulli) (Associate Professor). Area: Theory and Method in the Study of Religion in South Asia; History of Medicine in India; Sanskrit Language and Literature; Kerala History and Culture; Malayalam Language.

John D. Dunne (http://alc.wisc.edu/about/faculty/john-d-dunne) (Professor). Area: Buddhist Philosophy and Contemplative Practice; Religious Studies; Cognitive Science of Religion

## SOUTHEAST ASIA

Erlin Barnard (http://alc.wisc.edu/about/faculty/erlin-barnard) (Faculty Associate) Area: Indonesian Language, Language Pedagogy; Materials Development; Second Language Acquisition

Tyrell Haberkorn (Associate Professor) Area: Violence, Human Rights, Sovereignty, Arbitrary Detention, Land Rights, Agrarian Struggle, Historiographies of Repression, Gender Studies, Socialism, Dissident Literature, Southeast Asia (Thailand).

## LANGUAGE INSTRUCTORS

Language instructors (http://alc.wisc.edu/about/language-instructors) are an integral part of our department, teaching more than 14 languages during the academic year from East (Chinese, Japanese, Korean), South (Hindi, Persian, Sanskrit, Tibetan, Urdu), Southeast (Burmese, Filipino, Hmong, Indonesian, Thai, Vietnamese) Asian Languages.

## UNDERGRADUATE ADVISOR

Undergraduate Advisor:
email Rachel Weiss (rweiss@wisc.edu)
1244 Van Hise Hall
608-890-0138

## STAFF

Department Administrator:
email A (tenealon@wisc.edu)lyson Amenda (amenda@wisc.edu)
1240 Van Hise Hall
608-262-0524
Financial Specialist:
email Haiyan Wei (haiyanwei@wisc.edu)
1238 Van Hise Hall
608-890-0138

## ASIAN LANGUAGES AND CULTURES: EAST ASIAN STUDIES

A new undergraduate program in Asian Languages and Cultures is under development. The plan includes multiple options, such as East Asian studies, South Asian studies, and Southeast Asian studies, as well as a non-region-specific "Trans-Asian" option. These new programs will commence in fall 2019. Students interested in learning more about the program requirements can meet with the undergraduate advisor. Contact Rachel Weiss, rweiss@wisc.edu, for more information.

# ASIAN LANGUAGES AND CULTURES: SOUTH ASIAN STUDIES 

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> ASIAN LANGUAGES AND CULTURES, B.S.

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## PEOPLE

## FACULTY

Asian Languages and Cultures is home to nearly twenty faculty whose research and teaching specialities range from medical humanities in India, the Hinduist roots of yoga, or inflecting contemporary mindfulness practice with insights from Tibetan buddhism, to human rights in Thailand - from Chinese ghost stories, traditional Sinology, and mathematically inflected Chinese philology, to sociolinguistics, discourse analysis, and pragmatics in Mandarin, Japanese, Korean, and Indonesian - and from critical reading of late-Heian tale fiction, early modern Japanese comedic narratives, and haiku, to manga, anime, and Japanese counterculture.

## EAST ASIA

Charo D'Etcheverry (http://alc.wisc.edu/about/faculty/charo-detcheverry) (Associate Professor). Area: Classical Japanese Literature

Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern) (Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

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## CHINESE PROFESSIONAL COMMUNICATIONS, CERTIFICATE

The certificate in Chinese professional communication provides students with the opportunity to develop proficiency in Chinese while pursuing majors in other subjects across the university. It emphasizes the development of communication skills that are applicable to various professional contexts that students may encounter in their future careers.

The certificate is open to all undergraduate students (except for those majoring in Chinese). It is available to Special students only in circumstances where they have completed more than half of the 12-credit requirements discussed below as UW-Madison undergraduates in the semesters preceding their Special student enrollment.

For more information about the Department of Asian Languages and Cultures see the department overview (p. 423).

## STUDY ABROAD IN CHINA

Students may receive residence credit for study abroad through a variety of different programs sponsored by the department. Please contact International Academic Programs (https:// www.studyabroad.wisc.edu) for details.

Students may also receive credit, or gain experience, through various internship opportunities abroad. Please contact International Internship Programs (http://internships.international.wisc.edu) for details.

## HOW TO GET IN

## ENROLLMENT INFORMATION

The department requires that students who are new to the program take a placement test before enrolling in a language course beyond the firstsemester level. For information about the placement test and test dates, please visit the department website (http://alc.wisc.edu/languages/ placement-tests). To register for a placement test, please contact Rachel Weiss, rweiss@wisc.edu.

## DECLARATION

If you would like to declare the certificate, please meet with the undergraduate advisor (rweiss@wisc.edu) to review the requirements, discuss courses, and to submit the declaration request.

## REQUIRED PREREQUISITE LANGUAGE COURSES

Code Title Credits

For non-heritage speakers:

| E ASIAN 101 | First Semester Chinese |
| :---: | :--- |
| or |  |
| E ASIAN 121 | Elementary Chinese |
| \& E ASIAN 122 | and Elementary Chinese |
| and |  |
| E ASIAN 102 | Second Semester Chinese |
| E ASIAN 201 | Third Semester Chinese |


| E ASIAN 202 | Fourth Semester Chinese |  |
| :--- | :--- | :--- |
| For heritage Chinese speaking students: |  |  |
| E ASIAN 213 | First Semester Heritage Chinese | 6 |
| E ASIAN 214 | Second Semester Heritage Chinese | 6 |

## REQUIREMENTS

## 12 CREDITS FROM:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Foundation in Professional Communication: |  | 3 |
| E ASIAN 379 | Business Chinese |  |
| Additional Chinese Language: |  | 6 |
| E ASIAN 301 | Fifth Semester Chinese |  |
| E ASIAN 302 | Sixth Semester Chinese |  |
| E ASIAN 333 | Chinese Conversation |  |
| E ASIAN 401 | Seventh Semester Chinese |  |
| E ASIAN 402 | Eighth Semester Chinese |  |
| E ASIAN 501 | Fifth-year Chinese |  |
| Chinese Literature or Humanities Elective: |  | 3 |
| E ASIAN/ RELIG ST 350 | Introduction to Taoism |  |
| E ASIAN 351 | Survey of Chinese Literature |  |
| E ASIAN 352 | Survey of Chinese Literature |  |
| E ASIAN 356 | Chinese Painting |  |
| E ASIAN/ RELIG ST 363 | Introduction to Confucianism |  |
| E ASIAN 371 | Topics in Chinese Literature |  |
| E ASIAN 372 | Topics in Chinese: Study Abroad |  |
| E ASIAN 431 | Introduction to Chinese Linguistics |  |
| E ASIAN 432 | Introduction to Chinese Linguistics |  |
| E ASIAN 433 | Topics in East Asian Visual Cultures |  |
| HISTORY/ <br> EASTDS 103 | Introduction to East Asian History: China |  |
| E ASIAN 341 | Classical Chinese for Non-Majors |  |
| E ASIAN 342 | Classical Chinese for Non-Majors |  |
| Total Credits |  | 12 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA on all certificate-approved courses

6 credits in the certificate, in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Understand the content and cultural context of written texts and audiovisual materials with a large degree of independence, adapting style and speed of comprehension to different texts and purposes, and using appropriate reference sources selectively.
2. Spontaneously exchange ideas about various topics with relative ease.
3. State and support one's own opinion while acknowledging others' viewpoints.
4. Demonstrate an awareness of the importance of pragmatic, sociolinguistic, and rhetorical features of the target language.
5. Conduct library and/or internet-based research on topics relating to their particular interests and special fields of expertise, collecting and selecting relevant information using English and target language source materials.
6. Synthesize and critically evaluate source materials in both English and the target language.
7. Present (orally or in written language) their experiences and their introspection on these experiences in a coherent and effective manner.
8. Demonstrate cultural awareness across historical epochs.
9. Produce effective academic writing in English.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISOR

## Rachel Weiss

1244 Van Hise Hall
608-890-0138
rweiss@wisc.edu
Schedule an advising appointment (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/fUerTooa.html)

Rachel is the advisor for the undergraduate majors and certificates in the Department of Asian Languages and Cultures. She is happy to meet with students as they explore the degree options or advance through their four-year plans.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## INTERNATIONAL DIRECTIONS ADVISING LANGUAGE INSTITUTE

The Language Institute (https://languages.wisc.edu) provides academic and career advising to undergraduate students interested in languages and international area studies. The International Directions advisor provides academic and career advising to undergraduate students who are interested in languages and international area studies. Learn more (https://languages.wisc.edu/advising).

## PEOPLE

## FACULTY

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## EAST ASIA

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Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern) (Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

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## RESOURCES AND SCHOLARSHIPS

## DEPARTMENT SCHOLARSHIPS

## Cameron G. Keith Memorial Scholarship

This award is given annually to two undergraduate students studying Japanese. This award is annouced during the fall semester, and eligible
students may apply. The criteria are: Japanese major, junior or senior standing, cumulative GPA of 3.5 or above, currently taking Japanese, and plan to go into a Japanese related profession. Cameron G. Keith was an East Asian Studies and Economics studies major at UW-Madison who studied abroad in Japan, and later in Nepal. In his memory, the Keith family established these funds in memory of his interest in the region.

## Ellen and William E. Fisher Scholarship

Ellen and William E. Fisher have provided funding for an annual scholarship to be awarded to an undergraduate student at the UWMadison who is studying the Chinese language. According to the terms of the gift agreement, the award is based on merit, therefore there is no application, but faculty will make a determination based on students progressing in the program. Mr. Fisher stipulated that the award must be made in the Fall semester, so that the recipient can use it in the Spring semester.

## Chou Kuo-p'ing Book Award

Several awards will be given each year to undergraduate students who are studying and will continue to study Chinese during the following semester. This award is made possible through a donation by Professor Emerita Chou Kuo-p'ing, the founder of the Chinese program here at the University of Wisconsin-Madison. Professor Chou, a dedicated teacher, devoted her entire career to teaching, promoting and developing Chinese studies in Wisconsin. Professor Chou was very active during her teaching career, and often helped financially disadvantaged students, especially those who excelled in their academic careers despite economic difficulties. Although this award is based mainly on the applicant's academic performance, special consideration is given to those who are financially disadvantaged in order to carry on this tradition.

## Lawrence Louey Merit Scholarship

The Lawrence Louey Merit Scholarship is an annual competition recognizing an undergraduate Chinese major in the Department of Asian Languages and Cultures with a \$1000 award. Eligibility: You must be a graduating senior with a GPA above 3.75 and have taken at least three years of Chinese. An application is required for consideration, including a brief career plan, as well as a research paper from one of your major field courses.

## OTHER CAMPUS RESOURCES

Scholarships@UW-Madison (https://scholarships.wisc.edu/

## Scholarships)

This is the primary campus wide portal for applicants, current students, and everyone looking for scholarship opporunities on campus.

Undergraduate Academic Awards Office (https:// awards.advising.wisc.edu)
We help UW-Madison undergraduates and recent graduates pursue nationally competitive scholarships (https://awards.advising.wisc.edu/scholarships/ nationally-competitive) and campus-wide awards (https:// awards.advising.wisc.edu/scholarships/campus-wide) for research,
service and leadership-activities at the heart of the Wisconsin Experience. We can help you:

- Find scholarship opportunities that match your goals and interests
- Navigate the scholarship application process
- Review scholarship essays
- Prepare for national scholarship interviews

Contact us (https://awards.advising.wisc.edu/schedule-anappointment) to schedule an appointment to discuss which opportunities are right for you.

Foreign Language \& Area Studies (FLAS) Fellowships (https:// flas.wisc.edu)
FLAS fellowships are funded by the U.S. Department of Education and administered by the UW's National Resource Centers to assist students in acquiring foreign language and either area or international studies competencies. FLAS awards are only available for specific languages (https://flas.wisc.edu/Languages.html), and are contingent on federal funding. Please direct any questions to the FLAS Coordinator (https:// flas.wisc.edu/Languages.html)of your chosen language.

Applicants must be U.S. citizens or permanent residents of the United States. Applications by students in professional fields are encouraged. Preference will be given to applicants with a high level of academic ability and with previous language training. Academic Year and Summer FLAS awards are two separate competitions requiring two separate and complete applications.

## NATIONAL SCHOLARSHIPS

Boren Scholarships (http://borenawards.org)
These scholarships provide up to $\$ 20,000$ to U.S. undergraduate students to study abroad in areas of the world that are critical to U.S. interests and underrepresented in study abroad, including Africa, Asia, Central \& Eastern Europe, Eurasia, Latin America, and the Middle East. The countries of Western Europe, Canada, Australia, and New Zealand are excluded. (Full list of preferred countries (http://borenawards.org/ boren_scholarship/preferences.html)) Additionally, all programs must include formal study of an appropriate foreign language. (Full list of preferred languages (http://borenawards.org/boren_scholarship/ preferences.html)). Undergraduates with questions about the Boren Scholarship (https://www.borenawards.org/scholarships/program-basics/boren-scholarship-basics) should contact Matt Geisler (mdgeisler@studyabroad.wisc.edu), Associate Director of International Academic Programs.

## Critical Language Scholarship Program (http://www.clscholarship.org)

The CLS program is part of the U.S. Department of State, Bureau of Educational and Cultural Affairs. It is a fully-funded overseas intensive language and cultural immersion program for American undergraduate and graduate students. With the goal of broadening the base of Americans studying and mastering critical languages and to build relationships between the people of the United States and other countries, CLS provides opportunities to a diverse range of students from across the United States at every level of language learning.

The fourteen CLS languages are: Arabic, Azerbaijani, Bangla, Chinese, Hindi, Indonesian, Japanese, Korean, Persian, Punjabi, Russian, Swahili, Turkish, and Urdu.

The CLS Program seeks participants with diverse interests, from a wide variety of fields of study, backgrounds and career paths, with the purpose of representing the full diversity of the United States. Thus, students from all academic disciplines, including business, engineering, law, medicine, science, social sciences, arts and humanities are encouraged to apply.

## Gilman Scholarship Program <br> Campus Representative: Andy Quackenbush <br> (quackenbush@studyabroad.wisc.edu)

The Gilman Scholarship Program is an undergraduate grant program for U.S. citizens of limited financial means to enable them to study abroad, thereby internationalizing their outlook and better preparing them to assume significant roles in the increasingly global economy.

## CHINESE, B.A.

The Chinese program offers students a range of courses and activities which impart an understanding of the culture and civilization of China. With the completion of three basic years of the language, students will be prepared to handle various types of colloquial Chinese. Most majors pursue advanced studies in Chinese linguistics or literature, while others combine an interest in China with a degree in business, education, engineering or journalism.

For more information about the Department of Asian Languages and Cultures visit the department overview (p. 423).

## STUDY ABROAD IN CHINA

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## STARTING COURSEWORK TOWARDS THE MAJOR

Before declaring the major, students are urged to begin coursework early, ideally in the freshman or sophomore year. If, however, this is not possible, summer courses at UW-Madison or elsewhere are available which speed the student's progress. Those who have Chinese credits from high school or summer sessions may enter advanced courses on the basis of placement tests.

The following courses may be taken with no previous knowledge of Chinese or Japanese:

| Code | Title | Credits |
| :--- | :--- | ---: |
| E ASIAN 101 | First Semester Chinese | 6 |
| E ASIAN 103 | First Semester Japanese | 6 |
| E ASIAN 121 | Elementary Chinese | 3 |
| E ASIAN 123 | Elementary Japanese | 3 |
| E ASIAN 341 | Classical Chinese for Non-Majors | 8 |
| \& E ASIAN 342 | and Classical Chinese for Non- <br>  Majors |  |


| E ASIAN/ <br> RELIG ST 350 | Introduction to Taoism | 3-4 |
| :---: | :---: | :---: |
| EASIAN/ <br> RELIG ST 363 | Introduction to Confucianism | 3 |
| E ASIAN 367 | Japanese Poetic Tradition | 3-4 |
| E ASIAN 371 | Topics in Chinese Literature | 2-3 |
| E ASIAN 434 | Introduction to Japanese Linguistics | 3 |
| LITTRANS 261 <br> \& LITTRANS 262 | Survey of Chinese Literature in Translation and Survey of Chinese Literature in Translation | 6 |
| LITTRANS 263 <br> \& LITTRANS 264 | Survey of Japanese Literature in Translation and Survey of Japanese Literature in Translation | 6 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 372 | Classical Japanese Prose in Translation | 3 |
| LITTRANS 373 | Topics in Japanese Literature | 3 |

## HOW TO GET IN

## ENROLLMENT INFORMATION

The department requires that students who are new to the program take a placement test before enrolling in a language course beyond the firstsemester level. For information about the placement test and test dates, please visit the department website (http://alc.wisc.edu/languages/ placement-tests). To register for a placement test, please contact Rachel Weiss at rweiss@wisc.edu.

## DECLARATION

If you would like to declare the major, please meet with the undergraduate advisor, rweiss@wisc.edu, to review the requirements, discuss courses, and to submit the declaration request.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language
\&S Breadth

Liberal Arts
and Science
Coursework
Depth of Intermediate/
Advanced
work

Total Credits
UW-Madison
Experience

Major Declare and complete at least one (1) major

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

108 credits

60 intermediate or advanced credits




120 credits
30 credits in residence, overall
30 credits in residence after the 90th credit

| Minimum | 2.000 in all coursework at UW-Madison |
| :--- | :--- |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| First \& Second Year Language ${ }^{1}$ |  |  |
| First Year Chinese: |  |  |
| E ASIAN 101 \& EASIAN 102 | First Semester Chinese and Second Semester Chinese |  |
| or |  |  |
| E ASIAN 121 \& EASIAN 122 \& EASIAN 102 | Elementary Chinese and Elementary Chinese and Second Semester Chinese |  |
| Second Year Chinese |  |  |
| E ASIAN 201 <br> \& E ASIAN 202 | Third Semester Chinese and Fourth Semester Chinese |  |
| Advanced Studies, 27 credits: |  |  |
| 1. Third Year Chinese (2 courses): |  |  |
| E ASIAN 301 | Fifth Semester Chinese |  |
| E ASIAN 302 | Sixth Semester Chinese |  |
| 2. Classical Chinese Courses (2 courses) |  |  |
| E ASIAN 321 | First Year Classical Chinese |  |
| E ASIAN 322 | First Year Classical Chinese |  |
| 3. Chinese Literature or Linguistics (2 courses) |  |  |
| E ASIAN 351 \& E ASIAN 352 | Survey of Chinese Literature and Survey of Chinese Literature |  |
| or |  |  |
| E ASIAN 431 <br> \& E ASIAN 432 | Introduction to Chinese Linguistics and Introduction to Chinese Linguistics |  |
| 4. Additional credits in Chinese Studies, at least 5 credits: |  |  |
| E ASIAN/ HISTORY/LCA/ RELIG ST 308 | Introduction to Buddhism |  |
| E ASIAN 333 | Chinese Conversation |  |
| EASIAN/ RELIG ST 350 | Introduction to Taoism |  |
| E ASIAN 352 | Survey of Chinese Literature |  |
| E ASIAN 356 | Chinese Painting |  |

E ASIAN/ Introduction to Confucianism
RELIG ST 363
E ASIAN 371
E ASIAN 372 Topics in Chinese: Study Abroad
E ASIAN $379 \quad$ Business Chinese
E ASIAN 401 Seventh Semester Chinese
E ASIAN 402 Eighth Semester Chinese
E ASIAN 432 Introduction to Chinese Linguistics
E ASIAN/LCA/ Buddhist Thought
RELIG ST 466
E ASIAN $501 \quad$ Fifth-year Chinese
E ASIAN $520 \quad$ Popular Culture and Film in Twentieth-Century China
E ASIAN 631 History of the Chinese Language
E ASIAN 632 History of the Chinese Language
E ASIAN 651 History of Chinese Literature
E ASIAN 652 History of Chinese Literature
E ASIAN 661 History of Chinese Thought, Part 1
E ASIAN 662 History of Chinese Thought, Part 2
E ASIAN 671 Literary Studies in Chinese Drama
E ASIAN 672 Literary Studies in Chinese Fiction
E ASIAN 681 Senior Honors Thesis
E ASIAN 682 Senior Honors Thesis
E ASIAN 691 Senior Thesis
E ASIAN 692 Senior Thesis
E ASIAN 699 Directed Study

| ART HIST 307 | Early Chinese Art: From Antiquity to |
| :--- | :--- |
|  | the Tenth Century |

ART HIST 308 Later Chinese Art: From the Tenth Century to the Present
ART HIST $371 \quad$ Chinese Painting
HISTORY/ Introduction to East Asian History:
EASTDS 103 China

HISTORY/
ASIAN AM/
EASTDS 276
HISTORY 336
Chinese Economic and Business History: From Silk to iPhones
HISTORY/ Social and Intellectual History of
E A STDS 337 China, 589 AD-1919
HISTORY/
History of Modern China, 1800-1949
EASTDS 341
HISTORY/
EA STDS 342
History of the Peoples Republic of China, 1949 to the Present
HISTORY/
EASTDS 363
Chinese Migrations since 1500

1
Heritage speakers may satisfy the first-year language requirement with E ASIAN 213 First Semester Heritage Chinese and the secondyear language requirement with E ASIAN 214 Second Semester Heritage Chinese.

## DISTINCTION IN THE MAJOR

Students majoring in Chinese who are not enrolled in the honors program may earn distinction in the major by completing:

1. the L\&S general degree requirements, and
2. the junior-senior honors curriculum.

Fifteen honors credits are required in courses at the 300 level or higher, including a Senior Honors Thesis of 6 credits, E ASIAN 681 Senior Honors Thesis-E ASIAN 682 Senior Honors Thesis.

## RESIDENCE AND QUALITY OF WORK

15 credits that count toward the major, taken on campus
2.000 GPA on 15 upper-level major credits, in residence ${ }^{1}$
2.000 GPA in all credits in the major

| ¹ Upper level courses in the major |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| E ASIAN 301 | Fifth Semester Chinese | 4 |
| E ASIAN 302 | Sixth Semester Chinese | 4 |
| E ASIAN/HISTORY/ | Introduction to Buddhism | $3-4$ |
| LCA/RELIG ST 308 |  | 4 |
| E ASIAN 321 | First Year Classical Chinese | 4 |
| E ASIAN 322 | First Year Classical Chinese | 3 |
| E ASIAN 333 | Chinese Conversation | $3-4$ |


| RELIG ST 350 |  | 3 |
| :--- | :--- | ---: |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 352 | Survey of Chinese Literature | $3-4$ |
| E ASIAN 356 | Chinese Painting | 3 |
| E ASIAN 353 | Survey of Japanese Literature | 3 |


| RELIG ST 363 |  | 2-3 |
| :--- | :--- | :--- |
| E ASIAN 371 | Topics in Chinese Literature | 2 |

E ASIAN 379 Business Chinese 3
E ASIAN 402 Eighth Semester Chinese 3
E ASIAN 431 Introduction to Chinese Linguistics 3

| E ASIAN 432 | Introduction to Chinese Linguistics | 3 |
| :--- | :--- | :--- |
| E ASIAN/LCA/ | Buddhist Thought | 3 |


| RELIG ST 466 |  |
| :--- | :--- |
| E ASIAN 501 | Fifth-year Chinese |


| E ASIAN 520 | Popular Culture and Film in | 3 |
| :--- | :--- | :--- |
|  | Twentieth-Century China |  |


| E ASIAN 652 | History of Chinese Literature | 3 |
| :--- | :--- | :--- |


| E ASIAN 661 | History of Chinese Thought, Part 1 | 3 |
| :--- | :--- | :--- |
| E ASIAN 662 | History of Chinese Thought, Part 2 | 3 |

E ASIAN 671 Literary Studies in Chinese Drama 3
E ASIAN 672 Literary Studies in Chinese Fiction 3

| E ASIAN 681 | Senior Honors Thesis | 3 |
| :--- | :--- | :--- |
| E ASIAN 682 | Senior Honors Thesis | 3 |

E ASIAN $691 \quad$ Senior Thesis 3

| E ASIAN 692 | Senior Thesis | 3 |
| :--- | :--- | ---: |
| E ASIAN 699 | Directed Study | $2-3$ |

ART HIST 307 Early Chinese Art: From Antiquity to 3

| ART HIST 308 | Later Chinese Art: From the Tenth <br> Century to the Present | 3 |
| :--- | :--- | :---: |
| HISTORY/ | History of Modern China, 1800-1949 | $3-4$ |
| E A STDS 341 |  |  |

## HONORS IN THE MAJOR

Students may declare Honors in the Chinese Major in consultation with the Chinese undergraduate advisor.

## HONORS IN THE CHINESE MAJOR REQUIREMENTS

To earn Honors in the Major in Chinese, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 for all courses accepted in the major
- Complete the following coursework, with a grade of B or better.
- E ASIAN 699 Directed Study or other appropriate course of 34 credits with the major professor, under whose guidance a student intends to write a thesis. This course must be taken before E ASIAN 681 Senior Honors Thesis
- A two-semester Senior Honors Thesis in E ASIAN 681 Senior Honors Thesis and E ASIAN 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency
Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Understand the content and cultural context of written texts and audiovisual materials with a large degree of independence, adapting style and speed of comprehension to different texts and purposes, and using appropriate reference sources selectively.
2. Spontaneously exchange ideas about various topics with relative ease.
3. State and support one's own opinion while acknowledging others' viewpoints.
4. Demonstrate an awareness of the importance of pragmatic, sociolinguistic, and rhetorical features of the target language.
5. Conduct library and/or internet-based research on topics relating to their particular interests and special fields of expertise, collecting and selecting relevant information using English and target language source materials.
6. Synthesize and critically evaluate source materials in both English and the target language.
7. Present (orally or in written language) their experiences and their introspection on these experiences in a coherent and effective manner.
8. Demonstrate cultural awareness across historical epochs.
9. Produce effective academic writing in English.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISOR

## Rachel Weiss

1244 Van Hise Hall
608-890-0138
rweiss@wisc.edu
Schedule an advising appointment (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/fUerTooa.html)

Rachel is the advisor for the undergraduate majors and certificates in the Department of Asian Languages and Cultures. She is happy to meet with students as they explore the degree options or advance through their four-year plans.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/Isci)


## INTERNATIONAL DIRECTIONS ADVISING LANGUAGE INSTITUTE

The Language Institute (https://languages.wisc.edu) provides academic and career advising to undergraduate students interested in languages and international area studies. The International Directions advisor provides academic and career advising to undergraduate students who are interested in languages and international area studies. Learn more (https://languages.wisc.edu/advising).

## PEOPLE

## FACULTY

Asian Languages and Cultures is home to nearly twenty faculty whose research and teaching specialities range from medical humanities in India, the Hinduist roots of yoga, or inflecting contemporary mindfulness practice with insights from Tibetan buddhism, to human rights in Thailand - from Chinese ghost stories, traditional Sinology, and mathematically inflected Chinese philology, to sociolinguistics, discourse analysis, and pragmatics in Mandarin, Japanese, Korean, and Indonesian - and from critical reading of late-Heian tale fiction, early modern Japanese comedic narratives, and haiku, to manga, anime, and Japanese counterculture.

## EAST ASIA

Charo D'Etcheverry (http://alc.wisc.edu/about/faculty/charo-detcheverry) (Associate Professor). Area: Classical Japanese Literature

Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern) (Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

Byung-jin Lim (http://alc.wisc.edu/about/faculty/byung-jin-lim)
(Associate Professor) .Area: Korean Language and Linguistics, Second / Foreign Language Acquisition, Korean Language Textbook Development

Junko Mori (http://alc.wisc.edu/about/faculty/steve-ridgely) (Professor). Area: Japanese Linguistics, Applied Linguistics, Sociolinguistics

Takako Nakakubo (http://alc.wisc.edu/about/faculty/takako-nakakubo) (Faculty Associate). Area: Second Language Acquisition of Japanese, Japanese Pedagogy

William Nienhauser (http://alc.wisc.edu/about/faculty/williamnienhauser) (Professor). Area: Early Traditional Chinese Fiction and History; early poetry (Du Fu and Tao Qian)

Steve Ridgely (http://alc.wisc.edu/about/faculty/steve-ridgely) (Associate Professor). Area: Modern Japanese Literature, Pop culture, TransAsian studies

Hongming Zhang (http://alc.wisc.edu/about/faculty/hongming-zhang) (Professor). Area: Chinese Linguistics; History of Chinese Language; Teaching Chinese as a Second Language

Weihua Zhu (http://alc.wisc.edu/about/faculty/weihua-zhu) (Assistant Professor). Area: Chinese Language, Pedagogy and Second Language Acquisition

## SOUTH ASIA

Gudrun Bühnemann (http://alc.wisc.edu/about/faculty/gudrun-b \%C3\%BChnemann) (Professor). Area: Sanskrit Language and Literature; Buddhism in India and Nepal; Hinduism; Tantrism; Yoga Studies

Anthony Cerulli (http://alc.wisc.edu/about/faculty/anthony-cerulli) (Associate Professor). Area: Theory and Method in the Study of Religion in South Asia; History of Medicine in India; Sanskrit Language and Literature; Kerala History and Culture; Malayalam Language.

John D. Dunne (http://alc.wisc.edu/about/faculty/john-d-dunne) (Professor). Area: Buddhist Philosophy and Contemplative Practice; Religious Studies; Cognitive Science of Religion

## SOUTHEAST ASIA

Erlin Barnard (http://alc.wisc.edu/about/faculty/erlin-barnard) (Faculty Associate) Area: Indonesian Language, Language Pedagogy; Materials Development; Second Language Acquisition

Tyrell Haberkorn (Associate Professor) Area: Violence, Human Rights, Sovereignty, Arbitrary Detention, Land Rights, Agrarian Struggle, Historiographies of Repression, Gender Studies, Socialism, Dissident Literature, Southeast Asia (Thailand).

## LANGUAGE INSTRUCTORS

Language instructors (http://alc.wisc.edu/about/language-instructors) are an integral part of our department, teaching more than 14 languages during the academic year from East (Chinese, Japanese, Korean), South (Hindi, Persian, Sanskrit, Tibetan, Urdu), Southeast (Burmese, Filipino, Hmong, Indonesian, Thai, Vietnamese) Asian Languages.

## UNDERGRADUATE ADVISOR

Undergraduate Advisor:
email Rachel Weiss (rweiss@wisc.edu)
1244 Van Hise Hall
608-890-0138

## STAFF

Department Administrator:
email A (tenealon@wisc.edu)lyson Amenda (amenda@wisc.edu)
1240 Van Hise Hall
608-262-0524
Financial Specialist:
email Haiyan Wei (haiyanwei@wisc.edu)
1238 Van Hise Hall
608-890-0138

## RESOURCES AND SCHOLARSHIPS

## DEPARTMENT SCHOLARSHIPS

## Cameron G. Keith Memorial Scholarship

This award is given annually to two undergraduate students studying Japanese. This award is annouced during the fall semester, and eligible
students may apply. The criteria are: Japanese major, junior or senior standing, cumulative GPA of 3.5 or above, currently taking Japanese, and plan to go into a Japanese related profession. Cameron G. Keith was an East Asian Studies and Economics studies major at UW-Madison who studied abroad in Japan, and later in Nepal. In his memory, the Keith family established these funds in memory of his interest in the region.

## Ellen and William E. Fisher Scholarship

Ellen and William E. Fisher have provided funding for an annual scholarship to be awarded to an undergraduate student at the UWMadison who is studying the Chinese language. According to the terms of the gift agreement, the award is based on merit, therefore there is no application, but faculty will make a determination based on students progressing in the program. Mr. Fisher stipulated that the award must be made in the Fall semester, so that the recipient can use it in the Spring semester.

## Chou Kuo-p'ing Book Award

Several awards will be given each year to undergraduate students who are studying and will continue to study Chinese during the following semester. This award is made possible through a donation by Professor Emerita Chou Kuo-p'ing, the founder of the Chinese program here at the University of Wisconsin-Madison. Professor Chou, a dedicated teacher, devoted her entire career to teaching, promoting and developing Chinese studies in Wisconsin. Professor Chou was very active during her teaching career, and often helped financially disadvantaged students, especially those who excelled in their academic careers despite economic difficulties. Although this award is based mainly on the applicant's academic performance, special consideration is given to those who are financially disadvantaged in order to carry on this tradition.

## Lawrence Louey Merit Scholarship

The Lawrence Louey Merit Scholarship is an annual competition recognizing an undergraduate Chinese major in the Department of Asian Languages and Cultures with a \$1000 award. Eligibility: You must be a graduating senior with a GPA above 3.75 and have taken at least three years of Chinese. An application is required for consideration, including a brief career plan, as well as a research paper from one of your major field courses.

## OTHER CAMPUS RESOURCES

Scholarships@UW-Madison (https://scholarships.wisc.edu/

## Scholarships)

This is the primary campus wide portal for applicants, current students, and everyone looking for scholarship opporunities on campus.

Undergraduate Academic Awards Office (https:// awards.advising.wisc.edu)
We help UW-Madison undergraduates and recent graduates pursue nationally competitive scholarships (https://awards.advising.wisc.edu/scholarships/ nationally-competitive) and campus-wide awards (https:// awards.advising.wisc.edu/scholarships/campus-wide) for research,
service and leadership-activities at the heart of the Wisconsin Experience. We can help you:

- Find scholarship opportunities that match your goals and interests
- Navigate the scholarship application process
- Review scholarship essays
- Prepare for national scholarship interviews

Contact us (https://awards.advising.wisc.edu/schedule-anappointment) to schedule an appointment to discuss which opportunities are right for you

Foreign Language \& Area Studies (FLAS) Fellowships (https:// flas.wisc.edu)
FLAS fellowships are funded by the U.S. Department of Education and administered by the UW's National Resource Centers to assist students in acquiring foreign language and either area or international studies competencies. FLAS awards are only available for specific languages (https://flas.wisc.edu/Languages.html), and are contingent on federal funding. Please direct any questions to the FLAS Coordinator (https:// flas.wisc.edu/Languages.html)of your chosen language.

Applicants must be U.S. citizens or permanent residents of the United States. Applications by students in professional fields are encouraged. Preference will be given to applicants with a high level of academic ability and with previous language training. Academic Year and Summer FLAS awards are two separate competitions requiring two separate and complete applications.

## NATIONAL SCHOLARSHIPS

Boren Scholarships (http://borenawards.org)
These scholarships provide up to $\$ 20,000$ to U.S. undergraduate students to study abroad in areas of the world that are critical to U.S. interests and underrepresented in study abroad, including Africa, Asia, Central \& Eastern Europe, Eurasia, Latin America, and the Middle East. The countries of Western Europe, Canada, Australia, and New Zealand are excluded. (Full list of preferred countries (http://borenawards.org/ boren_scholarship/preferences.html)) Additionally, all programs must include formal study of an appropriate foreign language. (Full list of preferred languages (http://borenawards.org/boren_scholarship/ preferences.html)). Undergraduates with questions about the Boren Scholarship (https://www.borenawards.org/scholarships/program-basics/boren-scholarship-basics) should contact Matt Geisler (mdgeisler@studyabroad.wisc.edu), Associate Director of International Academic Programs.

## Critical Language Scholarship Program (http://www.clscholarship.org)

The CLS program is part of the U.S. Department of State, Bureau of Educational and Cultural Affairs. It is a fully-funded overseas intensive language and cultural immersion program for American undergraduate and graduate students. With the goal of broadening the base of Americans studying and mastering critical languages and to build relationships between the people of the United States and other countries, CLS provides opportunities to a diverse range of students from across the United States at every level of language learning.

The fourteen CLS languages are: Arabic, Azerbaijani, Bangla, Chinese, Hindi, Indonesian, Japanese, Korean, Persian, Punjabi, Russian, Swahili, Turkish, and Urdu.

The CLS Program seeks participants with diverse interests, from a wide variety of fields of study, backgrounds and career paths, with the purpose of representing the full diversity of the United States. Thus, students from all academic disciplines, including business, engineering, law, medicine, science, social sciences, arts and humanities are encouraged to apply.

## Gilman Scholarship Program <br> Campus Representative: Andy Quackenbush <br> (quackenbush@studyabroad.wisc.edu)

The Gilman Scholarship Program is an undergraduate grant program for U.S. citizens of limited financial means to enable them to study abroad, thereby internationalizing their outlook and better preparing them to assume significant roles in the increasingly global economy.

## CHINESE, B.S.

The Chinese program offers students a range of courses and activities which impart an understanding of the culture and civilization of China. With the completion of three basic years of the language, students will be prepared to handle various types of colloquial Chinese. Most majors pursue advanced studies in Chinese linguistics or literature, while others combine an interest in China with a degree in business, education, engineering or journalism.

For more information about the Department of Asian Languages and Cultures visit the department overview (p. 423).

## STUDY ABROAD IN CHINA

Students may receive residence credit for study abroad through a variety of different programs sponsored by the department. Please contact International Academic Programs (https:// www.studyabroad.wisc.edu) for details.

Students may also receive credit, or gain experience, through various internship opportunities abroad. Please contact International Internship Programs (http://internships.international.wisc.edu) for details.

## STARTING COURSEWORK TOWARDS THE MAJOR

Before declaring the major, students are urged to begin coursework early, ideally in the freshman or sophomore year. If, however, this is not possible, summer courses at UW-Madison or elsewhere are available which speed the student's progress. Those who have Chinese credits from high school or summer sessions may enter advanced courses on the basis of placement tests.

The following courses may be taken with no previous knowledge of Chinese or Japanese:

| Code | Title | Credits |
| :--- | :--- | ---: |
| E ASIAN 101 | First Semester Chinese | 6 |
| E ASIAN 103 | First Semester Japanese | 6 |
| E ASIAN 121 | Elementary Chinese | 3 |
| E ASIAN 123 | Elementary Japanese | 3 |
| E ASIAN 341 | Classical Chinese for Non-Majors | 8 |
| \& E ASIAN 342 | and Classical Chinese for Non- |  |
|  | Majors |  |


| E ASIAN/ <br> RELIG ST 350 | Introduction to Taoism | 3-4 |
| :---: | :---: | :---: |
| EASIAN/ <br> RELIG ST 363 | Introduction to Confucianism | 3 |
| E ASIAN 367 | Japanese Poetic Tradition | 3-4 |
| E ASIAN 371 | Topics in Chinese Literature | 2-3 |
| E ASIAN 434 | Introduction to Japanese Linguistics | 3 |
| LITTRANS 261 <br> \& LITTRANS 262 | Survey of Chinese Literature in Translation and Survey of Chinese Literature in Translation | 6 |
| LITTRANS 263 \& LITTRANS 264 | Survey of Japanese Literature in Translation and Survey of Japanese Literature in Translation | 6 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 372 | Classical Japanese Prose in Translation | 3 |
| LITTRANS 373 | Topics in Japanese Literature | 3 |

## HOW TO GET IN

## ENROLLMENT INFORMATION

The department requires that students who are new to the program take a placement test before enrolling in a language course beyond the firstsemester level. For information about the placement test and test dates, please visit the department website (http://alc.wisc.edu/languages/ placement-tests). To register for a placement test, please contact Rachel Weiss at rweiss@wisc.edu.

## DECLARATION

If you would like to declare the major, please meet with the undergraduate advisor, rweiss@wisc.edu, to review the requirements, discuss courses, and to submit the declaration request.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.-4

General Education

## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign
Language

L\&S Breadth Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits and Science Coursework

Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| First \& Second Year Language ${ }^{1}$ |  |  |
| First Year Chinese: |  |  |
| E ASIAN 101 \& E ASIAN 102 | First Semester Chinese and Second Semester Chinese |  |
| or |  |  |
| E ASIAN 121 \& EASIAN 122 \& EASIAN 102 | Elementary Chinese and Elementary Chinese and Second Semester Chinese |  |
| Second Year Chinese |  |  |
| E ASIAN 201 \& E ASIAN 202 | Third Semester Chinese and Fourth Semester Chinese |  |
| Advanced Studies, 27 credits: |  |  |
| 1. Third Year Chinese (2 courses): |  |  |
| E ASIAN 301 | Fifth Semester Chinese |  |
| E ASIAN 302 | Sixth Semester Chinese |  |
| 2. Classical Chinese Courses (2 courses) |  |  |
| E ASIAN 321 | First Year Classical Chinese |  |
| E ASIAN 322 | First Year Classical Chinese |  |
| 3. Chinese Literature or Linguistics (2 courses) |  |  |
| E ASIAN 351 \& E ASIAN 352 | Survey of Chinese Literature and Survey of Chinese Literature |  |
| or |  |  |
| E ASIAN 431 \& E ASIAN 432 | Introduction to Chinese Linguistics and Introduction to Chinese Linguistics |  |
| 4. Additional credits in Chinese Studies, at least 5 credits: |  |  |
| E ASIAN/ HISTORY/LCA/ RELIG ST 308 | Introduction to Buddhism |  |
| E ASIAN 333 | Chinese Conversation |  |
| EASIAN/ RELIG ST 350 | Introduction to Taoism |  |
| E ASIAN 352 | Survey of Chinese Literature |  |
| E ASIAN 356 | Chinese Painting |  |
| E ASIAN/ RELIG ST 363 | Introduction to Confucianism |  |
| E ASIAN 371 | Topics in Chinese Literature |  |
| E ASIAN 372 | Topics in Chinese: Study Abroad |  |
| E ASIAN 379 | Business Chinese |  |
| E ASIAN 401 | Seventh Semester Chinese |  |
| E ASIAN 402 | Eighth Semester Chinese |  |


| E ASIAN 432 | Introduction to Chinese Linguistics |
| :---: | :---: |
| E ASIAN/LCA/ RELIG ST 466 | Buddhist Thought |
| E ASIAN 501 | Fifth-year Chinese |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China |
| E ASIAN 631 | History of the Chinese Language |
| E ASIAN 632 | History of the Chinese Language |
| E ASIAN 651 | History of Chinese Literature |
| E ASIAN 652 | History of Chinese Literature |
| E ASIAN 661 | History of Chinese Thought, Part 1 |
| E ASIAN 662 | History of Chinese Thought, Part 2 |
| E ASIAN 671 | Literary Studies in Chinese Drama |
| E ASIAN 672 | Literary Studies in Chinese Fiction |
| E ASIAN 681 | Senior Honors Thesis |
| E ASIAN 682 | Senior Honors Thesis |
| E ASIAN 691 | Senior Thesis |
| E ASIAN 692 | Senior Thesis |
| E ASIAN 699 | Directed Study |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present |
| ART HIST 371 | Chinese Painting |
| HISTORY/ <br> EASTDS 103 | Introduction to East Asian History: China |
| HISTORY/ <br> ASIAN AM/ <br> EASTDS 276 | Chinese Migrations since 1500 |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones |
| HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present |
| HISTORY/ <br> EASTDS 363 | China and World War II in Asia |
| Heritage speakers may satisfy the first-year language requirement with E ASIAN 213 First Semester Heritage Chinese and the secondyear language requirement with E ASIAN 214 Second Semester Heritage Chinese. |  |

## DISTINCTION IN THE MAJOR

Students majoring in Chinese who are not enrolled in the honors program may earn distinction in the major by completing:

1. the L\&S general degree requirements, and
2. the junior-senior honors curriculum.

Fifteen honors credits are required in courses at the 300 level or higher, including a Senior Honors Thesis of 6 credits, E ASIAN 681 Senior Honors Thesis-E ASIAN 682 Senior Honors Thesis.

RESIDENCE AND QUALITY OF WORK
15 credits that count toward the major, taken on campus
2.000 GPA on 15 upper-level major credits, in residence ${ }^{1}$
2.000 GPA in all credits in the major

| ${ }^{1}$ Upper level courses in the major |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| E ASIAN 301 | Fifth Semester Chinese | 4 |
| E ASIAN 302 | Sixth Semester Chinese | 4 |
| E ASIAN/HISTORY/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| E ASIAN 321 | First Year Classical Chinese | 4 |
| E ASIAN 322 | First Year Classical Chinese | 4 |
| E ASIAN 333 | Chinese Conversation | 3 |
| E ASIAN/ RELIG ST 350 | Introduction to Taoism | 3-4 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 356 | Chinese Painting | 3-4 |
| E ASIAN 353 | Survey of Japanese Literature | 3 |
| E ASIAN/ RELIG ST 363 | Introduction to Confucianism | 3 |
| E ASIAN 371 | Topics in Chinese Literature | 2-3 |
| E ASIAN 379 | Business Chinese | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 |
| E ASIAN 402 | Eighth Semester Chinese | 3 |
| E ASIAN 431 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 432 | Introduction to Chinese Linguistics | 3 |
| E ASIAN/LCA/ RELIG ST 466 | Buddhist Thought | 3 |
| E ASIAN 501 | Fifth-year Chinese | 3 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| E ASIAN 661 | History of Chinese Thought, Part 1 | 3 |
| E ASIAN 662 | History of Chinese Thought, Part 2 | 3 |
| E ASIAN 671 | Literary Studies in Chinese Drama | 3 |
| E ASIAN 672 | Literary Studies in Chinese Fiction | 3 |
| E ASIAN 681 | Senior Honors Thesis | 3 |
| E ASIAN 682 | Senior Honors Thesis | 3 |
| E ASIAN 691 | Senior Thesis | 3 |
| E ASIAN 692 | Senior Thesis | 3 |
| E ASIAN 699 | Directed Study | 2-3 |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century | 3 |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present | 3 |
| HISTORY/ | History of Modern China, 1800-1949 | 3-4 |

## HONORS IN THE MAJOR

Students may declare Honors in the Chinese Major in consultation with the Chinese undergraduate advisor.

## HONORS IN THE CHINESE MAJOR REQUIREMENTS

To earn Honors in the Major in Chinese, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 for all courses accepted in the major
- Complete the following coursework, with a grade of B or better.
- E ASIAN 699 Directed Study or other appropriate course of 34 credits with the major professor, under whose guidance a student intends to write a thesis. This course must be taken before E ASIAN 681 Senior Honors Thesis
- A two-semester Senior Honors Thesis in E ASIAN 681 Senior Honors Thesis and E ASIAN 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Understand the content and cultural context of written texts and audiovisual materials with a large degree of independence, adapting style and speed of comprehension to different texts and purposes, and using appropriate reference sources selectively.
2. Spontaneously exchange ideas about various topics with relative ease.
3. State and support one's own opinion while acknowledging others' viewpoints.
4. Demonstrate an awareness of the importance of pragmatic,
sociolinguistic, and rhetorical features of the target language.
5. Conduct library and/or internet-based research on topics relating to their particular interests and special fields of expertise, collecting and
selecting relevant information using English and target language source materials.
6. Synthesize and critically evaluate source materials in both English and the target language.
7. Present (orally or in written language) their experiences and their introspection on these experiences in a coherent and effective manner.
8. Demonstrate cultural awareness across historical epochs.
9. Produce effective academic writing in English.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISOR

## Rachel Weiss

1244 Van Hise Hall
608-890-0138
rweiss@wisc.edu
Schedule an advising appointment (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/fUerTooa.html)

Rachel is the advisor for the undergraduate majors and certificates in the Department of Asian Languages and Cultures. She is happy to meet with students as they explore the degree options or advance through their four-year plans.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## INTERNATIONAL DIRECTIONS ADVISING

## LANGUAGE INSTITUTE

The Language Institute (https://languages.wisc.edu) provides academic and career advising to undergraduate students interested in languages and international area studies. The International Directions advisor provides academic and career advising to undergraduate students who
are interested in languages and international area studies. Learn more (https://languages.wisc.edu/advising).

## PEOPLE

## FACULTY

Asian Languages and Cultures is home to nearly twenty faculty whose research and teaching specialities range from medical humanities in India, the Hinduist roots of yoga, or inflecting contemporary mindfulness practice with insights from Tibetan buddhism, to human rights in Thailand - from Chinese ghost stories, traditional Sinology, and mathematically inflected Chinese philology, to sociolinguistics, discourse analysis, and pragmatics in Mandarin, Japanese, Korean, and Indonesian - and from critical reading of late-Heian tale fiction, early modern Japanese comedic narratives, and haiku, to manga, anime, and Japanese counterculture.

## EAST ASIA

Charo D'Etcheverry (http://alc.wisc.edu/about/faculty/charo-detcheverry) (Associate Professor). Area: Classical Japanese Literature

Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern)
(Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

Byung-jin Lim (http://alc.wisc.edu/about/faculty/byung-jin-lim) (Associate Professor) .Area: Korean Language and Linguistics, Second / Foreign Language Acquisition, Korean Language Textbook Development

Junko Mori (http://alc.wisc.edu/about/faculty/steve-ridgely) (Professor). Area: Japanese Linguistics, Applied Linguistics, Sociolinguistics

Takako Nakakubo (http://alc.wisc.edu/about/faculty/takako-nakakubo) (Faculty Associate). Area: Second Language Acquisition of Japanese, Japanese Pedagogy

William Nienhauser (http://alc.wisc.edu/about/faculty/williamnienhauser) (Professor). Area: Early Traditional Chinese Fiction and History; early poetry (Du Fu and Tao Qian)

Steve Ridgely (http://alc.wisc.edu/about/faculty/steve-ridgely) (Associate Professor). Area: Modern Japanese Literature, Pop culture, TransAsian studies

Hongming Zhang (http://alc.wisc.edu/about/faculty/hongming-zhang) (Professor). Area: Chinese Linguistics; History of Chinese Language; Teaching Chinese as a Second Language

Weihua Zhu (http://alc.wisc.edu/about/faculty/weihua-zhu) (Assistant Professor). Area: Chinese Language, Pedagogy and Second Language Acquisition

## SOUTH ASIA

Gudrun Bühnemann (http://alc.wisc.edu/about/faculty/gudrun-b \%C3\%BChnemann) (Professor). Area: Sanskrit Language and Literature; Buddhism in India and Nepal; Hinduism; Tantrism; Yoga Studies

Anthony Cerulli (http://alc.wisc.edu/about/faculty/anthony-cerulli) (Associate Professor). Area: Theory and Method in the Study of Religion in South Asia; History of Medicine in India; Sanskrit Language and Literature; Kerala History and Culture; Malayalam Language.

John D. Dunne (http://alc.wisc.edu/about/faculty/john-d-dunne) (Professor). Area: Buddhist Philosophy and Contemplative Practice; Religious Studies; Cognitive Science of Religion

## SOUTHEAST ASIA

Erlin Barnard (http://alc.wisc.edu/about/faculty/erlin-barnard) (Faculty Associate) Area: Indonesian Language, Language Pedagogy; Materials Development; Second Language Acquisition

Tyrell Haberkorn (Associate Professor) Area: Violence, Human Rights, Sovereignty, Arbitrary Detention, Land Rights, Agrarian Struggle, Historiographies of Repression, Gender Studies, Socialism, Dissident Literature, Southeast Asia (Thailand).

## LANGUAGE INSTRUCTORS

Language instructors (http://alc.wisc.edu/about/language-instructors) are an integral part of our department, teaching more than 14 languages during the academic year from East (Chinese, Japanese, Korean), South (Hindi, Persian, Sanskrit, Tibetan, Urdu), Southeast (Burmese, Filipino, Hmong, Indonesian, Thai, Vietnamese) Asian Languages.

## UNDERGRADUATE ADVISOR

Undergraduate Advisor:
email Rachel Weiss (rweiss@wisc.edu)
1244 Van Hise Hall
608-890-0138

## STAFF

Department Administrator: email A (tenealon@wisc.edu)lyson Amenda (amenda@wisc.edu)
1240 Van Hise Hall
608-262-0524
Financial Specialist:
email Haiyan Wei (haiyanwei@wisc.edu)
1238 Van Hise Hall
608-890-0138

## RESOURCES AND SCHOLARSHIPS

## DEPARTMENT SCHOLARSHIPS

## Cameron G. Keith Memorial Scholarship

This award is given annually to two undergraduate students studying Japanese. This award is annouced during the fall semester, and eligible students may apply. The criteria are: Japanese major, junior or senior standing, cumulative GPA of 3.5 or above, currently taking Japanese, and plan to go into a Japanese related profession. Cameron G. Keith was an East Asian Studies and Economics studies major at UW-Madison who
studied abroad in Japan, and later in Nepal. In his memory, the Keith family established these funds in memory of his interest in the region.

## Ellen and William E. Fisher Scholarship

Ellen and William E. Fisher have provided funding for an annual scholarship to be awarded to an undergraduate student at the UWMadison who is studying the Chinese language. According to the terms of the gift agreement, the award is based on merit, therefore there is no application, but faculty will make a determination based on students progressing in the program. Mr. Fisher stipulated that the award must be made in the Fall semester, so that the recipient can use it in the Spring semester.

## Chou Kuo-p'ing Book Award

Several awards will be given each year to undergraduate students who are studying and will continue to study Chinese during the following semester. This award is made possible through a donation by Professor Emerita Chou Kuo-p'ing, the founder of the Chinese program here at the University of Wisconsin-Madison. Professor Chou, a dedicated teacher, devoted her entire career to teaching, promoting and developing Chinese studies in Wisconsin. Professor Chou was very active during her teaching career, and often helped financially disadvantaged students, especially those who excelled in their academic careers despite economic difficulties. Although this award is based mainly on the applicant's academic performance, special consideration is given to those who are financially disadvantaged in order to carry on this tradition.

## Lawrence Louey Merit Scholarship

The Lawrence Louey Merit Scholarship is an annual competition recognizing an undergraduate Chinese major in the Department of Asian Languages and Cultures with a \$1000 award. Eligibility: You must be a graduating senior with a GPA above 3.75 and have taken at least three years of Chinese. An application is required for consideration, including a brief career plan, as well as a research paper from one of your major field courses.

## OTHER CAMPUS RESOURCES

Scholarships@UW-Madison (https://scholarships.wisc.edu/

## Scholarships)

This is the primary campus wide portal for applicants, current students, and everyone looking for scholarship opporunities on campus.

Undergraduate Academic Awards Office (https:// awards.advising.wisc.edu)
We help UW-Madison undergraduates and recent graduates pursue nationally competitive scholarships (https://awards.advising.wisc.edu/scholarships/ nationally-competitive) and campus-wide awards (https:// awards.advising.wisc.edu/scholarships/campus-wide) for research, service and leadership-activities at the heart of the Wisconsin Experience. We can help you:

- Find scholarship opportunities that match your goals and interests
- Navigate the scholarship application process
- Review scholarship essays
- Prepare for national scholarship interviews

Contact us (https://awards.advising.wisc.edu/schedule-anappointment) to schedule an appointment to discuss which opportunities are right for you.

Foreign Language \& Area Studies (FLAS) Fellowships (https:// flas.wisc.edu)
FLAS fellowships are funded by the U.S. Department of Education and administered by the UW's National Resource Centers to assist students in acquiring foreign language and either area or international studies competencies. FLAS awards are only available for specific languages (https://flas.wisc.edu/Languages.html), and are contingent on federal funding. Please direct any questions to the FLAS Coordinator (https:// flas.wisc.edu/Languages.html) of your chosen language.

Applicants must be U.S. citizens or permanent residents of the United States. Applications by students in professional fields are encouraged. Preference will be given to applicants with a high level of academic ability and with previous language training. Academic Year and Summer FLAS awards are two separate competitions requiring two separate and complete applications.

## NATIONAL SCHOLARSHIPS

Boren Scholarships (http://borenawards.org)
These scholarships provide up to $\$ 20,000$ to U.S. undergraduate students to study abroad in areas of the world that are critical to U.S. interests and underrepresented in study abroad, including Africa, Asia, Central \& Eastern Europe, Eurasia, Latin America, and the Middle East. The countries of Western Europe, Canada, Australia, and New Zealand are excluded. (Full list of preferred countries (http://borenawards.org/ boren_scholarship/preferences.html)) Additionally, all programs must include formal study of an appropriate foreign language. (Full list of preferred languages (http://borenawards.org/boren_scholarship/ preferences.html)). Undergraduates with questions about the Boren Scholarship (https://www.borenawards.org/scholarships/program-basics/boren-scholarship-basics) should contact Matt Geisler (mdgeisler@studyabroad.wisc.edu), Associate Director of International Academic Programs.

Critical Language Scholarship Program (http://www.clscholarship.org)
The CLS program is part of the U.S. Department of State, Bureau of Educational and Cultural Affairs. It is a fully-funded overseas intensive language and cultural immersion program for American undergraduate and graduate students. With the goal of broadening the base of Americans studying and mastering critical languages and to build relationships between the people of the United States and other countries, CLS provides opportunities to a diverse range of students from across the United States at every level of language learning.

The fourteen CLS languages are: Arabic, Azerbaijani, Bangla, Chinese, Hindi, Indonesian, Japanese, Korean, Persian, Punjabi, Russian, Swahili, Turkish, and Urdu.

The CLS Program seeks participants with diverse interests, from a wide variety of fields of study, backgrounds and career paths, with the purpose of representing the full diversity of the United States. Thus, students from
all academic disciplines, including business, engineering, law, medicine, science, social sciences, arts and humanities are encouraged to apply.

Gilman Scholarship Program<br>Campus Representative: Andy Quackenbush<br>(quackenbush@studyabroad.wisc.edu)

The Gilman Scholarship Program is an undergraduate grant program for U.S. citizens of limited financial means to enable them to study abroad, thereby internationalizing their outlook and better preparing them to assume significant roles in the increasingly global economy.

## JAPANESE PROFESSIONAL <br> COMMUNICATION, CERTIFICATE

The certificate in Japanese professional communication provides students with the opportunity to develop proficiency in Japanese while pursuing majors in other subjects across the university. It emphasizes the development of communication skills that are applicable to various professional contexts that students may encounter in their future careers.

The certificate is open to all undergraduate students (except for those majoring in Japanese). It is available to Special students only in circumstances where they have completed more than half of the 12-credit requirements discussed below as UW-Madison undergraduates in the semesters preceding their Special student enrollment.

## STUDY ABROAD IN JAPAN

Students may receive residence credit for study abroad through a variety of different programs sponsored by the department. Please contact International Academic Programs (https:// www.studyabroad.wisc.edu) for details.

Students may also receive credit, or gain experience, through various internship opportunities abroad. Please contact International Internship Programs (http://internships.international.wisc.edu) for details.

## HOW TO GET IN

## PLACEMENT TESTS

The department requires that students who are new to our program take a placement test before enrolling in a language course beyond the first semester level. More information here. (https://alc.wisc.edu/languages/ background-questionnaire)

## DECLARING THE CERTIFICATE

To declare the certificate in Japanese professional communication, students should meet with the undergraduate advisor, rweiss@wisc.edu, to review the requirements, discuss courses, and to submit the declaration request.

# REQUIRED PREREQUISITE LANGUAGE COURSES 

| Code | Title | Credits |
| :--- | :--- | ---: |
| E ASIAN 123 | Elementary Japanese | 6 |
| \& E ASIAN 124 | and Elementary Japanese |  |
| or E ASIAN 103 | First Semester Japanese | 3 |
| E ASIAN 124 | Elementary Japanese | 6 |
| E ASIAN 104 | Second Semester Japanese | 6 |
| E ASIAN 203 | Third Semester Japanese | 6 |

## REQUIREMENTS

## REQUIREMENTS

The certificate requires 12 credits of course work beyond the prerequisites. The 12 -credit requirement consists of the following components:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Foundation in Professional Communication: |  | 3 |
| $\begin{aligned} & \text { EASIAN/ } \\ & \text { EPD } 377 \end{aligned}$ | Business Japanese Communication |  |
| Additional Japanese Language Courses: |  | 6 |
| E ASIAN 303 | Fifth Semester Japanese |  |
| E ASIAN 304 | Sixth Semester Japanese |  |
| E ASIAN 335 | Intermediate Japanese Conversation |  |
| E ASIAN 368 | Topics in Japanese Professional Communication |  |
| $\begin{aligned} & \text { EASIAN/ } \\ & \text { EPD } 375 \end{aligned}$ | Intermediate Technical Japanese II |  |
| E ASIAN 403 | Seventh Semester Japanese |  |
| E ASIAN 404 | Eighth Semester Japanese |  |
| Japanese Literature or Humanities Elective: |  | 3 |
| ASIAN 354 | Early Modern Japanese Literature |  |
| E ASIAN 353 | Survey of Japanese Literature |  |
| E ASIAN 323 | First Year Classical Japanese |  |
| E ASIAN 358 | Language in Japanese Society |  |
| E ASIAN 361 | Masterworks of Japanese Literature: The Tale of Genji |  |
| E ASIAN 367 | Japanese Poetic Tradition |  |
| E ASIAN 376 | Manga. |  |
| E ASIAN 373 | Topics in Japanese: Study Abroad |  |
| E ASIAN 378 | Anime |  |
| E ASIAN 433 | Topics in East Asian Visual Cultures |  |
| E ASIAN 434 | Introduction to Japanese Linguistics |  |
| LITTRANS 373 | Topics in Japanese Literature |  |

Total Credits

A cumulative 2.000 GPA for courses counting toward the certificate

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Understand the content and cultural context of written texts and audiovisual materials with a large degree of independence, adapting style and speed of comprehension to different texts and purposes, and using appropriate reference sources selectively.
2. Spontaneously exchange ideas about various topics with relative ease.
3. State and support one's own opinion while acknowledging others' viewpoints.
4. Demonstrate an awareness of the importance of pragmatic, sociolinguistic, and rhetorical features of the target language.
5. Conduct library and/or internet-based research on topics relating to their particular interests and special fields of expertise, collecting and selecting relevant information using English and target language source materials.
6. Synthesize and critically evaluate source materials in both English and the target language.
7. Present (orally or in written language) their experiences and their introspection on these experiences in a coherent and effective manner.
8. Demonstrate cultural awareness across historical epochs.
9. Produce effective academic writing in English.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISOR

## Rachel Weiss

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rweiss@wisc.edu
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Rachel is the advisor for the undergraduate majors and certificates in the Department of Asian Languages and Cultures. She is happy to meet with students as they explore the degree options or advance through their four-year plans.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

## RESIDENCE AND QUALITY OF WORK

6 credits counting toward the certificate, taken in residence

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## INTERNATIONAL DIRECTIONS ADVISING

 LANGUAGE INSTITUTEThe Language Institute (https://languages.wisc.edu) provides academic and career advising to undergraduate students interested in languages and international area studies. The International Directions advisor provides academic and career advising to undergraduate students who are interested in languages and international area studies. Learn more (https://languages.wisc.edu/advising).

## PEOPLE

## FACULTY

Asian Languages and Cultures is home to nearly twenty faculty whose research and teaching specialities range from medical humanities in India, the Hinduist roots of yoga, or inflecting contemporary mindfulness practice with insights from Tibetan buddhism, to human rights in Thailand - from Chinese ghost stories, traditional Sinology, and mathematically inflected Chinese philology, to sociolinguistics, discourse analysis, and pragmatics in Mandarin, Japanese, Korean, and Indonesian - and from critical reading of late-Heian tale fiction, early modern Japanese comedic narratives, and haiku, to manga, anime, and Japanese counterculture.

## EAST ASIA

Charo D'Etcheverry (http://alc.wisc.edu/about/faculty/charo-detcheverry) (Associate Professor). Area: Classical Japanese Literature

Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern) (Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

Byung-jin Lim (http://alc.wisc.edu/about/faculty/byung-jin-lim)
(Associate Professor) .Area: Korean Language and Linguistics, Second / Foreign Language Acquisition, Korean Language Textbook Development

Junko Mori (http://alc.wisc.edu/about/faculty/steve-ridgely) (Professor). Area: Japanese Linguistics, Applied Linguistics, Sociolinguistics

Takako Nakakubo (http://alc.wisc.edu/about/faculty/takako-nakakubo) (Faculty Associate). Area: Second Language Acquisition of Japanese, Japanese Pedagogy

William Nienhauser (http://alc.wisc.edu/about/faculty/williamnienhauser) (Professor). Area: Early Traditional Chinese Fiction and History; early poetry (Du Fu and Tao Qian)

Steve Ridgely (http://alc.wisc.edu/about/faculty/steve-ridgely) (Associate Professor). Area: Modern Japanese Literature, Pop culture, TransAsian studies

Hongming Zhang (http://alc.wisc.edu/about/faculty/hongming-zhang) (Professor). Area: Chinese Linguistics; History of Chinese Language; Teaching Chinese as a Second Language

Weihua Zhu (http://alc.wisc.edu/about/faculty/weihua-zhu) (Assistant Professor). Area: Chinese Language, Pedagogy and Second Language Acquisition

## SOUTH ASIA

Gudrun Bühnemann (http://alc.wisc.edu/about/faculty/gudrun-b \%C3\%BChnemann) (Professor). Area: Sanskrit Language and Literature; Buddhism in India and Nepal; Hinduism; Tantrism; Yoga Studies

Anthony Cerulli (http://alc.wisc.edu/about/faculty/anthony-cerulli) (Associate Professor). Area: Theory and Method in the Study of Religion in South Asia; History of Medicine in India; Sanskrit Language and Literature; Kerala History and Culture; Malayalam Language.

John D. Dunne (http://alc.wisc.edu/about/faculty/john-d-dunne) (Professor). Area: Buddhist Philosophy and Contemplative Practice; Religious Studies; Cognitive Science of Religion

## SOUTHEAST ASIA

Erlin Barnard (http://alc.wisc.edu/about/faculty/erlin-barnard) (Faculty Associate) Area: Indonesian Language, Language Pedagogy; Materials Development; Second Language Acquisition

Tyrell Haberkorn (Associate Professor) Area: Violence, Human Rights, Sovereignty, Arbitrary Detention, Land Rights, Agrarian Struggle, Historiographies of Repression, Gender Studies, Socialism, Dissident Literature, Southeast Asia (Thailand).

## LANGUAGE INSTRUCTORS

Language instructors (http://alc.wisc.edu/about/language-instructors) are an integral part of our department, teaching more than 14 languages during the academic year from East (Chinese, Japanese, Korean), South (Hindi, Persian, Sanskrit, Tibetan, Urdu), Southeast (Burmese, Filipino, Hmong, Indonesian, Thai, Vietnamese) Asian Languages.

## UNDERGRADUATE ADVISOR

Undergraduate Advisor. email Rachel Weiss (rweiss@wisc.edu)
1244 Van Hise Hall
608-890-0138
STAFF
Department Administrator.
email A (tenealon@wisc.edu)lyson Amenda (amenda@wisc.edu)
1240 Van Hise Hall
608-262-0524
Financial Specialist:
email Haiyan Wei (haiyanwei@wisc.edu)
1238 Van Hise Hall
608-890-0138

## RESOURCES AND SCHOLARSHIPS

## DEPARTMENT SCHOLARSHIPS

## Cameron G. Keith Memorial Scholarship

This award is given annually to two undergraduate students studying Japanese. This award is annouced during the fall semester, and eligible students may apply. The criteria are: Japanese major, junior or senior standing, cumulative GPA of 3.5 or above, currently taking Japanese, and plan to go into a Japanese related profession. Cameron G. Keith was an East Asian Studies and Economics studies major at UW-Madison who studied abroad in Japan, and later in Nepal. In his memory, the Keith family established these funds in memory of his interest in the region.

## Ellen and William E. Fisher Scholarship

Ellen and William E. Fisher have provided funding for an annual scholarship to be awarded to an undergraduate student at the UWMadison who is studying the Chinese language. According to the terms of the gift agreement, the award is based on merit, therefore there is no application, but faculty will make a determination based on students progressing in the program. Mr. Fisher stipulated that the award must be made in the Fall semester, so that the recipient can use it in the Spring semester.

## Chou Kuo-p'ing Book Award

Several awards will be given each year to undergraduate students who are studying and will continue to study Chinese during the following semester. This award is made possible through a donation by Professor Emerita Chou Kuo-p'ing, the founder of the Chinese program here at the University of Wisconsin-Madison. Professor Chou, a dedicated teacher, devoted her entire career to teaching, promoting and developing Chinese studies in Wisconsin. Professor Chou was very active during her teaching career, and often helped financially disadvantaged students, especially those who excelled in their academic careers despite economic difficulties. Although this award is based mainly on the applicant's academic performance, special consideration is given to those who are financially disadvantaged in order to carry on this tradition.

## Lawrence Louey Merit Scholarship

The Lawrence Louey Merit Scholarship is an annual competition recognizing an undergraduate Chinese major in the Department of Asian Languages and Cultures with a \$1000 award. Eligibility: You must be a graduating senior with a GPA above 3.75 and have taken at least three years of Chinese. An application is required for consideration, including a brief career plan, as well as a research paper from one of your major field courses.

## OTHER CAMPUS RESOURCES

Scholarships@UW-Madison (https://scholarships.wisc.edu/ Scholarships)
This is the primary campus wide portal for applicants, current students, and everyone looking for scholarship opporunities on campus.

Undergraduate Academic Awards Office (https:// awards.advising.wisc.edu)
We help UW-Madison undergraduates and recent graduates pursue nationally competitive scholarships (https://awards.advising.wisc.edu/scholarships/ nationally-competitive) and campus-wide awards (https:// awards.advising.wisc.edu/scholarships/campus-wide) for research, service and leadership-activities at the heart of the Wisconsin Experience. We can help you:

- Find scholarship opportunities that match your goals and interests
- Navigate the scholarship application process
- Review scholarship essays
- Prepare for national scholarship interviews

Contact us (https://awards.advising.wisc.edu/schedule-anappointment) to schedule an appointment to discuss which opportunities are right for you.

[^16]Applicants must be U.S. citizens or permanent residents of the United States. Applications by students in professional fields are encouraged. Preference will be given to applicants with a high level of academic ability and with previous language training. Academic Year and Summer FLAS awards are two separate competitions requiring two separate and complete applications.

## NATIONAL SCHOLARSHIPS

Boren Scholarships (http://borenawards.org)
These scholarships provide up to $\$ 20,000$ to U.S. undergraduate students to study abroad in areas of the world that are critical to U.S. interests and underrepresented in study abroad, including Africa, Asia, Central \& Eastern Europe, Eurasia, Latin America, and the Middle East. The countries of Western Europe, Canada, Australia, and New Zealand are excluded. (Full list of preferred countries (http://borenawards.org/ boren_scholarship/preferences.html)) Additionally, all programs must include formal study of an appropriate foreign language. (Full list of preferred languages (http://borenawards.org/boren_scholarship/ preferences.html)). Undergraduates with questions about the Boren Scholarship (https://www.borenawards.org/scholarships/program-basics/boren-scholarship-basics) should contact Matt Geisler
(mdgeisler@studyabroad.wisc.edu), Associate Director of International Academic Programs.

Critical Language Scholarship Program (http://www.clscholarship.org)
The CLS program is part of the U.S. Department of State, Bureau of Educational and Cultural Affairs. It is a fully-funded overseas intensive language and cultural immersion program for American undergraduate and graduate students. With the goal of broadening the base of Americans studying and mastering critical languages and to build relationships between the people of the United States and other countries, CLS provides opportunities to a diverse range of students from across the United States at every level of language learning.

The fourteen CLS languages are: Arabic, Azerbaijani, Bangla, Chinese, Hindi, Indonesian, Japanese, Korean, Persian, Punjabi, Russian, Swahili, Turkish, and Urdu.

The CLS Program seeks participants with diverse interests, from a wide variety of fields of study, backgrounds and career paths, with the purpose of representing the full diversity of the United States. Thus, students from all academic disciplines, including business, engineering, law, medicine, science, social sciences, arts and humanities are encouraged to apply.

## Gilman Scholarship Program

Campus Representative: Andy Quackenbush
(quackenbush@studyabroad.wisc.edu)
The Gilman Scholarship Program is an undergraduate grant program for U.S. citizens of limited financial means to enable them to study abroad, thereby internationalizing their outlook and better preparing them to assume significant roles in the increasingly global economy.

## JAPANESE, B.A.

The Japanese program offers students a range of courses and activities which impart an understanding of the culture and civilization of Japan. With the completion of the four basic years of the language, students will be prepared to handle various types of colloquial Japanese. Most of our majors pursue advanced studies in Japanese linguistics or literature, while others combine an interest in Japan with a degree in business, engineering, history, or international studies.

Majors are urged to begin coursework early, ideally in the freshman or sophomore year. If, however, this is not possible, summer courses at UW-Madison or elsewhere are available which speed the student's progress. Those who have Japanese credits from high school or summer sessions may enter advanced courses on the basis of department recommendation (https://alc.wisc.edu/languages/backgroundquestionnaire).

For more information about the Department of Asian Languages and Cultures visit the department overview (p. 423).

## STUDY ABROAD IN JAPAN

Students may receive residence credit for study abroad through a variety of different programs sponsored by the department. Please contact International Academic Programs (https:// www.studyabroad.wisc.edu) for details.

Students may also receive credit, or gain experience, through various internship opportunities abroad. Please contact International Internship Programs (http://internships.international.wisc.edu) for details.

## STARTING COURSEWORK TOWARDS THE MAJOR

Before declaring the major, students are urged to begin coursework early, ideally in the freshman or sophomore year. If, however, this is not possible, summer courses at UW-Madison or elsewhere are available which speed the student's progress. Those who have Japanese credits from high school or summer sessions may enter advanced courses on the basis of placement tests.

The following courses may be taken with no previous knowledge of Chinese or Japanese:

| Code | Title | Credits |
| :---: | :---: | :---: |
| E ASIAN 101 | First Semester Chinese | 6 |
| E ASIAN 103 | First Semester Japanese | 6 |
| E ASIAN 121 | Elementary Chinese | 3 |
| E ASIAN 123 | Elementary Japanese | 3 |
| E ASIAN/LCA/ RELIG ST 235 | Genres of Asian Religious Writing | 3 |
| E ASIAN/HISTORY/ RELIG ST 267 | Asian Religions in Global Perspective | 3-4 |
| E ASIAN/HISTORY/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| E ASIAN 367 | Japanese Poetic Tradition | 3-4 |
| E ASIAN 434 | Introduction to Japanese Linguistics | 3 |
| LITTRANS 231 | Manga | 3 |
| LITTRANS 232 | Anime | 3 |
| LITTRANS 263 | Survey of Japanese Literature in Translation | 3 |
| LITTRANS 264 | Survey of Japanese Literature in Translation | 3 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 372 | Classical Japanese Prose in Translation | 3 |
| LITTRANS 373 | Topics in Japanese Literature | 3 |

## HOW TO GET IN

## PLACEMENT TESTS

The department requires that students who are new to our program take a placement test before enrolling in a language course beyond the first semester level. More information here. (http://alc.wisc.edu/ undergraduate-majors/japanese/placement)

## DECLARING THE MAJOR

Students may declare the major at any time during their undergraduate career and their study of Japanese. You are urged to meet with the undergraduate advisor (rweiss@wisc.edu) in advance of declaring the major to discuss the requirements

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b$ ( $Q R B$ ) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR REQUIREMENTS FOR THE MAJOR

Code
First and Second Year Language Credits

| Fourth Year Japanese |  |  |
| :---: | :---: | :---: |
| E ASIAN 403 <br> \& E ASIAN 404 | Seventh Semester Japanese and Eighth Semester Japanese | 6 |
| Pre-Modern Japanese Literature Survey |  |  |
| E ASIAN 353 | Survey of Japanese Literature (or equivalent) | 3 |
| Modern Japanese Literature Survey |  |  |
| ASIAN 355 | Modern Japanese Literature | 3 |
| Japanese History |  |  |
| ASIAN 253 or HISTORY/ EASTDS 104 | Japanese Popular Culture <br> Introduction to East Asian History. Japan | 3-4 |
| Select 5 credits from the following: |  | 5 |
| E ASIAN 323 | First Year Classical Japanese |  |
| E ASIAN 335 | Intermediate Japanese Conversation |  |
| E ASIAN 358 | Language in Japanese Society |  |
| E ASIAN 361 | Masterworks of Japanese Literature: The Tale of Genji |  |
| E ASIAN 367 | Japanese Poetic Tradition |  |
| E ASIAN 376 | Manga. |  |
| E ASIAN/ EPD 377 | Business Japanese Communication |  |
| E ASIAN 373 | Topics in Japanese: Study Abroad |  |
| E ASIAN 378 | Anime |  |
| E ASIAN 434 | Introduction to Japanese Linguistics |  |
| E ASIAN 563 | Readings in Modern Japanese Literature |  |
| E ASIAN 564 | Readings in Modern Japanese Literature |  |
| E ASIAN 573 | Readings in Classical Japanese Literature |  |
| E ASIAN 574 | Readings in Classical Japanese Literature |  |
| E ASIAN 681 | Senior Honors Thesis |  |
| E ASIAN 682 | Senior Honors Thesis |  |
| E ASIAN 691 | Senior Thesis |  |
| E ASIAN 692 | Senior Thesis |  |
| E ASIAN 699 | Directed Study |  |
| LITTRANS 368 | Modern Japanese Fiction |  |
| LITTRANS 372 | Classical Japanese Prose in Translation |  |
| LITTRANS 373 | Topics in Japanese Literature |  |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all courses that count toward the major
2.000 GPA in 15 upper-level major credits in residence ${ }^{1}$

15 credits, in the major, taken on campus
${ }^{1}$ Courses in Japanese that count toward upper-level major requirement are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 323 | First Year Classical Japanese | 3 |
| E ASIAN 335 | Intermediate Japanese Conversation | 3 |
| E ASIAN 353 | Survey of Japanese Literature | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 358 | Language in Japanese Society | 3 |
| E ASIAN 361 | Masterworks of Japanese Literature: The Tale of Genji | 3 |
| E ASIAN 367 | Japanese Poetic Tradition | 3-4 |
| E ASIAN/EP D 377 | Business Japanese Communication | 3 |
| E ASIAN 378 | Anime | 3 |
| E ASIAN 403 | Seventh Semester Japanese | 3 |
| E ASIAN 404 | Eighth Semester Japanese | 3 |
| E ASIAN 434 | Introduction to Japanese Linguistics | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 681 | Senior Honors Thesis | 3 |
| E ASIAN 682 | Senior Honors Thesis | 3 |
| E ASIAN 691 | Senior Thesis | 3 |
| E ASIAN 692 | Senior Thesis | 3 |
| E ASIAN 699 | Directed Study | 2-3 |
| HISTORY/ <br> EASTDS 454 | Samurai: History and Image | 3-4 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 372 | Classical Japanese Prose in Translation | 3 |
| LITTRANS 373 | Topics in Japanese Literature | 3 |

## DISTINCTION IN THE MAJOR

Students majoring in Japanese who are not enrolled in the honors program may earn distinction in the major by completing:

1. the L\&S general degree requirements, and
2. the junior-senior honors curriculum.

Fifteen honors credits are required in courses at the 300 level or higher, including a Senior Honors Thesis of 6 credits, E ASIAN 681 Senior Honors Thesis-E ASIAN 682 Senior Honors Thesis.

## HONORS IN THE MAJOR

Students may declare Honors in the Japanese Major in consultation with the Japanese undergraduate advisor.

## HONORS IN THE JAPANESE MAJOR: REQUIREMENTS

To earn Honors in the Major in Japanese, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all courses accepted in the major
- Complete the following courses:
- Either E ASIAN 699 Directed Study or other appropriate course of 3-4 credits with the major professor, under whose guidance a student intends to write a thesis. This course must be taken before taking the Senior Honors Thesis and must be completed with a grade of $B$ or better.
- Complete a two-semester Senior Honors Thesis in E ASIAN 681 Senior Honors Thesis and E ASIAN 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Quality of |
| Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Understand the content and cultural context of written texts and video materials with a large degree of independence, adapting style and speed of comprehension to different texts and purposes, and using appropriate reference sources selectively.
2. Spontaneously exchange ideas about various topics with relative ease.
3. State and support one's own opinion while acknowledging others' viewpoints.
4. Demonstrate an awareness of the importance of pragmatic, sociolinguistic, and rhetorical features of the target language.
5. Conduct library and/or internet-based research on topics relating to their particular interests and special fields of expertise, collecting and selecting relevant information using English and target language source materials.
6. Synthesize and critically evaluate source materials in both English and the target language.
7. Present (orally or in written language) their experiences and their introspection on these experiences in a coherent and effective manner.
8. Demonstrate cultural awareness across historical epochs.
9. Produce effective academic writing in English.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISOR

## Rachel Weiss

1244 Van Hise Hall
608-890-0138
rweiss@wisc.edu
Schedule an advising appointment (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/fUerTooa.html)

Rachel is the advisor for the undergraduate majors and certificates in the Department of Asian Languages and Cultures. She is happy to meet with students as they explore the degree options or advance through their four-year plans.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## INTERNATIONAL DIRECTIONS ADVISING LANGUAGE INSTITUTE

The Language Institute (https://languages.wisc.edu) provides academic and career advising to undergraduate students interested in languages and international area studies. The International Directions advisor provides academic and career advising to undergraduate students who are interested in languages and international area studies. Learn more (https://languages.wisc.edu/advising).

## PEOPLE

## FACULTY

Asian Languages and Cultures is home to nearly twenty faculty whose research and teaching specialities range from medical humanities in India, the Hinduist roots of yoga, or inflecting contemporary mindfulness practice with insights from Tibetan buddhism, to human rights in Thailand - from Chinese ghost stories, traditional Sinology, and mathematically inflected Chinese philology, to sociolinguistics, discourse analysis, and pragmatics in Mandarin, Japanese, Korean, and Indonesian - and from critical reading of late-Heian tale fiction, early modern Japanese comedic narratives, and haiku, to manga, anime, and Japanese counterculture.

## EAST ASIA

Charo D'Etcheverry (http://alc.wisc.edu/about/faculty/charo-detcheverry) (Associate Professor). Area: Classical Japanese Literature

Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern) (Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

Byung-jin Lim (http://alc.wisc.edu/about/faculty/byung-jin-lim) (Associate Professor) .Area: Korean Language and Linguistics, Second / Foreign Language Acquisition, Korean Language Textbook Development

Junko Mori (http://alc.wisc.edu/about/faculty/steve-ridgely) (Professor). Area: Japanese Linguistics, Applied Linguistics, Sociolinguistics

Takako Nakakubo (http://alc.wisc.edu/about/faculty/takako-nakakubo) (Faculty Associate). Area: Second Language Acquisition of Japanese, Japanese Pedagogy

William Nienhauser (http://alc.wisc.edu/about/faculty/williamnienhauser) (Professor). Area: Early Traditional Chinese Fiction and History; early poetry (Du Fu and Tao Qian)

Steve Ridgely (http://alc.wisc.edu/about/faculty/steve-ridgely) (Associate Professor). Area: Modern Japanese Literature, Pop culture, TransAsian studies

Hongming Zhang (http://alc.wisc.edu/about/faculty/hongming-zhang) (Professor). Area: Chinese Linguistics; History of Chinese Language; Teaching Chinese as a Second Language

Weihua Zhu (http://alc.wisc.edu/about/faculty/weihua-zhu) (Assistant Professor). Area: Chinese Language, Pedagogy and Second Language Acquisition

## SOUTH ASIA

Gudrun Bühnemann (http://alc.wisc.edu/about/faculty/gudrun-b
\%C3\%BChnemann) (Professor). Area: Sanskrit Language and Literature; Buddhism in India and Nepal; Hinduism; Tantrism; Yoga Studies

Anthony Cerulli (http://alc.wisc.edu/about/faculty/anthony-cerulli) (Associate Professor). Area: Theory and Method in the Study of Religion in South Asia; History of Medicine in India; Sanskrit Language and Literature; Kerala History and Culture; Malayalam Language.

John D. Dunne (http://alc.wisc.edu/about/faculty/john-d-dunne) (Professor). Area: Buddhist Philosophy and Contemplative Practice; Religious Studies; Cognitive Science of Religion

## SOUTHEAST ASIA

Erlin Barnard (http://alc.wisc.edu/about/faculty/erlin-barnard) (Faculty Associate) Area: Indonesian Language, Language Pedagogy; Materials Development; Second Language Acquisition

Tyrell Haberkorn (Associate Professor) Area: Violence, Human Rights, Sovereignty, Arbitrary Detention, Land Rights, Agrarian Struggle, Historiographies of Repression, Gender Studies, Socialism, Dissident Literature, Southeast Asia (Thailand).

## LANGUAGE INSTRUCTORS

Language instructors (http://alc.wisc.edu/about/language-instructors) are an integral part of our department, teaching more than 14 languages during the academic year from East (Chinese, Japanese, Korean), South (Hindi, Persian, Sanskrit, Tibetan, Urdu), Southeast (Burmese, Filipino, Hmong, Indonesian, Thai, Vietnamese) Asian Languages.

## UNDERGRADUATE ADVISOR

Undergraduate Advisor:
email Rachel Weiss (rweiss@wisc.edu)
1244 Van Hise Hall
608-890-0138

## STAFF

Department Administrator. email A (tenealon@wisc.edu)lyson Amenda (amenda@wisc.edu) 1240 Van Hise Hall 608-262-0524

Financial Specialist: email Haiyan Wei (haiyanwei@wisc.edu)
1238 Van Hise Hall
608-890-0138

## RESOURCES AND SCHOLARSHIPS

## DEPARTMENT SCHOLARSHIPS

## Cameron G. Keith Memorial Scholarship

This award is given annually to two undergraduate students studying Japanese. This award is annouced during the fall semester, and eligible students may apply. The criteria are: Japanese major, junior or senior standing, cumulative GPA of 3.5 or above, currently taking Japanese, and plan to go into a Japanese related profession. Cameron G. Keith was an East Asian Studies and Economics studies major at UW-Madison who studied abroad in Japan, and later in Nepal. In his memory, the Keith family established these funds in memory of his interest in the region.

## Ellen and William E. Fisher Scholarship

Ellen and William E. Fisher have provided funding for an annual scholarship to be awarded to an undergraduate student at the UWMadison who is studying the Chinese language. According to the terms of the gift agreement, the award is based on merit, therefore there is no application, but faculty will make a determination based on students progressing in the program. Mr. Fisher stipulated that the award must be made in the Fall semester, so that the recipient can use it in the Spring semester.

## Chou Kuo-p'ing Book Award

Several awards will be given each year to undergraduate students who are studying and will continue to study Chinese during the following semester. This award is made possible through a donation by Professor Emerita Chou Kuo-p'ing, the founder of the Chinese program here at the University of Wisconsin-Madison. Professor Chou, a dedicated teacher, devoted her entire career to teaching, promoting and developing Chinese studies in Wisconsin. Professor Chou was very active during her teaching career, and often helped financially disadvantaged students, especially those who excelled in their academic careers despite economic difficulties. Although this award is based mainly on the applicant's academic performance, special consideration is given to those who are financially disadvantaged in order to carry on this tradition.

## Lawrence Louey Merit Scholarship

The Lawrence Louey Merit Scholarship is an annual competition recognizing an undergraduate Chinese major in the Department of Asian Languages and Cultures with a \$1000 award. Eligibility: You must be a graduating senior with a GPA above 3.75 and have taken at least three years of Chinese. An application is required for consideration, including a brief career plan, as well as a research paper from one of your major field courses.

## OTHER CAMPUS RESOURCES

Scholarships@UW-Madison (https://scholarships.wisc.edu/ Scholarships)
This is the primary campus wide portal for applicants, current students, and everyone looking for scholarship opporunities on campus.

[^17]Contact us (https://awards.advising.wisc.edu/schedule-anappointment) to schedule an appointment to discuss which opportunities are right for you.

Foreign Language \& Area Studies (FLAS) Fellowships (https:// flas.wisc.edu)
FLAS fellowships are funded by the U.S. Department of Education and administered by the UW's National Resource Centers to assist students in acquiring foreign language and either area or international studies competencies. FLAS awards are only available for specific languages (https://flas.wisc.edu/Languages.html), and are contingent on federal funding. Please direct any questions to the FLAS Coordinator (https:// flas.wisc.edu/Languages.html)of your chosen language.

Applicants must be U.S. citizens or permanent residents of the United States. Applications by students in professional fields are encouraged. Preference will be given to applicants with a high level of academic ability and with previous language training. Academic Year and Summer FLAS awards are two separate competitions requiring two separate and complete applications.

## NATIONAL SCHOLARSHIPS

Boren Scholarships (http://borenawards.org)
These scholarships provide up to $\$ 20,000$ to U.S. undergraduate students to study abroad in areas of the world that are critical to U.S. interests and underrepresented in study abroad, including Africa, Asia, Central \& Eastern Europe, Eurasia, Latin America, and the Middle East. The countries of Western Europe, Canada, Australia, and New Zealand are excluded. (Full list of preferred countries (http://borenawards.org/ boren_scholarship/preferences.html)) Additionally, all programs must include formal study of an appropriate foreign language. (Full list of preferred languages (http://borenawards.org/boren_scholarship/ preferences.html)). Undergraduates with questions about the Boren Scholarship (https://www.borenawards.org/scholarships/program-basics/boren-scholarship-basics) should contact Matt Geisler (mdgeisler@studyabroad.wisc.edu), Associate Director of International Academic Programs.

Critical Language Scholarship Program (http://www.clscholarship.org)
The CLS program is part of the U.S. Department of State, Bureau of Educational and Cultural Affairs. It is a fully-funded overseas intensive language and cultural immersion program for American undergraduate and graduate students. With the goal of broadening the base of Americans studying and mastering critical languages and to build relationships between the people of the United States and other countries, CLS provides opportunities to a diverse range of students from across the United States at every level of language learning.

The fourteen CLS languages are: Arabic, Azerbaijani, Bangla, Chinese, Hindi, Indonesian, Japanese, Korean, Persian, Punjabi, Russian, Swahili, Turkish, and Urdu.

The CLS Program seeks participants with diverse interests, from a wide variety of fields of study, backgrounds and career paths, with the purpose of representing the full diversity of the United States. Thus, students from all academic disciplines, including business, engineering, law, medicine, science, social sciences, arts and humanities are encouraged to apply.

Campus Representative: Andy Quackenbush (quackenbush@studyabroad.wisc.edu)

The Gilman Scholarship Program is an undergraduate grant program for U.S. citizens of limited financial means to enable them to study abroad, thereby internationalizing their outlook and better preparing them to assume significant roles in the increasingly global economy.

## JAPANESE, B.S.

The Japanese program offers students a range of courses and activities which impart an understanding of the culture and civilization of Japan. With the completion of the four basic years of the language, students will be prepared to handle various types of colloquial Japanese. Most of our majors pursue advanced studies in Japanese linguistics or literature, while others combine an interest in Japan with a degree in business, engineering, history, or international studies.

Majors are urged to begin coursework early, ideally in the freshman or sophomore year. If, however, this is not possible, summer courses at UW-Madison or elsewhere are available which speed the student's progress. Those who have Japanese credits from high school or summer sessions may enter advanced courses on the basis of department recommendation (https://alc.wisc.edu/languages/backgroundquestionnaire).

For more information about the Department of Asian Languages and Cultures visit the department overview (p. 423).

## STUDY ABROAD IN JAPAN

Students may receive residence credit for study abroad through a variety of different programs sponsored by the department. Please contact International Academic Programs (https:// www.studyabroad.wisc.edu) for details.

Students may also receive credit, or gain experience, through various internship opportunities abroad. Please contact International Internship Programs (http://internships.international.wisc.edu) for details.

## STARTING COURSEWORK TOWARDS THE MAJOR

Before declaring the major, students are urged to begin coursework early, ideally in the freshman or sophomore year. If, however, this is not possible, summer courses at UW-Madison or elsewhere are available which speed the student's progress. Those who have Japanese credits from high school or summer sessions may enter advanced courses on the basis of placement tests.

The following courses may be taken with no previous knowledge of Chinese or Japanese:

| Code | Title | Credits |
| :--- | :--- | ---: |
| E ASIAN 101 | First Semester Chinese | 6 |
| E ASIAN 103 | First Semester Japanese | 6 |
| E ASIAN 121 | Elementary Chinese | 3 |
| E ASIAN 123 | Elementary Japanese | 3 |
| E ASIAN/LCA/ | Genres of Asian Religious Writing | 3 |


| E ASIAN/HISTORY/ | Asian Religions in Global | $3-4$ |
| :--- | :--- | ---: |
| RELIG ST 267 | Perspective |  |
| E ASIAN/HISTORY/ | Introduction to Buddhism | $3-4$ |
| LCA/RELIG ST 308 |  | $3-4$ |
| E ASIAN 367 | Japanese Poetic Tradition | 3 |
| E ASIAN 434 | Introduction to Japanese <br>  <br> Linguistics | 3 |
| LITTRANS 231 | Manga | 3 |
| LITTRANS 232 | Anime | 3 |
| LITTRANS 263 | Survey of Japanese Literature in <br> Translation |  |
| LITTRANS 264 | Survey of Japanese Literature in <br>  <br> Translation | 3 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 372 | Classical Japanese Prose in <br> Translation | 3 |
| LITTRANS 373 | Topics in Japanese Literature | 3 |

## HOW TO GET IN

## PLACEMENT TESTS

The department requires that students who are new to our program take a placement test before enrolling in a language course beyond the first semester level. More information here. (http://alc.wisc.edu/ undergraduate-majors/japanese/placement)

## DECLARING THE MAJOR

Students may declare the major at any time during their undergraduate career and their study of Japanese. You are urged to meet with the undergraduate advisor (rweiss@wisc.edu) in advance of declaring the major to discuss the requirements

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign <br> Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title |
| :--- | :--- |
| First and Second Year Language | Credits |
| First Year Japanese, select one of the following options: |  |
| E ASIAN 103 | First Semester Japanese <br> and Second Semester Japanese (or <br> equivalent) |
| E ASIAN 104 123 Elementary Japanese <br> \& E ASIAN 124 and Elementary Japanese <br> a E ASIAN 104 |  |

Second Year Japanese

| E ASIAN 203 | Third Semester Japanese |
| :--- | :--- |
| \& E ASIAN 204 | and Fourth Semester Japanese (or <br> equivalent) |

## 28 credits of Advanced Studies

Third Year Japanese
E ASIAN 303 Fifth Semester Japanese 8
\& E ASIAN 304 and Sixth Semester Japanese
Fourth Year Japanese
E ASIAN $403 \quad$ Seventh Semester Japanese 6
\& E ASIAN 404 and Eighth Semester Japanese
Pre-Modern Japanese Literature Survey
E ASIAN 353 Survey of Japanese Literature (or 3 equivalent)
Modern Japanese Literature Survey

| ASIAN 355 | Modern Japanese Literature | 3 |
| :--- | :--- | ---: |
| Japanese History |  | $3-4$ |
| ASIAN 253 | Japanese Popular Culture |  |
| or HISTORY/ <br> E A STDS 104 | Introduction to East Asian History: Japan |  |
| Select 5 credits from the following: | 5 |  |


| Select 5 credits from the following: |  |
| :--- | :--- |
| E ASIAN 323 | First Year Classical Japanese |
| E ASIAN 335 | Intermediate Japanese <br> Conversation |
| E ASIAN 358 | Language in Japanese Society <br> E ASIAN 361 |
| Masterworks of Japanese |  |
| E ASIAN 367 | Literature: The Tale of Genji |
| E ASIAN 376 | Manga. |
| E ASIAN/ | Business Japanese Communication |
| E P D 377 | Topics in Japanese: Study Abroad Tradition |
| E ASIAN 373 | Anime |
| E ASIAN 378 |  |


| E ASIAN 434 | Introduction to Japanese <br> Linguistics |
| :--- | :--- |
| E ASIAN 563 | Readings in Modern Japanese <br> Literature |
| E ASIAN 564 | Readings in Modern Japanese <br> Literature |
| E ASIAN 573 | Readings in Classical Japanese <br> Literature |
| E ASIAN 574 | Readings in Classical Japanese <br> Literature |
| E ASIAN 681 | Senior Honors Thesis <br> E ASIAN 682 |
| E ASIAN 691 | Senior Honors Thesis |
| E ASIAN 692 | Senior Thesis |
| E ASIAN 699 | Directed Study <br> LITTRANS 368 <br> Modern Japanese Fiction |
| LITTRANS 372 | Classical Japanese Prose in <br> Translation |
| LITTRANS 373 | Topics in Japanese Literature |
| Total Credits |  |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all courses that count toward the major
2.000 GPA in 15 upper-level major credits in residence ${ }^{1}$

15 credits, in the major, taken on campus
${ }^{1}$ Courses in Japanese that count toward upper-level major requirement are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 323 | First Year Classical Japanese | 3 |
| E ASIAN 335 | Intermediate Japanese Conversation | 3 |
| E ASIAN 353 | Survey of Japanese Literature | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 358 | Language in Japanese Society | 3 |
| E ASIAN 361 | Masterworks of Japanese Literature: The Tale of Genji | 3 |
| E ASIAN 367 | Japanese Poetic Tradition | 3-4 |
| E ASIAN/E P D 377 | Business Japanese Communication | 3 |
| E ASIAN 378 | Anime | 3 |
| E ASIAN 403 | Seventh Semester Japanese | 3 |
| E ASIAN 404 | Eighth Semester Japanese | 3 |
| E ASIAN 434 | Introduction to Japanese Linguistics | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |


| E ASIAN 681 | Senior Honors Thesis | 3 |
| :--- | :--- | ---: |
| E ASIAN 682 | Senior Honors Thesis | 3 |
| E ASIAN 691 | Senior Thesis | 3 |
| E ASIAN 692 | Senior Thesis | 3 |
| E ASIAN 699 | Directed Study | $2-3$ |
| HISTORY/ | Samurai: History and Image | $3-4$ |
| E A STDS 454 | Modern Japanese Fiction | 3 |
| LITTRANS 368 | Classical Japanese Prose in | 3 |
| LITTRANS 372 | Translation | 3 |

## DISTINCTION IN THE MAJOR

Students majoring in Japanese who are not enrolled in the honors program may earn distinction in the major by completing:

1. the L\&S general degree requirements, and
2. the junior-senior honors curriculum.

Fifteen honors credits are required in courses at the 300 level or higher, including a Senior Honors Thesis of 6 credits, E ASIAN 681 Senior Honors Thesis-E ASIAN 682 Senior Honors Thesis.

## HONORS IN THE MAJOR

Students may declare Honors in the Japanese Major in consultation with the Japanese undergraduate advisor.

## HONORS IN THE JAPANESE MAJOR: REQUIREMENTS

To earn Honors in the Major in Japanese, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all courses accepted in the major
- Complete the following courses:
- Either E ASIAN 699 Directed Study or other appropriate course of 3-4 credits with the major professor, under whose guidance a student intends to write a thesis. This course must be taken before taking the Senior Honors Thesis and must be completed with a grade of B or better.
- Complete a two-semester Senior Honors Thesis in E ASIAN 681 Senior Honors Thesis and E ASIAN 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Understand the content and cultural context of written texts and video materials with a large degree of independence, adapting style and speed of comprehension to different texts and purposes, and using appropriate reference sources selectively.
2. Spontaneously exchange ideas about various topics with relative ease.
3. State and support one's own opinion while acknowledging others' viewpoints.
4. Demonstrate an awareness of the importance of pragmatic, sociolinguistic, and rhetorical features of the target language.
5. Conduct library and/or internet-based research on topics relating to their particular interests and special fields of expertise, collecting and selecting relevant information using English and target language source materials.
6. Synthesize and critically evaluate source materials in both English and the target language.
7. Present (orally or in written language) their experiences and their introspection on these experiences in a coherent and effective manner.
8. Demonstrate cultural awareness across historical epochs.
9. Produce effective academic writing in English.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISOR

## Rachel Weiss

1244 Van Hise Hall
608-890-0138
rweiss@wisc.edu
Schedule an advising appointment (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/fUerTooa.html)

Rachel is the advisor for the undergraduate majors and certificates in the Department of Asian Languages and Cultures. She is happy to meet with students as they explore the degree options or advance through their four-year plans.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## INTERNATIONAL DIRECTIONS ADVISING LANGUAGE INSTITUTE

The Language Institute (https://languages.wisc.edu) provides academic and career advising to undergraduate students interested in languages and international area studies. The International Directions advisor provides academic and career advising to undergraduate students who are interested in languages and international area studies. Learn more (https://languages.wisc.edu/advising).

## PEOPLE

## FACULTY

Asian Languages and Cultures is home to nearly twenty faculty whose research and teaching specialities range from medical humanities in India, the Hinduist roots of yoga, or inflecting contemporary mindfulness practice with insights from Tibetan buddhism, to human rights in Thailand - from Chinese ghost stories, traditional Sinology, and mathematically inflected Chinese philology, to sociolinguistics, discourse analysis, and pragmatics in Mandarin, Japanese, Korean, and Indonesian - and from critical reading of late-Heian tale fiction, early modern Japanese comedic narratives, and haiku, to manga, anime, and Japanese counterculture.

## EAST ASIA

Charo D'Etcheverry (http://alc.wisc.edu/about/faculty/charo-detcheverry) (Associate Professor). Area: Classical Japanese Literature

Naomi Geyer (http://alc.wisc.edu/about/faculty/naomi-geyer) (Associate Professor). Area: Japanese Language

Rania Huntington (http://alc.wisc.edu/about/faculty/rania-huntington) (Professor). Area: Ming and Qing Narrative and Drama, Chinese Literature of the weird and supernatural

Adam L. Kern (http://alc.wisc.edu/about/faculty/adam-l-kern)
(Professor). Area: Popular Literature, Culture, Poetry, Theater, and Visual Culture of early modern-modern Japan.

Byung-jin Lim (http://alc.wisc.edu/about/faculty/byung-jin-lim) (Associate Professor) .Area: Korean Language and Linguistics, Second / Foreign Language Acquisition, Korean Language Textbook Development

Junko Mori (http://alc.wisc.edu/about/faculty/steve-ridgely) (Professor). Area: Japanese Linguistics, Applied Linguistics, Sociolinguistics

Takako Nakakubo (http://alc.wisc.edu/about/faculty/takako-nakakubo) (Faculty Associate). Area: Second Language Acquisition of Japanese, Japanese Pedagogy

William Nienhauser (http://alc.wisc.edu/about/faculty/williamnienhauser) (Professor). Area: Early Traditional Chinese Fiction and History; early poetry (Du Fu and Tao Qian)

Steve Ridgely (http://alc.wisc.edu/about/faculty/steve-ridgely) (Associate Professor). Area: Modern Japanese Literature, Pop culture, TransAsian studies

Hongming Zhang (http://alc.wisc.edu/about/faculty/hongming-zhang) (Professor). Area: Chinese Linguistics; History of Chinese Language; Teaching Chinese as a Second Language

Weihua Zhu (http://alc.wisc.edu/about/faculty/weihua-zhu) (Assistant Professor). Area: Chinese Language, Pedagogy and Second Language Acquisition

## SOUTH ASIA

Gudrun Bühnemann (http://alc.wisc.edu/about/faculty/gudrun-b \%C3\%BChnemann) (Professor). Area: Sanskrit Language and Literature; Buddhism in India and Nepal; Hinduism; Tantrism; Yoga Studies

Anthony Cerulli (http://alc.wisc.edu/about/faculty/anthony-cerulli) (Associate Professor). Area: Theory and Method in the Study of Religion in South Asia; History of Medicine in India; Sanskrit Language and Literature; Kerala History and Culture; Malayalam Language.

John D. Dunne (http://alc.wisc.edu/about/faculty/john-d-dunne) (Professor). Area: Buddhist Philosophy and Contemplative Practice; Religious Studies; Cognitive Science of Religion

## SOUTHEAST ASIA

Erlin Barnard (http://alc.wisc.edu/about/faculty/erlin-barnard) (Faculty Associate) Area: Indonesian Language, Language Pedagogy; Materials Development; Second Language Acquisition

Tyrell Haberkorn (Associate Professor) Area: Violence, Human Rights, Sovereignty, Arbitrary Detention, Land Rights, Agrarian Struggle, Historiographies of Repression, Gender Studies, Socialism, Dissident Literature, Southeast Asia (Thailand)

## LANGUAGE INSTRUCTORS

Language instructors (http://alc.wisc.edu/about/language-instructors) are an integral part of our department, teaching more than 14 languages during the academic year from East (Chinese, Japanese, Korean), South (Hindi, Persian, Sanskrit, Tibetan, Urdu), Southeast (Burmese, Filipino, Hmong, Indonesian, Thai, Vietnamese) Asian Languages.

## UNDERGRADUATE ADVISOR

Undergraduate Advisor
email Rachel Weiss (rweiss@wisc.edu)
1244 Van Hise Hall
608-890-0138
STAFF
Department Administrator:
email A (tenealon@wisc.edu)lyson Amenda (amenda@wisc.edu)
1240 Van Hise Hall
608-262-0524

Financial Specialist:
email Haiyan Wei (haiyanwei@wisc.edu)
1238 Van Hise Hall
608-890-0138

## RESOURCES AND SCHOLARSHIPS

## DEPARTMENT SCHOLARSHIPS


#### Abstract

Cameron G. Keith Memorial Scholarship

This award is given annually to two undergraduate students studying Japanese. This award is annouced during the fall semester, and eligible students may apply. The criteria are: Japanese major, junior or senior standing, cumulative GPA of 3.5 or above, currently taking Japanese, and plan to go into a Japanese related profession. Cameron G. Keith was an East Asian Studies and Economics studies major at UW-Madison who studied abroad in Japan, and later in Nepal. In his memory, the Keith family established these funds in memory of his interest in the region.


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Several awards will be given each year to undergraduate students who are studying and will continue to study Chinese during the following semester. This award is made possible through a donation by Professor Emerita Chou Kuo-p'ing, the founder of the Chinese program here at the University of Wisconsin-Madison. Professor Chou, a dedicated teacher, devoted her entire career to teaching, promoting and developing Chinese studies in Wisconsin. Professor Chou was very active during her teaching career, and often helped financially disadvantaged students, especially those who excelled in their academic careers despite economic difficulties. Although this award is based mainly on the applicant's academic performance, special consideration is given to those who are financially disadvantaged in order to carry on this tradition.

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## OTHER CAMPUS RESOURCES

Scholarships@UW-Madison (https://scholarships.wisc.edu/ Scholarships)
This is the primary campus wide portal for applicants, current students, and everyone looking for scholarship opporunities on campus.

[^18]Foreign Language \& Area Studies (FLAS) Fellowships (https:// flas.wisc.edu)
FLAS fellowships are funded by the U.S. Department of Education and administered by the UW's National Resource Centers to assist students in acquiring foreign language and either area or international studies competencies. FLAS awards are only available for specific languages (https://flas.wisc.edu/Languages.html), and are contingent on federal funding. Please direct any questions to the FLAS Coordinator (https:// flas.wisc.edu/Languages.html) of your chosen language.

Applicants must be U.S. citizens or permanent residents of the United States. Applications by students in professional fields are encouraged. Preference will be given to applicants with a high level of academic ability and with previous language training. Academic Year and Summer FLAS awards are two separate competitions requiring two separate and complete applications.

## NATIONAL SCHOLARSHIPS

Boren Scholarships (http://borenawards.org)
These scholarships provide up to $\$ 20,000$ to U.S. undergraduate students to study abroad in areas of the world that are critical to U.S. interests and underrepresented in study abroad, including Africa, Asia, Central \& Eastern Europe, Eurasia, Latin America, and the Middle East. The countries of Western Europe, Canada, Australia, and New Zealand are excluded. (Full list of preferred countries (http://borenawards.org/ boren_scholarship/preferences.html)) Additionally, all programs must include formal study of an appropriate foreign language. (Full list of preferred languages (http://borenawards.org/boren_scholarship/ preferences.html)). Undergraduates with questions about the Boren Scholarship (https://www.borenawards.org/scholarships/program-basics/boren-scholarship-basics) should contact Matt Geisler
(mdgeisler@studyabroad.wisc.edu), Associate Director of International Academic Programs.

Critical Language Scholarship Program (http://www.clscholarship.org)
The CLS program is part of the U.S. Department of State, Bureau of Educational and Cultural Affairs. It is a fully-funded overseas intensive language and cultural immersion program for American undergraduate and graduate students. With the goal of broadening the base of Americans studying and mastering critical languages and to build relationships between the people of the United States and other countries, CLS provides opportunities to a diverse range of students from across the United States at every level of language learning.

The fourteen CLS languages are: Arabic, Azerbaijani, Bangla, Chinese, Hindi, Indonesian, Japanese, Korean, Persian, Punjabi, Russian, Swahili, Turkish, and Urdu.

The CLS Program seeks participants with diverse interests, from a wide variety of fields of study, backgrounds and career paths, with the purpose of representing the full diversity of the United States. Thus, students from all academic disciplines, including business, engineering, law, medicine, science, social sciences, arts and humanities are encouraged to apply.

## Gilman Scholarship Program <br> Campus Representative: Andy Quackenbush <br> (quackenbush@studyabroad.wisc.edu)

The Gilman Scholarship Program is an undergraduate grant program for U.S. citizens of limited financial means to enable them to study abroad, thereby internationalizing their outlook and better preparing them to assume significant roles in the increasingly global economy.

## LANGUAGES AND CULTURES OF ASIA, B.A.

Admissions to the Languages and Cultures B.A. has been suspended as of fall 2014. If you have any questions, please contact the department (rweiss@wisc.edu).

A new undergraduate program in Asian languages and cultures is under development. The plan includes multiple options, such as East Asian studies, South Asian studies, and Southeast Asian studies, as well as a non-region-specific "Trans-Asian" option. These new programs will commence in fall 2019. Students interested in learning more about the program requirements can meet with the undergraduate advisor. Contact Rachel Weiss, rweiss@wisc.edu, for more information.

## LANGUAGES AND CULTURES OF ASIA, B.S.

Admissions to the Languages and Cultures B.S. has been suspended as of fall 2014. If you have any questions, please contact the department (rweiss@wisc.edu).

A new undergraduate program in Asian languages and cultures is under development. The plan includes multiple options, such as East Asian studies, South Asian studies, and Southeast Asian studies, as well as
a non-region-specific "Trans-Asian" option. These new programs will commence in fall 2019. Students interested in learning more about the program requirements can meet with the undergraduate advisor. Contact Rachel Weiss, rweiss@wisc.edu, for more information.

## ASTRONOMY

Astronomy, the oldest of the sciences, for the last several decades has been one of the most exciting fields of modern scientific research. New discoveries concerning the solar system, stars, galaxies, and the origin of the universe continue to be made by both ground and space telescopes. To understand and pursue modern astronomy, one must have a solid background in physics and mathematics as well as in astronomy.

The astronomy-physics major, administered by the Department of Astronomy, provides undergraduates the opportunity to appreciate our current understanding of the astronomical universe, while developing the necessary physics and math background. Students who intend to continue astronomy in a graduate program are strongly encouraged to do a Senior Thesis ASTRON 691/ASTRON 692 or Senior Honors Thesis ASTRON 681/ASTRON 682. The experiences of actual research and of writing a major paper develop both technical and writing skills.

## DEGREES/MAJORS/CERTIFICATES

- Astronomy-Physics, B.A. (p. 460)
- Astronomy-Physics, B.S. (p. 463)


## PEOPLE

Professors Barger, Bershady, Heinz, Lazarian, Mathieu, Stanimirovic, Wilcots, Zweibel

Associate Professors Townsend, Tremonti

Assistant Professor D'Onghia

## ASTRONOMY-PHYSICS, B.A.

Astronomy, the oldest of the sciences, for the last several decades has been one of the most exciting fields of modern scientific research. New discoveries concerning the solar system, stars, galaxies, and the origin of the universe continue to be made by both ground and space telescopes. To understand and pursue modern astronomy, one must have a solid background in physics and mathematics as well as in astronomy.

The astronomy-physics major, administered by the Department of Astronomy, provides undergraduates the opportunity to appreciate our current understanding of the astronomical universe, while developing the necessary physics and math background. Students who intend to continue astronomy in a graduate program are strongly encouraged to do a Senior Thesis ASTRON 691/ASTRON 692 or Senior Honors Thesis ASTRON 681/ASTRON 682. The experiences of actual research and of writing a major paper develop both technical and writing skills.

## HOW TO GET IN

Students are encouraged to declare their major as early as possible. Before declaring the major, students must complete the first two of the three classes in the Introductory PHYSICS sequence.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :---: | :---: |
| Language | - Complete the third unit of a foreign language and the second unit of an additional foreign language <br> Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UW- <br> Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major requires a minimum of 34 credits in the field of specialization, with at least 6 of these credits in ASTRON and at least 28 credits in PHYSICS.

## COURSE REQUIREMENTS FOR THE MAJOR ARE:

| Code Astronomy ${ }^{1}$ | Title | Credits |
| :---: | :---: | :---: |
| Select at least two of the following: |  | 6 |
| ASTRON 310 | Stellar Astrophysics ${ }^{2}$ |  |
| ASTRON 320 | The Interstellar Medium |  |
| ASTRON 330 | Galaxies ${ }^{2}$ |  |
| ASTRON 335 | Cosmology ${ }^{2}$ |  |
| ASTRON 340 | Solar System Astrophysics |  |


| ASTRON 500 | Techniques of Modern <br> Observational Astrophysics |
| :--- | :--- |

## Physics

Select one of the following sequences for Introductory
Physics: ${ }^{3}$
Option 1 (Recommended Sequence):

| PHYSICS 247 | A Modern Introduction to Physics |
| ---: | :--- |
| PHYSICS 248 | A Modern Introduction to Physics |
| PHYSICS 249 | A Modern Introduction to Physics |
| Option 2: |  |
| PHYSICS 201 | General Physics |
| PHYSICS 202 | General Physics |
| PHYSICS 205 | Modern Physics for Engineers |
| Option 3: |  |
| PHYSICS 207 | General Physics |
| PHYSICS 208 | General Physics |
| PHYSICS 241 | Introduction to Modern Physics |

Additional PHYSICS to reach minimum of 34 credits, to include the following:

| PHYSICS 311 | Mechanics |
| :--- | :--- |
| PHYSICS 322 | Electromagnetic Fields |
| PHYSICS 415 | Thermal Physics |
| PHYSICS 448 | Atomic and Quantum Physics |
| \& PHYSICS 449 | and Atomic and Quantum Physics |
| or PHYSICS 531 Introduction to Quantum Mechanics |  |
| Select a 300-level or higher laboratory course: |  |
| ASTRON 510 | Radio Astronomy Laboratory |
| PHYSICS 308 | Intermediate Laboratory- <br>  <br> PHYSICS 321 |

Total Credits
34
1 ASTRON 103 The Evolving Universe: Stars, Galaxies, and Cosmology and ASTRON 104 Our Exploration of the Solar System are not required for majors.
2 ASTRON 310 Stellar Astrophysics is a prerequisite for ASTRON 330 Galaxies, ASTRON 335 Cosmology, and ASTRON 500 Techniques of Modern Observational Astrophysics.
3
E M A 201 Statics, E M A 202 Dynamics, and M E 240 Dynamics count toward the 28 credits of PHYSICS requirement. E M A 201 \& E M A 202, or E M A 201 \& M E 240 count as a first semester, introductory course (e.g., PHYSICS 247, PHYSICS 201, PHYSICS 207).

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all ASTRON, PHYSICS and major courses
2.000 GPA on 15 upper-level major credits in residence: ASTRON 300 through 699 and PHYSICS 300 through 699

15 credits in the ASTRON and PHYSICS, taken on campus

## HONORS IN THE MAJOR

Students may declare Honors in the Astronomy-Physics Major in consultation with the Astronomy-Physics undergraduate advisor(s).

## HONORS IN THE MAJOR IN ASTRONOMY-PHYSICS: REQUIREMENTS

To earn Honors in the Major in Astronomy-Physics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all ASTRON and PHYSICS courses, and all courses accepted in the major, at the 300 level or higher
- Complete the following coursework:
- Four 300-level or higher ASTRON courses, with a 3.500 GPA
- A two-semester Senior Honors Thesis in ASTRON 681 Senior Honors Thesis and ASTRON 682 Senior Honors Thesis, with a grade of AB or better, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
|  | Abroad/Study Away programs. |
| Quality of | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Learn how astronomical observations are made and how astronomical data are analyzed. Become acquainted with basic principles of astronomical imaging and spectroscopy, detectors, and interferometry. Apply simple statistical concepts learned previously in required laboratory courses to astronomical data. Use simple scientific computing methods to plan astronomical observations and analyze astronomical data.
2. Become familiar with current astrophysical theories and observations of basic systems such as planets, stars, interstellar gas, galaxies, and structure of the Universe (cosmology). Learn to apply physical principles and mathematical techniques learned previously in required courses to understand the natural laws governing these systems. Use simple scientific computing methods to analyze and physically interpret numerical models of astronomical systems.
3. Learn how to read and critically evaluate scientific literature. Grasp the main points, scientific goals, and research methods used in an article and discern whether the article supports or conflicts with material presented elsewhere.
4. Learn the basics of oral and written scientific communication. Written coursework will be assessed on the basis of clear writing, appropriate level of detail in reporting calculations, and computations and appropriate bibliographic references and citations as well as on scientific accuracy. Learn to give clear and accurate short oral presentations with appropriate supporting materials.
5. Be trained in principles and standards of professional and ethical conduct. Learn when and how to cite references and when it is appropriate to credit the contributions of others or claim credit for one's own work. Learn what constitutes a professional or unprofessional demeanor and how to apply principles of equality in an educational or workplace setting. Learn how to address a breakdown of professional ethics and standards if experienced or observed.
6. Develop the skills to carry out a small independent research project. Learn to define the scope of the project, how to conduct an effective literature search, and perform computations, analyze data, and report on the literature as appropriate. Learn the basics of presenting the results of the project, whether as a paper, poster, talk, or some combination. The project may involve group work, or teamwork, depending on logistics and the nature of the project. Note: Not all Astronomy majors engage in independent research; this learning goal applies only to majors who have a formal research advisor to perform the assessment.

## ADVISING AND CAREERS

## ADVISING

For premajor advising and major advising, students should contact Undergraduate Advisor Eric Schueffner at elschueffner@wisc.edu (sstanimi@astro.wisc.edu), or Faculty Advisors: Professor Richard Townsend (4550 Sterling Hall, townsend@astro.wisc.edu) and Professor Snezana Stanimirovic, ( 4514 Sterling Hall, sstanimi@astro.wisc.edu).

We encourage students to meet major advisors as early as possible. Undergraduate advisor Eric Schueffner can assist students with curriculum and course scheduling, career planning, academic concerns, and overall performance and strategies.

Additional information and handouts on the major are available in the office of the undergraduate coordinator Sharon Pittman (2554 Sterling Hall, pittman@astro.wisc.edu (townsend@astro.wisc.edu)).

To declare the astronomy-physics major, please contact Professor Townsend or Professor Stanimirovic to schedule an appointment.

## RECOMMENDED ADDITIONAL COURSES

Math: Mathematics courses other than those required as prerequisites for PHYSICS courses are not required for the major, but the following courses are recommended: MATH 319 Techniques in Ordinary Differential Equations, MATH 321 Applied Mathematical Analysis and MATH 322 Applied Mathematical Analysis. If a student plans to work toward the Ph.D degree, the student should also take MATH 320 Linear Algebra and Differential Equations or MATH 340 Elementary Matrix and Linear Algebra. Additional mathematics (or statistics) courses should be chosen after consultation with the undergraduate advisor.

Computing: Computers are fundamental to astronomical research. An introduction through Introduction to Programming, or short courses run by the computing center should be considered.

Chemistry: A college course in physical or organic chemistry is useful for astronomy students. Physical chemistry is particularly valuable for those interested in the interstellar medium, comets, and planets.

Statistics: A background in statistics is valuable, particularly for students interested in observational astronomy. STAT 301 Introduction to Statistical Methods, or STAT/MATH 309 Introduction to Probability and Mathematical Statistics I/STAT/MATH 310 Introduction to Probability and Mathematical Statistics II for a more solid foundation, are suggested.

Languages: French, German, Russian, and especially Spanish are the most useful foreign languages for astronomy students, but are not required.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Barger, Bershady, Heinz, Lazarian, Mathieu,
Stanimirovic, Wilcots, Zweibel
Associate Professors Townsend, Tremonti
Assistant Professor D'Onghia

## ASTRONOMY-PHYSICS, B.S.

Astronomy, the oldest of the sciences, for the last several decades has been one of the most exciting fields of modern scientific research. New discoveries concerning the solar system, stars, galaxies, and the origin of the universe continue to be made by both ground and space telescopes. To understand and pursue modern astronomy, one must have a solid background in physics and mathematics as well as in astronomy.

The astronomy-physics major, administered by the Department of Astronomy, provides undergraduates the opportunity to appreciate our current understanding of the astronomical universe, while developing the necessary physics and math background. Students who intend to continue astronomy in a graduate program are strongly encouraged to
do a Senior Thesis ASTRON 691/ASTRON 692 or Senior Honors Thesis ASTRON 681/ASTRON 682. The experiences of actual research and of writing a major paper develop both technical and writing skills.

## HOW TO GET IN

Students are encouraged to declare their major as early as possible. Before declaring the major, students must complete the first two of the three classes in the Introductory PHYSICS sequence.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign
Language

Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of | 60 intermediate or advanced credits |
| Intermediate/ |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major requires a minimum of 34 credits in the field of specialization, with at least 6 of these credits in ASTRON and at least 28 credits in PHYSICS.

COURSE REQUIREMENTS FOR THE MAJOR ARE:


Option 1 (Recommended Sequence):

| PHYSICS 247 | A Modern Introduction to Physics |
| :---: | :--- |
| PHYSICS 248 | A Modern Introduction to Physics |
| PHYSICS 249 | A Modern Introduction to Physics |
| Option 2: |  |
| PHYSICS 201 | General Physics |
| PHYSICS 202 | General Physics |
| PHYSICS 205 | Modern Physics for Engineers |
| Option 3: |  |
| PHYSICS 207 | General Physics |
| PHYSICS 208 | General Physics |
| PHYSICS 241 | Introduction to Modern Physics |

Additional PHYSICS to reach minimum of 34 credits, to include the following:

| PHYSICS 311 | Mechanics |
| :---: | :---: |
| PHYSICS 322 | Electromagnetic Fields |
| PHYSICS 415 | Thermal Physics |
| PHYSICS 448 <br> \& PHYSICS 449 <br> or PHYSICS 531 | Atomic and Quantum Physics and Atomic and Quantum Physics Introduction to Quantum Mechanics |
| Select a 300-level or higher laboratory course: |  |
| ASTRON 510 | Radio Astronomy Laboratory |
| PHYSICS 308 | Intermediate LaboratoryElectromagnetic Fields and Optics |
| PHYSICS 321 | Electric Circuits and Electronics |
| Total Credits |  |

ASTRON 103 The Evolving Universe: Stars, Galaxies, and Cosmology and ASTRON 104 Our Exploration of the Solar System are not required for majors.
2
ASTRON 310 Stellar Astrophysics is a prerequisite for ASTRON 330 Galaxies, ASTRON 335 Cosmology, and ASTRON 500 Techniques of Modern Observational Astrophysics.
3 E M A 201 Statics, E M A 202 Dynamics, and M E 240 Dynamics count toward the 28 credits of PHYSICS requirement. E M A 201 \& E M A 202, or E M A 201 \& M E 240 count as a first semester, introductory course (e.g., PHYSICS 247, PHYSICS 201, PHYSICS 207).

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all ASTRON, PHYSICS and major courses
2.000 GPA on 15 upper-level major credits in residence: ASTRON 300 through 699 and PHYSICS 300 through 699

15 credits in the ASTRON and PHYSICS, taken on campus

## HONORS IN THE MAJOR

Students may declare Honors in the Astronomy-Physics Major in consultation with the Astronomy-Physics undergraduate advisor(s).

## HONORS IN THE MAJOR IN ASTRONOMY-PHYSICS: REQUIREMENTS

To earn Honors in the Major in Astronomy-Physics, students must satisfy both the requirements for the major (above) and the following additional requirements:

[^19]- Earn a 3.500 GPA for all ASTRON and PHYSICS courses, and all courses accepted in the major, at the 300 level or higher
- Complete the following coursework:
- Four 300-level or higher ASTRON courses, with a 3.500 GPA
- A two-semester Senior Honors Thesis in ASTRON 681 Senior Honors Thesis and ASTRON 682 Senior Honors Thesis, with a grade of $A B$ or better, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |

## LEARNING OUTCOMES

1. Learn how astronomical observations are made and how astronomical data are analyzed. Become acquainted with basic principles of astronomical imaging and spectroscopy, detectors, and interferometry. Apply simple statistical concepts learned previously in required laboratory courses to astronomical data. Use simple scientific computing methods to plan astronomical observations and analyze astronomical data.
2. Become familiar with current astrophysical theories and observations of basic systems such as planets, stars, interstellar gas, galaxies, and structure of the Universe (cosmology). Learn to apply physical principles and mathematical techniques learned previously in required courses to understand the natural laws governing these systems. Use simple scientific computing methods to analyze and physically interpret numerical models of astronomical systems.
3. Learn how to read and critically evaluate scientific literature. Grasp the main points, scientific goals, and research methods used in an article and discern whether the article supports or conflicts with material presented elsewhere.
4. Learn the basics of oral and written scientific communication. Written coursework will be assessed on the basis of clear writing, appropriate level of detail in reporting calculations, and computations and appropriate bibliographic references and citations as well as on scientific accuracy. Learn to give clear and accurate short oral presentations with appropriate supporting materials.
5. Be trained in principles and standards of professional and ethical conduct. Learn when and how to cite references and when it is
appropriate to credit the contributions of others or claim credit for one's own work. Learn what constitutes a professional or unprofessional demeanor and how to apply principles of equality in an educational or workplace setting. Learn how to address a breakdown of professional ethics and standards if experienced or observed.
6. Develop the skills to carry out a small independent research project. Learn to define the scope of the project, how to conduct an effective literature search, and perform computations, analyze data, and report on the literature as appropriate. Learn the basics of presenting the results of the project, whether as a paper, poster, talk, or some combination. The project may involve group work, or teamwork, depending on logistics and the nature of the project. Note: Not all Astronomy majors engage in independent research; this learning goal applies only to majors who have a formal research advisor to perform the assessment.

## ADVISING AND CAREERS

## ADVISING

For premajor advising and major advising, students should contact Undergraduate Advisor Eric Schueffner at elschueffner@wisc.edu (sstanimi@astro.wisc.edu), or Faculty Advisors: Professor Richard Townsend (4550 Sterling Hall, townsend@astro.wisc.edu) and Professor Snezana Stanimirovic, (4514 Sterling Hall, sstanimi@astro.wisc.edu).

We encourage students to meet major advisors as early as possible. Undergraduate advisor Eric Schueffner can assist students with curriculum and course scheduling, career planning, academic concerns, and overall performance and strategies.

Additional information and handouts on the major are available in the office of the undergraduate coordinator Sharon Pittman (2554 Sterling Hall, pittman@astro.wisc.edu (townsend@astro.wisc.edu)).

To declare the astronomy-physics major, please contact Professor Townsend or Professor Stanimirovic to schedule an appointment.

## RECOMMENDED ADDITIONAL COURSES

Math: Mathematics courses other than those required as prerequisites for PHYSICS courses are not required for the major, but the following courses are recommended: MATH 319 Techniques in Ordinary Differential Equations, MATH 321 Applied Mathematical Analysis and MATH 322 Applied Mathematical Analysis. If a student plans to work toward the Ph.D degree, the student should also take MATH 320 Linear Algebra and Differential Equations or MATH 340 Elementary Matrix and Linear Algebra. Additional mathematics (or statistics) courses should be chosen after consultation with the undergraduate advisor.

Computing: Computers are fundamental to astronomical research. An introduction through Introduction to Programming, or short courses run by the computing center should be considered.

Chemistry: A college course in physical or organic chemistry is useful for astronomy students. Physical chemistry is particularly valuable for those interested in the interstellar medium, comets, and planets.

Statistics: A background in statistics is valuable, particularly for students interested in observational astronomy. STAT 301 Introduction to Statistical Methods, or STAT/MATH 309 Introduction to Probability and Mathematical Statistics I/STAT/MATH 310 Introduction to

Probability and Mathematical Statistics II for a more solid foundation, are suggested.

Languages: French, German, Russian, and especially Spanish are the most useful foreign languages for astronomy students, but are not required.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)

PEOPLE

Professors Barger, Bershady, Heinz, Lazarian, Mathieu,
Stanimirovic, Wilcots, Zweibel
Associate Professors Townsend, Tremonti
Assistant Professor D'Onghia

## ATMOSPHERIC AND OCEANIC SCIENCES

The study of atmospheric and oceanic sciences includes all aspects of the atmosphere and physical oceanography, their mutual interaction, and their interaction with space and the rest of the earth system. Although a primary goal is to understand the atmosphere and ocean for the purpose of predicting the weather, atmospheric and oceanic sciences embraces much more: motions at large, medium, and small scales; past, present, and future climates; air chemistry and quality; clouds and precipitation; and solar and terrestrial radiation. In many areas, new remote-sensing technology including satellites is used to provide circulation patterns at both global and local scales.

Many undergraduates take an elementary atmospheric and oceanic sciences course to meet part of their natural or physical science breadth requirements. Other students, who have had sufficient mathematics and physics preparation, take higher-level atmospheric and oceanic sciences courses to complement their major work in other fields of natural science. An atmospheric and oceanic sciences major receives a thorough introduction to the basic concepts and tools in the core
courses, which cover the physics and dynamics of the atmosphere and ocean. An array of elective courses are offered in the senior year, with tracks in the areas of weather systems, earth/environmental science, and general and applied atmospheric and oceanic sciences. Elective groups are tailored individually. Some students will want preparation for careers in areas such as operational forecasting, environmental consulting, and broadcasting. Others will seek preparation for graduate work leading to a broader range of careers.

## DEGREES/MAJORS/CERTIFICATES

- Atmospheric and Oceanic Sciences, B.A. (p. 466)
- Atmospheric and Oceanic Sciences, B.S. (p. 470)
- Environmental Sciences, B.A. (L\&S) (p. 473)
- Environmental Sciences, B.S. (L\&S) (p. 481)


## PEOPLE

## EXECUTIVE COMMITTEE

Balster, Nick, Associate Professor, Department of Soil Science Martin, Jonathan, Professor, Department of Atmospheric and Oceanic Sciences
Thompson, Anita, Professor, Department of Biological Systems Engineering

## PROGRAM COMMITTEE

Bertram, Timothy, Associate Professor, Department of Chemistry Grainger, Corbett, Assistant Professor Department of Agricultural and Applied Economics
Harrington, John, Professor, Department of Landscape Architecture Holloway, Tracey, Professor, Nelson Institute for Environmental Studies Hotchkiss, Sara, Professor, Department of Botany
Kanarek, Marty, Professor, Department of Population Health Sciences Schauer, James, Professor, Department of Civil and Environmental Engineering
Stoltenberg, David, Professor, Department of Agronomy

## ATMOSPHERIC AND OCEANIC SCIENCES, B.A.

The study of atmospheric and oceanic sciences includes all aspects of the atmosphere and physical oceanography, their mutual interaction, and their interaction with space and the rest of the earth system. Although a primary goal is to understand the atmosphere and ocean for the purpose of predicting the weather, atmospheric and oceanic sciences embraces much more: motions at large, medium, and small scales; past, present, and future climates; air chemistry and quality; clouds and precipitation; and solar and terrestrial radiation. In many areas, new remote-sensing technology including satellites is used to provide circulation patterns at both global and local scales.

Many undergraduates take an elementary atmospheric and oceanic sciences course to meet part of their natural or physical science breadth requirements. Other students, who have had sufficient mathematics and physics preparation, take higher-level atmospheric and oceanic sciences courses to complement their major work in other fields of natural science. An atmospheric and oceanic sciences major receives a thorough introduction to the basic concepts and tools in the core
courses, which cover the physics and dynamics of the atmosphere and ocean. An array of elective courses are offered in the senior year, with tracks in the areas of weather systems, earth/environmental science, and general and applied atmospheric and oceanic sciences. Elective groups are tailored individually. Some students will want preparation for careers in areas such as operational forecasting, environmental consulting, and broadcasting. Others will seek preparation for graduate work leading to a broader range of careers.

## HOW TO GET IN

Because the atmospheric and oceanic sciences involve applying the principles and techniques of physical science to the fluid atmosphere and ocean, a strong background in mathematics, physics, and chemistry is necessary. Admission to the atmospheric and oceanic sciences major requires a combined grade point average of 2.250 or better in the following courses:

| Code <br> Calculus | Title |
| :--- | :--- |
| Select three semesters equivalent to the following: | Credits |
| MATH 221 | Calculus and Analytic Geometry 1 |
| MATH 222 | Calculus and Analytic Geometry 2 |
| MATH 234 | Calculus--Functions of Several <br> Variables |
| Two semesters, calculus-based physics; |  |
| First semester Physics, one from: |  |
| PHYSICS 207 | General Physics |
| PHYSICS 201 | General Physics |
| PHYSICS 247 | A Modern Introduction to Physics |
| Second semester Physics, one from: |  |
| PHYSICS 208 | General Physics |
| PHYSICS 202 | General Physics |
| PHYSICS 248 | A Modern Introduction to Physics |

## Chemistry

Select any one semester course in subject CHEM

## Computer Sciences

Select one COMP SCI course in programming such as C+ +, Fortran, Python, Matlab or another approved language (or working programming knowledge in one of these languages).

| COMP SCI 301 | Introduction to Data Programming | 3 |
| :--- | :--- | :--- |
| COMP SCI 310 | Problem Solving Using Computers | 3 |
| COMP SCI/E C E 354 | Machine Organization and <br>  <br>  <br> Programming | 3 |
| COMP SCI 412 | Introduction to Numerical Methods | 3 |
| COMP SCI/I SY E/ | Introduction to Combinatorial <br> MATH 425 | Optimization |

A Declaration of Major form must be completed by the student and authorized by the department undergraduate advisor. The undergraduate advisor will require a transcript or DARS report at this time.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts and Science Coursework | 108 credits |
| :---: | :---: |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| Background Requirements |  |  |
| Calculus |  |  |
| Select three semesters equivalent to the following: |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| MATH 234 | Calculus--Functions of Several Variables |  |
| Two semesters, calculus-based physics; |  |  |
| First semester Physics, one from: |  |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| Second semester Physics, one from: |  |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |

## Chemistry

Select any one semester course in subject CHEM

## Computer Sciences

Select one COMP SCI course in programming such as C+
+, Fortran, Python, Matlab or another approved language (or working programming knowledge in one of these languages).

| COMP SCI 301 | Introduction to Data Programming |  |
| :--- | :--- | :--- |
| COMP SCI 310 | Problem Solving Using Computers |  |
| COMP SCI/ | Machine Organization and |  |
| E C E 354 | Programming |  |
| COMP SCl 412 | Introduction to Numerical Methods |  |
| COMP SCI/I SY E/ | Introduction to Combinatorial |  |
| MATH 425 | Optimization | Credits |
| Code | Title |  |
| Core Sequence | 10 |  |
| Complete ten credits in core sequence: |  |  |

ATM OCN $310 \quad$| Dynamics of the Atmosphere and |
| :--- |
| Ocean I |

ATM OCN 311 Dynamics of the Atmosphere and Ocean II
ATM OCN 330 Physics of the Atmosphere and Ocean I
ATM OCN $340 \quad$ Physics of the Atmosphere and Ocean II
Quantitative Analysis
Select at least one course in MATH (MATH/STAT 309
to 632), COMP SCI (COMP SCI 412, 475, 514, 525), or STAT (STAT/MATH 309 to 690)

ATM OCN Electives, to include:
ATM OCN 405 AOS Senior Capstone Seminar ${ }^{2}$
ATM OCN Courses Numbered 400 and higher to reach
12 credits $^{3}$
Total Credits
1 Note that core sequence begins in the fall semester only.
2 The 12 credits of ATM OCN electives, number 400 or higher, shall include at least 1 credit in ATM OCN 405, or an independent study research project, or a senior thesis.

3
No more than 2 of the 12 credits may be earned with internships or directed-study credits.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all ATM OCN and major courses
2.000 GPA on 15 upper-level credits in the major, taken in residence: ATM OCN 300 through ATM OCN 699

15 credits in ATM OCN, taken on campus

## HONORS IN THE MAJOR

Students may declare Honors in the Atmospheric and Oceanic Sciences Major in consultation with the Atmospheric and Oceanic Sciences undergraduate advisor.

## REQUIREMENTS

To earn Honors in the Major in Atmospheric and Oceanic Sciences, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA for all ATM OCN courses, and all courses accepted in the major
- Complete the following additional coursework:
- ATM OCN 601 Challenging Problems of Atmospheric and Oceanic Sciences or ATM OCN 611 Geophysical Fluid Dynamics II and
- A two-semester Senior Honors Thesis in ATM OCN 681 Senior Honors Thesis and ATM OCN 682 Senior Honors Thesis, for a total of 6 credits


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Recognize and describe the fundamental principles and processes associated with the dynamics and thermodynamics of geophysical fluid flows, the basic physics of clouds, aerosols, and precipitation.
2. Recognize and describe the fundamental principles and processes associated with radiation and atmospheric and oceanic radiative transfer.
3. Demonstrate critical thinking skills by identifying a problem, identifying the required information to solve that problem; and formulating and interpreting solutions to that problem using appropriate analytical and/or computational techniques.
4. Apply diagnostic tools to to analyses and numerical model output to diagnose, describe, and interpret the fundamental dynamical and thermodynamical processes at work in synoptic-scale, mesoscale, and large-scale weather systems and climate circulations.
5. Apply fundamental radiative transfer theory to interpret remotelysensed observations of atmospheric and oceanic phenomena.
6. Design and conduct experiments and/or analyze data to test hypotheses in an area of atmospheric or climate sciences.
7. Demonstrate effective scientific communication skills through development and delivery of oral presentations (including poster presentations) and written reports and case studies.

## ADVISING AND CAREERS

## GENERAL ADVISING

Any student interested in the atmospheric and oceanic sciences major should meet with the AOS undergraduate advisor, Eric Schueffner, to discuss steps to complete the necessary prerequisite coursework for the major. Eric can be reached at 608-890-3231 or elschueffner@wisc.edu. A Major Declaration Form must be completed by the student and authorized by Professor Michael Morgan to complete the major declaration process. Professor Morgan can be reached at 608-265-8159 or mcmorgan@wisc.edu. Students should bring a current DARS report to their individual advising appointment.

## CAREER ADVISING

The Department of Atmospheric and Oceanic Sciences encourages majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important that students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## PROFESSORS

Ackerman, Steve
Desai, Ankur
Hitchman, Matt
Holloway, Tracey

Martin, Jonathan
Morgan, Morgan
Petty, Grant
Tripoli, Greg (Chair)
Vimont, Dan

## ASSOCIATE PROFESSORS

Back, Larissa
L'Ecuyer, Tristan

## ATMOSPHERIC AND OCEANIC SCIENCES, B.S.

The study of atmospheric and oceanic sciences includes all aspects of the atmosphere and physical oceanography, their mutual interaction, and their interaction with space and the rest of the earth system. Although a primary goal is to understand the atmosphere and ocean for the purpose of predicting the weather, atmospheric and oceanic sciences embraces much more: motions at large, medium, and small scales; past, present, and future climates; air chemistry and quality; clouds and precipitation; and solar and terrestrial radiation. In many areas, new remote-sensing technology including satellites is used to provide circulation patterns at both global and local scales.

Many undergraduates take an elementary atmospheric and oceanic sciences course to meet part of their natural or physical science breadth requirements. Other students, who have had sufficient mathematics and physics preparation, take higher-level atmospheric and oceanic sciences courses to complement their major work in other fields of natural science. An atmospheric and oceanic sciences major receives a thorough introduction to the basic concepts and tools in the core courses, which cover the physics and dynamics of the atmosphere and ocean. An array of elective courses are offered in the senior year, with tracks in the areas of weather systems, earth/environmental science, and general and applied atmospheric and oceanic sciences. Elective groups are tailored individually. Some students will want preparation for careers in areas such as operational forecasting, environmental consulting, and broadcasting. Others will seek preparation for graduate work leading to a broader range of careers.

## HOW TO GET IN

Because the atmospheric and oceanic sciences involve applying the principles and techniques of physical science to the fluid atmosphere and ocean, a strong background in mathematics, physics, and chemistry is necessary. Admission to the atmospheric and oceanic sciences major requires a combined grade point average of 2.250 or better in the following courses:

| Code | Title | Credits |
| :--- | :--- | :--- |
| Calculus |  |  |

## Calculus

Select three semesters equivalent to the following:

| MATH 221 | Calculus and Analytic Geometry 1 |
| :--- | :--- |
| MATH 222 | Calculus and Analytic Geometry 2 |


| MATH 234 | Calculus--Functions of Several Variables |  |
| :---: | :---: | :---: |
| Two semesters, calculus-based physics; |  |  |
| First semester Physics, one from: |  |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| Second semester Physics, one from: |  |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |
| Chemistry |  |  |
| Select any one semester course in subject CHEM |  |  |
| Computer Sciences |  |  |
| Select one COMP SCI course in programming such as C+ +, Fortran, Python, Matlab or another approved language (or working programming knowledge in one of these languages). |  |  |
| COMP SCI 301 | Introduction to Data Programming | 3 |
| COMP SCI 310 | Problem Solving Using Computers | 3 |
| COMP SCI/ECE 354 | Machine Organization and Programming | 3 |
| COMP SCI 412 | Introduction to Numerical Methods | 3 |
| COMP SCI/I SY E/ <br> MATH 425 | Introduction to Combinatorial Optimization | 3 |

A Declaration of Major form must be completed by the student and authorized by the department undergraduate advisor. The undergraduate advisor will require a transcript or DARS report at this time.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT |
| Limit one each: COMP SCI, STAT |  |


| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| Background Requirements |  |  |
| Calculus |  |  |
| Select three semesters equivalent to the following: |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| MATH 234 | Calculus--Functions of Several Variables |  |
| Two semesters, calculus-based physics; |  |  |
| First semester Physics, one from: |  |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| Second semester Physics, one from: |  |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |
| Chemistry |  |  |
| Select any one semester course in subject CHEM |  |  |
| Computer Sciences |  |  |
| Select one COMP SCI course in programming such as C+ +, Fortran, Python, Matlab or another approved language (or working programming knowledge in one of these languages). |  |  |
| COMP SCI 301 | Introduction to Data Programming |  |
| COMP SCI 310 | Problem Solving Using Computers |  |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { E C E } 354 \end{aligned}$ | Machine Organization and Programming |  |
| COMP SCI 412 | Introduction to Numerical Methods |  |
| COMP SCI/I SY E/ MATH 425 | Introduction to Combinatorial Optimization |  |
| Code | Title | Credits |
| Core Sequence |  |  |
| Complete ten credits in core sequence: ${ }^{1}$ |  | 10 |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I |  |
| ATM OCN 311 | Dynamics of the Atmosphere and Ocean II |  |
| ATM OCN 330 | Physics of the Atmosphere and Ocean I |  |



## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all ATM OCN and major courses
2.000 GPA on 15 upper-level credits in the major, taken in residence: ATM OCN 300 through ATM OCN 699

15 credits in ATM OCN, taken on campus

## HONORS IN THE MAJOR

Students may declare Honors in the Atmospheric and Oceanic Sciences Major in consultation with the Atmospheric and Oceanic Sciences undergraduate advisor.

## REQUIREMENTS

To earn Honors in the Major in Atmospheric and Oceanic Sciences, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA for all ATM OCN courses, and all courses accepted in the major
- Complete the following additional coursework:
- ATM OCN 601 Challenging Problems of Atmospheric and Oceanic Sciences or ATM OCN 611 Geophysical Fluid Dynamics II and
- A two-semester Senior Honors Thesis in ATM OCN 681 Senior Honors Thesis and ATM OCN 682 Senior Honors Thesis, for a total of 6 credits


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Work | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Recognize and describe the fundamental principles and processes associated with the dynamics and thermodynamics of geophysical fluid flows, the basic physics of clouds, aerosols, and precipitation.
2. Recognize and describe the fundamental principles and processes associated with radiation and atmospheric and oceanic radiative transfer.
3. Demonstrate critical thinking skills by identifying a problem, identifying the required information to solve that problem; and formulating and interpreting solutions to that problem using appropriate analytical and/or computational techniques.
4. Apply diagnostic tools to to analyses and numerical model output to diagnose, describe, and interpret the fundamental dynamical and thermodynamical processes at work in synoptic-scale, mesoscale, and large-scale weather systems and climate circulations.
5. Apply fundamental radiative transfer theory to interpret remotelysensed observations of atmospheric and oceanic phenomena.
6. Design and conduct experiments and/or analyze data to test hypotheses in an area of atmospheric or climate sciences.
7. Demonstrate effective scientific communication skills through development and delivery of oral presentations (including poster presentations) and written reports and case studies.

## ADVISING AND CAREERS

## GENERAL ADVISING

Any student interested in the atmospheric and oceanic sciences major should meet with the AOS undergraduate advisor, Eric Schueffner, to discuss steps to complete the necessary prerequisite coursework for the major. Eric can be reached at 608-890-3231 or elschueffner@wisc.edu. A Major Declaration Form must be completed by the student and authorized by Professor Michael Morgan to complete the major declaration process. Professor Morgan can be reached at 608-265-8159 or mcmorgan@wisc.edu. Students should bring a current DARS report to their individual advising appointment.

## CAREER ADVISING

The Department of Atmospheric and Oceanic Sciences encourages majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of

Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important that students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## PROFESSORS

Tripoli, Greg (Chair)
Ackerman, Steve
Desai, Ankur
Hitchman, Matt
Holloway, Tracey
Martin, Jonathan
Morgan, Morgan
Petty, Grant
Vimont, Dan

## ASSOCIATE PROFESSORS

Back, Larissa

L'Ecuyer, Tristan

## ENVIRONMENTAL SCIENCES, B.A. (L\&S)

The environmental sciences major satisfies the growing demand among entry-level students for a rigorous, science-based program that promotes critical thinking and emphasizes environmental problem solving in service to society. The program is designed to prepare graduates who will be highly competitive for entry-level positions in nonprofit and private
sectors, and for master's programs and doctoral research programs in environmental fields. Possible career paths include environmental monitoring, consulting, education, research, and planning, as well as natural resource management, ecology restoration, remediation, water and air quality assessment, sustainability practices, and more. Undergraduates in environmental sciences prepare for a variety of career and graduate school opportunities that require a strong background in the natural sciences. Foundational course work in the major includes calculus, biology, chemistry, and physics. Core and elective course work is fulfilled through diverse offerings from both the College of Agricultural and Life Sciences, and the College of Letters \& Science.

The environmental sciences major can be earned in either the College of Agricultural and Life Sciences (CALS) or the College of Letters \& Science (L\&S) under the bachelor of science (B.S.) or bachelor of arts (B.A.) degree program. An undergraduate B.S. degree is offered through both colleges. A B.A. option is offered through L\&S only. Students are encouraged to review the degree requirements for both L\&S and CALS and choose the college from which they would prefer to earn their degree; students may choose only one degree "home."

- In CALS, the major is housed administratively in the Department of Soil Science.
- In L\&S, the major is housed administratively in the Department of Atmospheric and Oceanic Sciences.

The major can be taken as a stand-alone or as a double major with a variety of other majors on campus including environmental studies, life sciences communication, agronomy, soil science, landscape architecture, foreign language/culture, and a number of other disciplines.

## HOW TO GET IN

Students wishing to declare the environmental sciences major should meet with an academic advisor. Contact information for advisors can be found here (http://envirosci.wisc.edu/advising).

CALS undergraduate students interested in pursuing the environmental sciences major in the College of Agricultural and Life Sciences should contact Kathryn Jones, kjones26@wisc.edu or 608-807-7391.

L\&S undergraduate students interested in pursuing the environmental sciences major in the College of Letters \& Science should contact Eric Schueffner, elschueffner@wisc.edu or 608-890-3231.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics
Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in
literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of | 60 intermedits |
| Intermediate/ |  |

Minimum
GPAs
2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Mathematics \& Statistics | $8-13$ |
| Chemistry | $8-12$ |
| Biology | $8-10$ |
| Physics | $8-10$ |
| Major Foundation | $3-5$ |
| Major Core | 12 |
| Major Electives | 12 |
| Capstone | $2-6$ |
| Total Credits | $61-80$ |

## MATHEMATICS AND STATISTICS

This major requires calculus. Prerequisites may need to be taken before enrollment in calculus. Refer to the Course Guide for information about calculus prerequisites.

| Code |  |  |
| :--- | :--- | ---: |
| Select one of the following: |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 <br> (Recommended) | Credits <br> $5-10$ |
| MATH 171 | Calculus with Algebra and <br> \& MATH 217 | Trigonometry I <br> and Calculus with Algebra and <br> Trigonometry II |
| MATH 211 | Calculus |  |
| Select one of the following: |  |  |
| STAT 302 | Accelerated Introduction to <br> Statistical Methods |  |
| STAT/MATH 309 | Introduction to Probability and <br> Mathematical Statistics I |  |
| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I <br> STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |

Total Credits

## CHEMISTRY

| Code | Title |
| :--- | :--- |
| CHEM 103 | General Chemistry I |
| \& CHEM 104 | and General Chemistry II |
| or CHEM 109 | Advanced General Chemistry |


| Select one of the following: |  |
| :--- | :--- |
| CHEM 341 | Elementary Organic Chemistry |
| CHEM 343 | Introductory Organic Chemistry |
| CHEM 561 | Physical Chemistry |


| Total Credits | $8-12$ |
| :--- | :--- |

## BIOLOGY

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | 10 |  |
| BIOLOGY/ | Introductory Biology |  |
| BOTANY/ | and Introductory Biology |  |
| ZOOLOGY 151 |  |  |
| \& BIOLOGY/ |  |  |
| BOTANY/ |  |  |
| ZOOLOGY 152 |  |  |
| BOTANY/ | General Botany |  |
| BIOLOGY 130 | and Animal Biology |  |
| \& ZOOLOGY/ | and Animal Biology Laboratory |  |
| BIOLOGY 101 |  |  |
| \& ZOOLOGY/ |  |  |
| BIOLOGY 102 |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| \& BIOCORE 382 | and Evolution, Ecology, and |  |
| \& BIOCORE 383 | Genetics Laboratory |  |
| \& BIOCORE 384 | and Cellular Biology |  |
|  | and Cellular Biology Laboratory |  |

Total Credits 10

## PHYSICS

$\left.\begin{array}{llr}\text { Code } & \text { Title } & \begin{array}{r}\text { Credits } \\ \text { Select on of the following: }\end{array} \\ \begin{array}{lll}\text { PHYSICS 207 }\end{array} & \begin{array}{l}\text { General Physics } \\ \text { and General Physics } \\ \text { \& PHYSICS 208 }\end{array} & \\ \text { (Recommended) }\end{array}\right]$

Total Credits

## MAJOR FOUNDATION

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | $3-5$ |  |
| ENVIR ST/ILS | 126 | Principles of Environmental Science |


| SOIL SCI/ | Soil: Ecosystem and Resource |  |
| :--- | :--- | :--- |
| ENVIR ST/ |  |  |
| GEOG 230 | $3-5$ |  |

## MAJOR CORE

Select at least 3 credits from each of the following subsets:

| Ecology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY/ <br> BOTANY/ <br> SOIL SCI 370 | Grassland Ecology | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology (Recommended) | 4 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| ENTOM/BOTANY/ ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| ENVIR ST/ ZOOLOGY 510 | Ecology of Fishes | 3 |
| ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab | 2 |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL 551 | Forest Ecology Lab | 1 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| HORT 334 | Greenhouse Cultivation | 2 |
| HORT 335 | Greenhouse Cultivation Lab | 1 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |

## Physical Environment

Code Title Credits

ATM OCN $310 \quad$ Dynamics of the Atmosphere and 3
Ocean I
ATM OCN/GEOG 323 Science of Climate Change 3
ATM OCN/ENVIR ST/ Climatic Environments of the Past 3
GEOG/GEOSCI 335
ATM OCN/ Bioclimatology 3
ENVIR ST 520
ATM OCN/ Atmospheric Dispersion and Air 3
ENVIR ST 535 Pollution

| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| :---: | :---: | :---: |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| CIV ENGR 310 | Fluid Mechanics | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| CIV ENGR 424 | Environmental Engineering Laboratory | 2 |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| GEOG/GEOSCI 320 | Geomorphology | 3 |
| GEOG 321 | Climatology | 3 |
| GEOG/ENVIR ST 325 | Analysis of the Physical Environment | 4 |
| GEOG 329 | Landforms and Landscapes of North America | 3 |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/GEOSCI 420 | Glacial and Pleistocene Geology | 3 |
| GEOG/GEOSCI 524 | Advanced Landform Geography | 3 |
| GEOSCI 304 | Geobiology | 3 |
| GEOSCI/G LE 627 | Hydrogeology | 3-4 |
| POP HLTH/ ENVIR ST 471 | Introduction to Environmental Health | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry | 3 |
| SOIL SCI/ <br> AGRONOMY/ <br> ATM OCN 532 | Environmental Biophysics | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: Sources, Distribution, Fate, \& Effects | 3 |
| Geospatial Sciences |  |  |
| Code | Title | Credits |
| COMP SCI 301 | Introduction to Data Programming | 3 |
| ENVIR ST/CIV ENGR/ LAND ARC 556 | Remote Sensing Digital Image Processing | 3 |
| GEOG 360 | Quantitative Methods in Geographical Analysis | 4 |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG/ENVIR ST/ F\&W ECOL/ G L E/GEOSCI/ LAND ARC 371 | Introduction to Environmental Remote Sensing | 3 |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| GEOSCI/CIV ENGR/ ENVIR ST/G LE 444 | Practical Applications of GPS Surveying | 2 |


| SOIL SCI/ENVIR ST// | Applications of Geographic | 3 |
| :--- | :--- | :--- |
| LAND ARC 695 | Information Systems in Natural <br>  <br>  <br> Resources |  |

Code Title Credits

A A E/ENVIR ST 244 The Environment and the Global 3
Economy
A A E $246 \quad$ Climate Change Economics and 3
Policy
A AE/ECON/ Environmental Economics 3-4
ENVIR ST 343
SOC 248 and Society

C\&E SOC/ENVIR ST/ People, Wildlife and Landscapes 3
GEOG 434
C\&E SOC/ENVIR ST/ Sociology of International 3

| SOC 540 | Development, Environment, and <br> Sustainability |
| :--- | :--- |

C\&E SOC/SOC 541 Environmental Stewardship and 3
Social Justice
ENVIR ST 349 Climate Change Governance 3
ENVIR ST/ Environmental Law, Toxic 2

M\&ENVTOX/ Substances, and Conservation
PLPATH 368
ENVIR ST/GEOG 439 US Environmental Policy and 3-4
Regulation
ENVIR ST/ Environmental Ethics 3-4

PHILOS 441
ENVIR ST/HIST SCI/ Environment and Health in Global 3
MED HIST 513 Perspective
GEOG/ENVIR ST 339 Environmental Conservation 4
GEOG/URB R PL 305 Introduction to the City 3-4
GEOG/ENVIR ST/ American Environmental History 4
HISTORY 460
GEOG/ENVIR ST 537 Culture and Environment 4
GEOSCI/ Minerals as a Public Problem 3
ENVIR ST 410
GEOSCI/ Energy Resources 3
ENVIR ST 411
HISTORY/ENVIR ST/ The Making of the American 4
GEOG 469 Landscape
POLI SCI 510 Politics of Government Regulation 3-4
URB R PL/ECON/ Government and Natural Resources 3-4
ENVIR ST/
POLI SCI 449

## MAJOR ELECTIVES

Select one of two tracks:

## Distributed Electives

Students choosing the Distributed Electives path must complete a total of $\mathbf{1 2}$ credits of Environmental Sciences Electives from the categories below, including at least one course from each category.

| Ecology |  |  | CIV ENGR 320 | Environmental Engineering | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Title | Credits | CIV ENGR 423 | Air Pollution Effects, Measurement | 3 |
| AGRONOMY 300 | Cropping Systems | 3 |  | and Control |  |
| AGRONOMY/ BOTANY/ | Grassland Ecology | 3 | CIV ENGR 424 | Environmental Engineering Laboratory | 2 |
| SOIL SCI 370 |  |  | ENVIR ST/ | Air Pollution and Human Health | 3 |
| BOTANY/ | The Vegetation of Wisconsin | 4 | POP HLTH 502 |  |  |
| F\&W ECOL 455 |  |  | GEOG/GEOSCI 320 | Geomorphology | 3 |
| BOTANY/F\&W ECOL/ ZOOLOGY 460 | General Ecology | 4 | GEOG 321 | Climatology | 3 |
| ENTOM/BOTANY/ | Plant-Insect Interactions | 3 | GEOG/ENVIR ST 325 | Analysis of the Physical Environment | 4 |
| ZOOLOGY 473 |  |  | GEOG 329 |  | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 | GEOG 3 | North America |  |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 | GEOG/ATM OCN/ <br> ENVIR ST 332 | Global Warming: Science and Impacts | 3 |
| ENVIR ST/ | Ecology of Fishes | 3 | GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| ZOOLOGY 510 |  |  | GEOG/GEOSCI 420 | Glacial and Pleistocene Geology | 3 |
| ENVIR ST/ <br> ZOOLOGY 511 | Ecology of Fishes Lab | 2 | GEOG/GEOSCI 524 | Advanced Landform Geography | 3 |
| F\&W ECOL/ | Extinction of Species | 3 | GEOSCI 304 | Geobiology | 3 |
| ENVIR ST/ |  |  | GEOSCI/G LE 627 | Hydrogeology | 3-4 |
| ZOOLOGY 360 |  |  | POP HLTH/ | Introduction to Environmental | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 | ENVIR ST 471 |  |  |
| F\&W ECOL 550 | Forest Ecology | 3 | SOIL SCI 301 | General Soil Science | 4 |
| F\&W ECOL 551 | Forest Ecology Lab | 1 | SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| F\&W ECOL/ <br> LAND ARC/ | Principles of Landscape Ecology | 2 | SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| ZOOLOGY 565 |  |  | SOIL SCI/ | Environmental Biogeochemistry | 3 |
| F\&W ECOL/ | Climate Change Ecology | 3 | F\&W ECOL 451 |  |  |
| ZOOLOGY 660 |  |  | SOIL SCI/ | Environmental Biophysics | 3 |
| HORT 334 | Greenhouse Cultivation | 2 | AGRONOMY/ |  |  |
| HORT 335 | Greenhouse Cultivation Lab | 1 | ATM OCN 532 |  |  |
| LAND ARC/ <br> ENVIR ST 361 | Wetlands Ecology | 3 | SOIL SCI/CIV ENGR/ <br> M\&ENVTOX 631 | Toxicants in the Environment: <br> Sources, Distribution, Fate, \& Effects | 3 |
| ZOOLOGY/ | Limnology-Conservation of Aquatic | 2 | Geospatial Sciences |  |  |
| ENVIR ST 315 | Resources |  | Code | Title | Credits |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 | ENVIR ST/CIV ENGR/ LAND ARC 556 | Remote Sensing Digital Image Processing | 3 |
| Physical Environme |  |  | GEOG 360 | Quantitative Methods in Geographical Analysis | 4 |
| Code | Title | Credits | GEOG 370 | Introduction to Cartography | 4 |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I | 3 | GEOG/ENVIR ST/ F\&W ECOL/ | Intermediate Environmental Remote Sensing | 3 |
| ATM OCN/GEOG 323 | Science of Climate Change | 3 | G L E/GEOSCI/ |  |  |
| ATM OCN/ENVIR ST/ GEOG/GEOSCI 335 | Climatic Environments of the Past | 3 | LAND ARC 372 |  |  |
| GEOG/GEOSCI 335 ATM OCN/ | Bioclimatology | 3 | GEOG/CIV ENGR/ <br> ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| ENVIR ST 520 |  |  | GEOG 378 | Introduction to Geocomputing | 4 |
| ATM OCN/ <br> ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 | GEOG 560 | Advanced Quantitative Methods | 3 |
|  |  |  | GEOG 577 | Environmental Modeling with GIS | 3 |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 | GEOG 578 | GIS Applications | 4 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 | GEOG 579 | GIS and Spatial Analysis | 4 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 | GEOSCI/CIV ENGR/ <br> ENVIR ST/GLE 444 | Practical Applications of GPS Surveying | 2 |

## SOIL SCI/ENVIR LAND ARC 695 Area of Focus

Students choosing the Focused Electives path must complete a total of $\mathbf{1 2}$ credits of Environmental Sciences Electives from one of the following categories. ${ }^{1}$

| Ecology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology | 4 |
| ENTOM/BOTANY/ <br> ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| ENVIR ST/ <br> ZOOLOGY 510 | Ecology of Fishes | 3 |
| ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab | 2 |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL 551 | Forest Ecology Lab | 1 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 |
| HORT 334 | Greenhouse Cultivation | 2 |
| HORT 335 | Greenhouse Cultivation Lab | 1 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |


| Physical Environment |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I | 3 |
| ATM OCN/GEOG 323 | Science of Climate Change | 3 |
| ATM OCN/ENVIR ST/ GEOG/GEOSCI 335 | Climatic Environments of the Past | 3 |
| ATM OCN/ <br> ENVIR ST 520 | Bioclimatology | 3 |


| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| :---: | :---: | :---: |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| CIV ENGR 424 | Environmental Engineering Laboratory | 2 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| GEOG/GEOSCI 320 | Geomorphology | 3 |
| GEOG 321 | Climatology | 3 |
| GEOG/ENVIR ST 325 | Analysis of the Physical Environment | 4 |
| GEOG 329 | Landforms and Landscapes of North America | 3 |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/GEOSCI 420 | Glacial and Pleistocene Geology | 3 |
| GEOG/GEOSCI 524 | Advanced Landform Geography | 3 |
| GEOSCI 304 | Geobiology | 3 |
| GEOSCI/G LE 627 | Hydrogeology | 3-4 |
| POP HLTH/ <br> ENVIR ST 471 | Introduction to Environmental Health | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry | 3 |
| SOIL SCI/ AGRONOMY/ ATM OCN 532 | Environmental Biophysics | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: Sources, Distribution, Fate, \& Effects | 3 |

## Geospatial Sciences

Code Title Credits

ENVIR ST/CIV ENGR/ Remote Sensing Digital Image 3
LAND ARC 556 Processing
GEOG $360 \quad$ Quantitative Methods in 4 Geographical Analysis
GEOG $370 \quad$ Introduction to Cartography 4

GEOG/ENVIR ST/ Intermediate Environmental Remote 3
F\&W ECOL/ Sensing
G L E/GEOSCI/
LAND ARC 372
GEOG/CIV ENGR/ An Introduction to Geographic 4
ENVIR ST 377 Information Systems
GEOG $378 \quad$ Introduction to Geocomputing 4

| GEOG 560 | Advanced Quantitative Methods | 3 |
| :--- | :--- | :--- |
| GEOG 577 | Environmental Modeling with GIS | 3 |
| GEOG 578 | GIS Applications | 4 |
| GEOG 579 | GIS and Spatial Analysis | 4 |
| GEOSCI/CIV ENGR/ | Practical Applications of GPS <br> ENVIR ST/G LE 444 | Surveying |
| SOIL SCI/ENVIR ST/ <br> LAND ARC 695 | Applications of Geographic <br> Information Systems in Natural <br> Resources | 3 |

Environmental Policy \& Social Perspectives
Code Title

| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| :---: | :---: | :---: |
| A A E 246 | Climate Change Economics and Policy | 3 |
| A A E/ECON/ ENVIR ST 343 | Environmental Economics | 3-4 |
| $\begin{aligned} & \text { C\&E SOC/F\&W ECOL/ } \\ & \text { SOC } 248 \end{aligned}$ | Environment, Natural Resources, and Society | 3 |
| C\&E SOC/ENVIR ST/ GEOG 434 | People, Wildlife and Landscapes | 3 |
| C\&E SOC/ENVIR ST/ <br> SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC 541 | Environmental Stewardship and Social Justice | 3 |
| ENVIR ST 349 | Climate Change Governance | 3 |
| ENVIR ST/ M\&ENVTOX/ PLPATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| ENVIR ST/GEOG 439 | US Environmental Policy and Regulation | 3-4 |
| ENVIR ST/ | Environmental Ethics | 3-4 |

## PHILOS 441

ENVIR ST/HIST SCI/ Environment and Health in Global 3
MED HIST 513 Perspective
GEOG/URB R PL 305 Introduction to the City 3-4
GEOG/ENVIR ST 339 Environmental Conservation 4
GEOG/ENVIR ST/ American Environmental History 4

HISTORY 460
GEOG/ENVIR ST 537 Culture and Environment 4
GEOSCI/ Minerals as a Public Problem 3

ENVIR ST 410
GEOSCI/ Energy Resources 3
ENVIR ST 411
HISTORY/ENVIR ST/ The Making of the American 4
GEOG 469 Landscape
POLI SCI $510 \quad$ Politics of Government Regulation 3-4
URB R PL/ECON/ Government and Natural Resources 3-4
ENVIR ST/
POLI SCI 449
1 Consult environmental sciences advisor regarding alternate ways to complete the major electives.

## CAPSTONE ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY 500 | Senior Capstone Experience | 2 |
| BOTANY/ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| CIV ENGR 515 | Hydroclimatology for Water Resources Management | 3 |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| F\&W ECOL 577 | Complexity and Conservation of White-tailed Deer | 3 |
| F\&W ECOL 590 | Integrated Resource Management | 3 |
| F\&W ECOL 599 | Wildlife Research Capstone | 3 |
| F\&W ECOL/A A E/ ENVIR ST 652 | Decision Methods for Natural Resource Managers | 3-4 |
| LAND ARC 551 | Senior Project in Landscape Architecture | 4 |
| LAND ARC 668 | Restoration Ecology | 3 |
| PL PATH 315 | Plant Microbiomes | 4 |
| SOIL SCI 499 | Soil Management | 3 |
| Students may speak with their environmental science advisor about alternatives (e.g., courses, directed study, senior thesis) to complete the capstone. To be approved, the alternative must be taken for a minimum of 3 credits, clearly focused on environmental science, and approved by the Environmental Sciences Administrative Committee. Students must consult with their environmental sciences advisor and fill out all necessary paperwork before registering. |  |  |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all major courses
2.000 GPA and 15 credits of upper level major courses taken in residence ${ }^{1}$

15 credits in the major taken on the UW-Madison campus
1 Courses numbered 300 through 699 are considered upper level for this major.

## HONORS IN THE MAJOR

Honors in the Major is not available in Environmental Sciences.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Demonstrate understanding of Environmental Science fundamentals in the context of biology, chemistry, mathematics, statistics, and physics.
2. Demonstrate a quantitative and qualitative understanding of the ecological relationships (material and energetic) between organisms, both as individuals and in groups, and their biotic and abiotic environment. This may include processes influencing the distribution and abundance of organisms.
3. Demonstrate a quantitative and qualitative understanding of the physical, largely abiotic, conditions (e.g. climate, water, soil, air, noise, greenspace, etc.) of the environment. The physical environment can include natural or managed settings such as urban environments.
4. Demonstrate a quantitative and qualitative understanding of geospatial processes and information as it relates to the environment including how to collect, interpret, and analyze geospatial information regarding the features of the Earth's surface. These technologies may include geographic information systems (GIS), the global positioning system (GPS), digital maps, and satellite based remote sensing.
5. Demonstrate a basic understanding of relationships that focus on the organization and implementation of laws, regulations, and other policy mechanisms concerning environmental issues and sustainability and their effect on society. This includes how human behaviors influences, and are also influenced by, the natural environment.
6. Apply skills in critical thinking, problem identification and resolution of a complex environmental issues that require interdisciplinary solutions and team-based work.
7. Articulate the role of environmental science in one or more focused areas of a specific environmental discipline (e.g. geology, soils, atmosphere, water, plants, animals).
8. Demonstrate expertise in organizing and presenting (written and oral) scientific information to both lay and professional audiences.

## ADVISING AND CAREERS

## ADVISING

Students wishing to declare the environmental sciences major should meet with an academic advisor. Contact information for advisors can be found here (http://envirosci.wisc.edu/advising).

CALS undergraduate students interested in pursuing the environmental sciences major in the College of Agricultural and Life Sciences should contact Kathryn Jones, kjones26@wisc.edu or 608-807-7391.

L\&S undergraduate students interested in pursuing the environmental sciences major in the College of Letters \& Science should contact Eric Schueffner, elschueffner@wisc.edu or 608-890-3231.

## CAREERS

A major in environmental sciences serves as excellent preparation for careers of great diversity, including environmental modeling, agricultural scientist, botanist, ecologist, forest ranger, oceanographer, agricultural technician, engineering technician, forester, air and water quality manager, environmental analyst, park ranger, air pollution analyst, environmental consultant, environmental educator, geologist, project manager, environmental engineer, geophysicist, biologist, hazardous waste manager, hydrologist, environmental lawyer, chemical technician, soil conservation technician, chemist, management consultant, teacher, meteorologist, urban and regional planner, civil engineer, environmental planner, microbiologist/wastewater plant operator, natural resource specialist, wildlife manager, conservationist, or zoologist. For more info about careers, please visit our website (http://envirosci.wisc.edu/careersinternships).

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## EXECUTIVE COMMITTEE

Balster, Nick, Associate Professor, Department of Soil Science Martin, Jonathan, Professor, Department of Atmospheric and Oceanic Sciences
Thompson, Anita, Professor, Department of Biological Systems Engineering

## PROGRAM COMMITTEE

Bertram, Timothy, Associate Professor, Department of Chemistry Grainger, Corbett, Assistant Professor Department of Agricultural and Applied Economics
Harrington, John, Professor, Department of Landscape Architecture Holloway, Tracey, Professor, Nelson Institute for Environmental Studies Hotchkiss, Sara, Professor, Department of Botany
Kanarek, Marty, Professor, Department of Population Health Sciences Schauer, James, Professor, Department of Civil and Environmental Engineering
Stoltenberg, David, Professor, Department of Agronomy

## ENVIRONMENTAL SCIENCES, B.S. <br> (L\&S)

The environmental sciences major satisfies the growing demand among entry-level students for a rigorous, science-based program that promotes critical thinking and emphasizes environmental problem solving in service to society. The program is designed to prepare graduates who will be highly competitive for entry-level positions in nonprofit and private sectors, and for master's programs and doctoral research programs in environmental fields. Possible career paths include environmental monitoring, consulting, education, research, and planning, as well as natural resource management, ecology restoration, remediation, water and air quality assessment, sustainability practices, and more. Undergraduates in environmental sciences prepare for a variety of career and graduate school opportunities that require a strong background in the natural sciences. Foundational course work in the major includes calculus, biology, chemistry, and physics. Core and elective course work is fulfilled through diverse offerings from both the College of Agricultural and Life Sciences, and the College of Letters \& Science.

The environmental sciences major can be earned in either the College of Agricultural and Life Sciences (CALS) or the College of Letters \& Science (L\&S) under the bachelor of science (B.S.) or bachelor of arts (B.A.) degree program. An undergraduate B.S. degree is offered through both colleges. A B.A. option is offered through L\&S only. Students are encouraged to review the degree requirements for both L\&S and CALS and choose the college from which they would prefer to earn their degree; students may choose only one degree "home."

- In CALS, the major is housed administratively in the Department of Soil Science.
- In L\&S, the major is housed administratively in the Department of Atmospheric and Oceanic Sciences.

The major can be taken as a stand-alone or as a double major with a variety of other majors on campus including environmental studies, life sciences communication, agronomy, soil science, landscape architecture, foreign language/culture, and a number of other disciplines.

## HOW TO GET IN

Students wishing to declare the environmental sciences major should meet with an academic advisor. Contact information for advisors can be found here (http://envirosci.wisc.edu/advising).

CALS undergraduate students interested in pursuing the environmental sciences major in the College of Agricultural and Life Sciences should contact Kathryn Jones, kjones26@wisc.edu or 608-807-7391.

L\&S undergraduate students interested in pursuing the environmental sciences major in the College of Letters \& Science should contact Eric Schueffner, elschueffner@wisc.edu or 608-890-3231.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign
Language
Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| :--- | :--- |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison <br> GPAs |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Mathematics \& Statistics | $8-13$ |
| Chemistry | $8-12$ |
| Biology | $8-10$ |
| Physics | $8-10$ |
| Major Foundation | $3-5$ |
| Major Core | 12 |
| Major Electives | 12 |
| Capstone | $2-6$ |
| Total Credits | $61-80$ |

## MATHEMATICS AND STATISTICS

This major requires calculus. Prerequisites may need to be taken before enrollment in calculus. Refer to the Course Guide for information about calculus prerequisites.


| STAT/MATH 309 | Introduction to Probability and <br> Mathematical Statistics I |
| :--- | :--- |
| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |

## Total Credits

## 8-13

## CHEMISTRY

| Code | Title | Credits |
| :--- | :--- | ---: |
| CHEM 103 | General Chemistry I | $5-9$ |
| \& CHEM 104 | and General Chemistry II |  |
| or CHEM 109 | Advanced General Chemistry | 3 |
| Select one of the following: |  |  |
| CHEM 341 | Elementary Organic Chemistry |  |
| CHEM 343 | Introductory Organic Chemistry |  |
| CHEM 561 | Physical Chemistry |  |


| Total Credits | $8-12$ |
| :--- | :--- |

## BIOLOGY

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 10 |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 \& BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology and Introductory Biology |  |
| BOTANY/ <br> BIOLOGY 130 <br> \& ZOOLOGY/ <br> BIOLOGY 101 <br> \& ZOOLOGY/ <br> BIOLOGY 102 | General Botany and Animal Biology and Animal Biology Laboratory |  |
| BIOCORE 381 <br> \& BIOCORE 382 <br> \& BIOCORE 383 <br> \& BIOCORE 384 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory and Cellular Biology and Cellular Biology Laboratory |  |

## PHYSICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select on of the following: | $8-10$ |  | | PHYSICS 207 | General Physics <br> and General Physics <br> \& PHYSICS 208 |
| :--- | :--- |
| PHYSICS 103 | General Physics <br> and General Physics |
| \& PHYSICS 104 | General Physics <br> PHYSICS 201 |
| \& PHYSICS 202 | and General Physics |

## MAJOR FOUNDATION

Code Title
Credits
Select one of the following: 3-5

| ENVIR ST/ILS | 126 |
| :--- | :--- |
| Principles of Environmental Science |  |
| GEOG 127 | Physical Systems of the |
| GEOG/ | Environment |
| ENVIR ST 120 | Introduction to the Earth System |
| GEOSCI/ | Environmental Geology |
| ENVIR ST 106 |  |
| SOIL SCI/ | Soil: Ecosystem and Resource |
| ENVIR ST/ |  |
| GEOG 230 |  |
| Total Credits |  |

## MAJOR CORE

Select at least 3 credits from each of the following subsets:

| Ecology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology (Recommended) | 4 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| ENTOM/BOTANY/ ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| ENVIR ST/ $\text { ZOOLOGY } 510$ | Ecology of Fishes | 3 |
| ENVIR ST/ <br> ZOOLOGY 511 | Ecology of Fishes Lab | 2 |
| F\&W ECOL/ ENVIR ST/ ZOOLOGY 360 | Extinction of Species | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL 551 | Forest Ecology Lab | 1 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| HORT 334 | Greenhouse Cultivation | 2 |
| HORT 335 | Greenhouse Cultivation Lab | 1 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |

## Physical Environment

## Code Title

ATM OCN 310 Dynamics of the Atmosphere and Ocean I
ATM OCN/GEOG 323 Science of Climate Change
Credits

## Geospatial Sciences

| Code | Title | Credits |
| :--- | :--- | ---: |
| COMP SCI 301 | Introduction to Data Programming | 3 |
| ENVIR ST/CIV ENGR/ Remote Sensing Digital Image | 3 |  |
| LAND ARC 556 | Processing | 4 |
| GEOG 360 | Quantitative Methods in <br> Geographical Analysis |  |
| GEOG 370 | Introduction to Cartography | 4 |


| GEOG/ENVIR ST/ | Introduction to Environmental |
| :--- | :--- |
| F\&W ECOL/ | Remote Sensing |
| GLE/GEOSCI/ |  |
| LAND ARC 371 |  |
| GEOG/CIV ENGR/ | An Introduction to Geographic |
| ENVIR ST 377 | Information Systems |
| GEOSCI/CIV ENGR/ | Practical Applications of GPS |
| ENVIR ST/G LE 444 | Surveying |
| SOIL SCI/ENVIR ST/ | Applications of Geographic |
| LAND ARC 695 | Information Systems in Natural <br> Resources |

## Environmental Policy \& Social Perspectives Code Title

| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| :---: | :---: | :---: |
| A A E 246 | Climate Change Economics and Policy | 3 |
| A A E/ECON/ ENVIR ST 343 | Environmental Economics | 3-4 |
| C\&E SOC/F\&W ECOL/ SOC 248 | Environment, Natural Resources, and Society | 3 |
| $\begin{aligned} & \text { C\&E SOC/ENVIR ST/ } \\ & \text { GEOG } 434 \end{aligned}$ | People, Wildlife and Landscapes | 3 |
| $\begin{aligned} & \text { C\&E SOC/ENVIR ST/ } \\ & \text { SOC } 540 \end{aligned}$ | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC 541 | Environmental Stewardship and Social Justice | 3 |
| ENVIR ST 349 | Climate Change Governance | 3 |
| ENVIR ST/ <br> M\&ENVTOX/ <br> PL PATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| ENVIR ST/GEOG 439 | US Environmental Policy and Regulation | 3-4 |
| ENVIR ST/ PHILOS 441 | Environmental Ethics | 3-4 |


| ENVIR ST/HIST SCI// | Environment and Health in Global | 3 |
| :--- | :--- | :--- |
| MED HIST 513 | Perspective |  |

GEOG/ENVIR ST 339 Environmental Conservation 4
GEOG/URB R PL 305 Introduction to the City 3-4
GEOG/ENVIR ST/ American Environmental History 4

## HISTORY 460

GEOG/ENVIR ST 537 Culture and Environment 4
GEOSCI/ Minerals as a Public Problem 3

ENVIR ST 410
GEOSCI/ Energy Resources 3
ENVIR ST 411
HISTORY/ENVIR ST/ The Making of the American 4
GEOG 469 Landscape
POLI SCI 510 Politics of Government Regulation 3-4
URB R PL/ECON/ Government and Natural Resources 3-4

## ENVIR ST/

POLI SCI 449

Ecology

| Code | Title | Credits |
| :--- | :--- | ---: |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY/ | Grassland Ecology | 3 |
| BOTANY/ |  |  |
| SOIL SCI 370 |  | 4 |

F\&W ECOL 455
BOTANY/F\&W ECOL/ General Ecology 4
ZOOLOGY 460
ENTOM/BOTANY/ Plant-Insect Interactions 3
ZOOLOGY 473
ENTOM $450 \quad$ Basic and Applied Insect Ecology 3

ENTOM 451 Basic and Applied Insect Ecology 1
Laboratory
ENVIR ST/ Ecology of Fishes 3
ZOOLOGY 510
ENVIR ST/ Ecology of Fishes Lab 2
ZOOLOGY 511
F\&W ECOL/ Extinction of Species 3
ENVIR ST/
ZOOLOGY 360
F\&W ECOL $410 \quad$ Principles of Silviculture 3
F\&W ECOL 550 Forest Ecology 3
F\&W ECOL $551 \quad$ Forest Ecology Lab 1

F\&W ECOL/ Principles of Landscape Ecology 2
LAND ARC/
ZOOLOGY 565
F\&W ECOL/ Climate Change Ecology 3

ZOOLOGY 660
HORT 334 Greenhouse Cultivation 2
HORT 335 Greenhouse Cultivation Lab 1

LAND ARC/ Wetlands Ecology 3
ENVIR ST 361
ZOOLOGY/ Limnology-Conservation of Aquatic 2
ENVIR ST 315 Resources
$\begin{array}{lll}\text { ZOOLOGY } 316 & \begin{array}{l}\text { Laboratory for Limnology- } \\ \text { Conservation of Aquatic Resources }\end{array} & 2-3\end{array}$

## Physical Environment

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN 310 | Dynamics of the Atmosphere and <br> Ocean I | 3 |
| ATM OCN/GEOG | 323 | Science of Climate Change |
| ATM OCN/ENVIR ST/ Climatic Environments of the Past <br> GEOG/GEOSCI 335 | 3 |  |
| ATM OCN/ | Bioclimatology | 3 |
| ENVIR ST 520 |  | 3 |


| ATM OCN/ <br> ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| :---: | :---: | :---: |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| CIV ENGR 424 | Environmental Engineering Laboratory | 2 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| GEOG/GEOSCI 320 | Geomorphology | 3 |
| GEOG 321 | Climatology | 3 |
| GEOG/ENVIR ST 325 | Analysis of the Physical Environment | 4 |
| GEOG 329 | Landforms and Landscapes of North America | 3 |
| GEOG/ATM OCN/ <br> ENVIR ST 332 | Global Warming: Science and Impacts | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/GEOSCI 420 | Glacial and Pleistocene Geology | 3 |
| GEOG/GEOSCI 524 | Advanced Landform Geography | 3 |
| GEOSCI 304 | Geobiology | 3 |
| GEOSCI/GLE 627 | Hydrogeology | 3-4 |
| POP HLTH/ <br> ENVIR ST 471 | Introduction to Environmental Health | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry | 3 |
| SOIL SCI/ AGRONOMY/ ATM OCN 532 | Environmental Biophysics | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: <br> Sources, Distribution, Fate, \& Effects | 3 |

## Geospatial Sciences <br> Code Title

| ENVIR ST/CIV ENGR/ <br> LAND ARC 556 | Remote Sensing Digital Image Processing | 3 |
| :---: | :---: | :---: |
| GEOG 360 | Quantitative Methods in Geographical Analysis | 4 |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG/ENVIR ST/ <br> F\&W ECOL/ <br> G LE/GEOSCI/ <br> LAND ARC 372 | Intermediate Environmental Remote Sensing | 3 |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| GEOG 378 | Introduction to Geocomputing | 4 |


| GEOG 560 | Advanced Quantitative Methods | 3 |
| :--- | :--- | ---: |
| GEOG 577 | Environmental Modeling with GIS | 3 |
| GEOG 578 | GIS Applications | 4 |
| GEOG 579 | GIS and Spatial Analysis | 4 |
| GEOSCI/CIV ENGR/ | Practical Applications of GPS | 2 |
| ENVIR ST/G LE 444 | Surveying |  |
| SOIL SCI/ENVIR ST// | Applications of Geographic <br> LAND ARC 695Information Systems in Natural | 3 |
|  | Resources |  |

## Area of Focus

Students choosing the Focused Electives path must complete a total of $\mathbf{1 2}$ credits of Environmental Sciences Electives from one of the following categories. ${ }^{1}$

## Ecology

Code Title Credits

AGRONOMY 300 Cropping Systems 3
AGRONOMY/ Grassland Ecology 3
BOTANY/
SOIL SCI 370
BOTANY/
The Vegetation of Wisconsin 4
F\&W ECOL 455
BOTANY/F\&W ECOL/ General Ecology 4
ZOOLOGY 460
ENTOM/BOTANY/ Plant-Insect Interactions 3
ZOOLOGY 473
ENTOM $450 \quad$ Basic and Applied Insect Ecology 3

ENTOM $451 \quad$ Basic and Applied Insect Ecology 1
Laboratory

| ENVIR ST/ | Ecology of Fishes | 3 |
| :--- | :--- | :--- |
| ZOOLOGY 510 |  | 2 |
| ENVIR ST/ | Ecology of Fishes Lab |  |

ZOOLOGY 511 Extinction of Species 3
ENVIR ST/
ZOOLOGY 360
F\&W ECOL $410 \quad$ Principles of Silviculture 3
F\&W ECOL 550 Forest Ecology 3
F\&W ECOL $551 \quad$ Forest Ecology Lab 1
F\&W ECOL/ Principles of Landscape Ecology 2
LAND ARC/
ZOOLOGY 565
F\&W ECOL/ Climate Change Ecology 3
ZOOLOGY 660
HORT 334 Greenhouse Cultivation 2

HORT 335 Greenhouse Cultivation Lab 1
LAND ARC/ Wetlands Ecology 3
ENVIR ST 361
ZOOLOGY/ Limnology-Conservation of Aquatic 2
ENVIR ST 315 Resources
ZOOLOGY $316 \quad \begin{array}{lll}\text { Laboratory for Limnology- } \\ \text { Conservation of Aquatic Resources }\end{array}$

| Physical Environment |  |  | GEOG 360 | Quantitative Methods in | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Title | Credits |  | Geographical Analysi |  |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I | 3 | GEOG 370 | Introduction to Cartography | 4 |
|  |  |  | GEOG/ENVIR ST/ | Intermediate Environmental Remote Sensing | 3 |
| ATM OCN/GEOG 323 | Science of Climate Change | 3 | F\&W ECOL/ |  |  |
| ATM OCN/ENVIR ST/ GEOG/GEOSCI 335 | Climatic Environments of the Past | 3 | G LE/GEOSCI/ LAND ARC 372 |  |  |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 | GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| ATM OCN/ <br> ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 | GEOG 378 | Introduction to Geocomputing | 4 |
|  |  |  | GEOG 560 | Advanced Quantitative Methods | 3 |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 | GEOG 577 | Environmental Modeling with GIS | 3 |
|  |  |  | GEOG 578 | GIS Applications | 4 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 | GEOG 579 | GIS and Spatial Analysis | 4 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 | GEOSCI/CIV ENGR/ ENVIR ST/GLE 444 | Practical Applications of GPS Surveying | 2 |
| CIV ENGR 311 | Hydroscience | 3 | SOIL SCI/ENVIR ST/ <br> LAND ARC 695 | Applications of Geographic Information Systems in Natural Resources | 3 |
| CIV ENGR 320 | Environmental Engineering | 3 |  |  |  |
| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |  |  |  |
| CIV ENGR 424 | Environmental Engineering Laboratory | 2 | Environmental Policy \& Social Perspectives |  | Credits |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 | A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| GEOG/GEOSCI 320 | Geomorphology | 3 | A A E 246 | Climate Change Economics and Policy | 3 |
| GEOG 321 | Climatology | 3 | A A E/ECON/ ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 325 | Analysis of the Physical Environment | 4 |  |  |  |
| GEOG 329 | Landforms and Landscapes of North America | 3 | C\&E SOC/F\&W ECOL/ SOC 248 | Environment, Natural Resources, and Society | 3 |
| GEOG/ATM OCN/ <br> ENVIR ST 332 | Global Warming: Science and Impacts |  | $\text { GEOG } 434$ | People, Wildlife and Landscapes | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 | C\&E SOC/ENVIR ST/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| GEOG/GEOSCI 420 | Glacial and Pleistocene Geology | 3 |  |  |  |
| GEOG/GEOSCI 524 | Advanced Landform Geography | 3 | C\&E SOC/SOC 541 | Environmental Stewardship and Social Justice | 3 |
| GEOSCI 304 | Geobiology | 3 |  |  |  |
| GEOSCI/G LE 627 | Hydrogeology | 3-4 | ENVIR ST 349 | Climate Change Governance | 3 |
| POP HLTH/ <br> ENVIR ST 471 | Introduction to Environmental 3Health |  | ENVIR ST/ M\&ENVTOX/ PLPATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| SOIL SCI 301 | General Soil Science | 4 |  |  |  |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 | ENVIR ST/GEOG 439 | US Environmental Policy and Regulation | 3-4 |
| SOIL SCI/ | Soils and Environmental Quality | 3 |  |  |  |
| ENVIR ST 324 |  |  | ENVIR ST/ | Environmental Ethics | 3-4 |
| SOIL SCI/ | Environmental Biogeochemistry | 3 | PHILOS 441 |  |  |
| F\&W ECOL 451 |  |  |  | Perspective <br> Introduction to the City | 3 |
| SOIL SCI/ | Environmental Biophysics | 3 | MED HIST 513 |  |  |
| AGRONOMY/ |  |  | GEOG/URB R PL 305 |  | 3-4 |
| ATM OCN 532 |  |  | GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: <br> Sources, Distribution, Fate, \& Effects | 3 | GEOG/ENVIR ST/ HISTORY 460 | American Environmental History | 4 |
|  |  |  | GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| Code |  | Title | Credits | GEOSCI/ <br> ENVIR ST 410 | Minerals as a Public Problem | 3 |
| ENVIR ST/CIV ENGR/ <br> LAND ARC 556 | Remote Sensing Digital Image Processing | 3 | $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 411 \end{aligned}$ | Energy Resources | 3 |


| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |
| :---: | :---: | :---: |
| POLI SCI 510 | Politics of Government Regulation | 3-4 |
| URB R PL/ECON/ ENVIR ST/ <br> POLI SCI 449 | Government and Natural Resources | 3-4 |
| Consult environmental sciences advisor regarding alternate ways to complete the major electives. |  |  |

## CAPSTONE ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY 500 | Senior Capstone Experience | 2 |
| BOTANY/ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| CIV ENGR 515 | Hydroclimatology for Water Resources Management | 3 |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| F\&W ECOL 577 | Complexity and Conservation of White-tailed Deer | 3 |
| F\&W ECOL 590 | Integrated Resource Management | 3 |
| F\&W ECOL 599 | Wildlife Research Capstone | 3 |
| F\&W ECOL/A A E/ ENVIR ST 652 | Decision Methods for Natural Resource Managers | 3-4 |
| LAND ARC 551 | Senior Project in Landscape Architecture | 4 |
| LAND ARC 668 | Restoration Ecology | 3 |
| PL PATH 315 | Plant Microbiomes | 4 |
| SOIL SCI 499 | Soil Management | 3 |

1 Students may speak with their environmental science advisor about alternatives (e.g., courses, directed study, senior thesis) to complete the capstone. To be approved, the alternative must be taken for a minimum of 3 credits, clearly focused on environmental science, and approved by the Environmental Sciences Administrative Committee.
Students must consult with their environmental sciences advisor and fill out all necessary paperwork before registering.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major courses
2.000 GPA and 15 credits of upper level major courses taken in residence ${ }^{1}$

15 credits in the major taken on the UW-Madison campus
1 Courses numbered 300 through 699 are considered upper level in this major.

## HONORS IN THE MAJOR

Honors in the Major is not available in environmental sciences.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Demonstrate understanding of Environmental Science fundamentals in the context of biology, chemistry, mathematics, statistics, and physics.
2. Demonstrate a quantitative and qualitative understanding of the ecological relationships (material and energetic) between organisms, both as individuals and in groups, and their biotic and abiotic environment. This may include processes influencing the distribution and abundance of organisms.
3. Demonstrate a quantitative and qualitative understanding of the physical, largely abiotic, conditions (e.g. climate, water, soil, air, noise, greenspace, etc.) of the environment. The physical environment can include natural or managed settings such as urban environments.
4. Demonstrate a quantitative and qualitative understanding of geospatial processes and information as it relates to the environment including how to collect, interpret, and analyze geospatial information regarding the features of the Earth's surface. These technologies may include geographic information systems (GIS), the global positioning system (GPS), digital maps, and satellite based remote sensing.
5. Demonstrate a basic understanding of relationships that focus on the organization and implementation of laws, regulations, and other policy mechanisms concerning environmental issues and sustainability and their effect on society. This includes how human behaviors influences, and are also influenced by, the natural environment.
6. Apply skills in critical thinking, problem identification and resolution of a complex environmental issues that require interdisciplinary solutions and team-based work.
7. Articulate the role of environmental science in one or more focused areas of a specific environmental discipline (e.g. geology, soils, atmosphere, water, plants, animals).
8. Demonstrate expertise in organizing and presenting (written and oral) scientific information to both lay and professional audiences.

## ADVISING AND CAREERS

## ADVISING

Students wishing to declare the environmental sciences major should meet with an academic advisor. Contact information for advisors can be found here (http://envirosci.wisc.edu/advising)

CALS undergraduate students interested in pursuing the environmental sciences major in the College of Agricultural and Life Sciences should contact Kathryn Jones, kjones26@wisc.edu or 608-807-7391.

L\&S undergraduate students interested in pursuing the environmental sciences major in the College of Letters \& Science should contact Eric Schueffner, elschueffner@wisc.edu or 608-890-3231.

## CAREERS

A major in environmental sciences serves as excellent preparation for careers of great diversity, including environmental modeling, agricultural scientist, botanist, ecologist, forest ranger, oceanographer, agricultural technician, engineering technician, forester, air and water quality manager, environmental analyst, park ranger, air pollution analyst, environmental consultant, environmental educator, geologist, project manager, environmental engineer, geophysicist, biologist, hazardous waste manager, hydrologist, environmental lawyer, chemical technician, soil conservation technician, chemist, management consultant, teacher, meteorologist, urban and regional planner, civil engineer, environmental planner, microbiologist/wastewater plant operator, natural resource specialist, wildlife manager, conservationist, or zoologist. For more info about careers, please visit our website (http://envirosci.wisc.edu/careersinternships).

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## EXECUTIVE COMMITTEE

Balster, Nick, Associate Professor, Department of Soil Science

Martin, Jonathan, Professor, Department of Atmospheric and Oceanic Sciences
Thompson, Anita, Professor, Department of Biological Systems Engineering

## PROGRAM COMMITTEE

Bertram, Timothy, Associate Professor, Department of Chemistry Grainger, Corbett, Assistant Professor Department of Agricultural and Applied Economics
Harrington, John, Professor, Department of Landscape Architecture Holloway, Tracey, Professor, Nelson Institute for Environmental Studies Hotchkiss, Sara, Professor, Department of Botany
Kanarek, Marty, Professor, Department of Population Health Sciences Schauer, James, Professor, Department of Civil and Environmental Engineering
Stoltenberg, David, Professor, Department of Agronomy

## BIOLOGY CORE CURRICULUM

## DEGREES/MAJORS/CERTIFICATES

- Biology Core Curriculum Honors, Certificate (p. 488)


## BIOLOGY CORE CURRICULUM HONORS, CERTIFICATE

Biology Core Curriculum (Biocore (http://www.biocore.wisc.edu)) is an undergraduate Honors biology certificate program for students who are motivated to learn biology within a small community of students, peer mentors, and faculty instructors. The four-semester curriculum of lecture and laboratory courses provides an integrated foundation of knowledge and skills applicable to any area of bioscience.

Biocore is not a major but fulfills requirements (introductory to intermediate coursework, Honors, and Communication Part B) for a variety of biological science majors including those in the College of Agricultural and Life Sciences, College of Letters \& Science, College of Engineering, and School of Pharmacy. See the Biocore website and video (http://www.biocore.wisc.edu/about) to learn more.

Unique aspects of Biocore include:

- Small classes and high faculty/instructor contact
- Emphasis on research, problem solving, science reasoning, group learning, and communication
- Collaborative community of students and faculty
- Peer mentoring, outreach, and directed study opportunities
- Biocore Honors certificate. ${ }^{1}$

1 Biology Core Curriculum Honors certificate is available to students within the College of Agricultural and Life Sciences, the College of Engineering, the School of Human Ecology, the College of Letters \& Science, and the School of Pharmacy. Students in the School of Business, the School of Education, and the School of Nursing are welcome to benefit from enrollment in the Biocore courses, but they are ineligible to earn the certificate. Students earn Honors course credit for each Biocore course and are eligible to earn a certificate upon completion of all four lecture courses and two of
three lab courses with a grade of B or higher in all BIOCORE (http:// guide.wisc.edu/courses/biocore) courses and a 3.33 cumulative GPA.

## HOW TO GET IN

Biocore is an application-based Honors program that starts in the fall. While any UW-Madison who is admitted to Biocore can take courses and complete the program, only students in the College of Agricultural and Life Sciences, the College of Engineering, the School of Human Ecology, the College of Letters \& Science, and the School of Pharmacy will be eligible to have the certificate noted on their transcript.

## Application options:

1. Regular. For all students who have have completed the prerequisites and would like to begin Biocore sophomore year. Applications are available through the Biocore website (http://www.biocore.wisc.edu/ bioadmissions). Regular application deadline is in early March prior to April registration; however, Biocore continues to accept applications right up to the start of classes (space permitting). Most students apply during the spring of freshman year and begin fall of sophomore year.
2. Freshman: for a small cohort ( 10 ) of well-prepared students who meet the requirements and would like to begin Biocore at the start of their freshman year (see website (http://www.biocore.wisc.edu/ bio_admissions_freshman)).

## PREREQUISITES

Please inquire about course equivalents.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Math |  |  |
| Select one of the following: |  | 5 |
| MATH 217 | Calcu <br> Trigo |  |
| MATH 221 | Calc |  |
| Introductory Chemistry |  |  |
| Select one of the following: |  | 5 |
| CHEM 104 | Gener |  |
| CHEM 109 | Adva |  |
| CHEM 115 | Chem |  |

Total Credits
1 Organic chemistry (CHEM 341 or CHEM 343) is not a prerequisite for the BIOCORE program; however, organic chemistry is a prerequisite for BIOCORE 383 Cellular Biology.

## REQUIREMENTS

To earn the Biology Core Curriculum Honors (Biocore) certificate,

## students must:

1. Complete all four Biocore lecture courses and two of three lab courses
2. Earn a 'B' grade or better in all Biocore courses
3. Complete degree with a cumulative GPA of 3.3 or higher.

All Biocore courses are taken for Honors credit.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Complete the following lecture courses (in sequence): ${ }^{1}$ |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics | 3 |
| BIOCORE 383 | Cellular Biology | 3 |
| BIOCORE 485 | Organismal Biology | 3 |
| BIOCORE 587 | Biological Interactions | 3 |
| Complete two of the following lab courses (in any order): |  | 4 |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| Total Credits |  | 16 |
| 1 Students pursuing the Biology Core Curriculum Honors certificate should not take the following courses since most majors will not allow credit for both:$\begin{aligned} & \text { ZOOLOGY/BIOLOGY/BOTANY } 151 \\ & \text { ZOOLOGY/BIOLOGY/BOTANY } 152 \\ & \text { ZOOLOGY/BIOLOGY } 101 \\ & \text { ZOOLOGY/BIOLOGY } 102 \\ & \text { BOTANY/BIOLOGY } 130 \\ & \text { GENETICS 466 } \\ & \text { ANAT\&PHY } 335 \text { Physiology } \end{aligned}$ |  |  |

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Demonstrate a learning mindset and intellectual curiosity for biology.
2. Demonstrate advanced level scientific reasoning and integration of biological concepts and processes - from molecules to the biosphere, across different forms of life, through space and time.
3. Generate novel scientific questions, formulate hypotheses, carry out experiments, and make logical conclusions based on evidence.
4. Demonstrate advanced scientific communication skills, oral and written, and the ability to translate their understanding to the broader community.
5. Actively engage in and practice group learning, collaboration, and teamwork.
6. Reach for and achieve high standards in the quality of learning.
7. Articulate the value of their Biocore Honors experience.

## FOUR-YEAR PLAN

## EXAMPLE SEQUENCE OF BIOCORE COURSES AND RELATED COURSEWORK

To earn the Biology Core Curriculum Honors certificate, students need only complete two of three Biocore laboratory courses.

Talk with your advisor and look on the Biocore website (https:// biocore.wisc.edu) for how Biocore fits into many different bioscience majors.

| Code |  | Credits |
| :---: | :---: | :---: |
| Prerequisite Coursework - Freshman Year |  |  |
| MATH 221 or MATH 217 | Calculus and Analytic Geometry 1 <br> Calculus with Algebra and Trigonometry II | 5 |
| CHEM 104 <br> or CHEM 109 or CHEM 115 | General Chemistry II <br> Advanced General Chemistry <br> Chemical Principles I | 5 |
| First Semester of Biocore Program - Fall Sophmore Year |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics (previous or concurrent registration in CHEM 341 or 343) | 3 |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory | 2 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| Second Semester of Biocore Program - Spring Sophomore Year |  |  |
| BIOCORE 383 | Cellular Biology | 3 |
| BIOCORE 384 | Cellular Biology Laboratory | 2 |
| Third Semester of Biocore Program - Fall Junior Year |  |  |
| BIOCORE 485 | Organismal Biology | 3 |
| BIOCORE 486 | Organismal Biology Laboratory | 2 |
| Fourth Semester of Biocore Program - Spring Junior Year |  |  |
| BIOCORE 587 | Biological Interactions | 3 |

## ADVISING AND CAREERS

Some majors require students to complete the whole program, but others do not. Check on your major requirements and with an academic advisor in your major. Look on the Biocore website (https://biocore.wisc.edu) for how Biocore fits into many different bioscience majors. Students who plan to study abroad during their junior year can plan to start Biocore as sophomores and complete coursework as seniors.

For general academic and advising questions in Biocore, contact: Janet Batzli, Biocore associate director, jcbatzli@wisc.edu.

For questions about the student experience in Biocore, contact: Biocore peer advisors, uwbiocore.peeradvisors@gmail.com.

PEOPLE

Jeff Hardin (director)
Janet Batzli (associate director)
Michelle Harris (faculty associate)
Seth McGee (lab manager)
Carol Borcherding (program manager)
Biocore faculty instructors come from departments and colleges across campus (College of Letters \& Science, College of Agriculture and Life Sciences, School of Medicine and Public Health, College of Engineering) and bring with them different perspectives and disciplinary expertise
on a whole range of topics and scales of biological organization from molecules to ecosystems. The curriculum permits students to attain a relatively high level of sophistication with complete flexibility of choice for subsequent major specialization.

## Affiliated Faculty Instructors

Elaine Alarid (Oncology, SMPH)
Bill Bement (Zoology, L\&S)
Paul Bethke (Horticulture, CALS)
Erik Dent (Neuroscience, SMPH)
Irwin Goldman (Horticulture, CALS)
Anne Griep (Cell and Regenerative Biology, SMPH)
Jeff Hardin (Zoology, L\&S)
Evelyn Howell (Landscape Architecture, CALS)
Stephen Johnson (Comparative Biosciences, VetMed)
Trina McMahon (Civil and Environmental Engineering, Engr)
Amy Moser (Oncology, SMPH)
Shelby O'Connor (Pathology, SMPH)
Biocore Committee: Jeff Hardin (director), Janet Batzli (associate director), Michelle Harris, Evelyn Howell, Amy Moser, Shelby O'Connor

## WISCONSIN EXPERIENCE

The Biocore Experience is aligned with the Wisconsin Experience, supporting students' development of knowledge, intellectual skills, and social responsibilities.

Biocore is an Honors biology program, a community, and a curriculum that challenges students to discover and reach their academic potential within a supportive biology education program. The Biocore Honors community of highly motivated students works with dedicated faculty to extend opportunities for scientific research, communication, integrative learning, and collaboration in the context of a four-semester undergraduate biology curriculum.

## Students say:

"Biocore has helped me think about science in a completely different way."
"I have never been so challenged, nor so excited about learning, as during my time in Biocore."
"Biocore taught me how to think critically and how to question. I learned to be part of a team and made some great friendships. "
"Taking Biocore made other advanced courses in biology/biochemistry/ genetics so much easier because I gained such solid background knowledge."
"Biocore has been my most valuable academic experience yet. It has helped me develop my scientific writing skills, ability to problem solve as a member of a team, and to think like a scientist."
"The great staff and teaching teams are excellent -- they really care and invest a huge amount of time to benefit our learning."

See Biocore Experience video (http://www.biocore.wisc.edu/about) and alumni profiles (http://www.biocore.wisc.edu/alumni).

The Biocore curriculum provides an Honors experience in introductory to intermediate level integrated biology. Students experience small class sizes and a high instructor/student ratio all within a learning community of highly motivated and dedicated Honors students, faculty, staff, and peers. Biocore courses emphasize problem-solving, critical thinking, research, scientific writing, group learning, and the process of science. In this collaborative and supportive learning community, students are also able to engage in peer mentoring (http://www.biocore.wisc.edu/ peer_mentors), in directed study opportunities, in the Biocore Prairie (http://www.biocore.wisc.edu/prairie), and in K-12 outreach through the Biocore Outreach Ambassadors (http://www.biocore.wisc.edu/ outreach).

## BOTANY

The Department of Botany provides an introduction to the living world: the diversity of its organisms; its historical origins through evolution; its principles of structure, function, and ecology; and its interactions, relationships, and effects on the nonliving world. Botany is the science of plants, algae, fungi, and bacteria-all living organisms except animals. Green plants and algae provide the photosynthetic energy for fueling all other life on earth and drive global water and carbon cycles. Fungi and bacteria are the fundamental recyclers of the earth.

The study of botany provides a broad background in the principles of modern biology and gives a solid foundation for careers in environmental studies, conservation biology, ecology, systematics, evolution, genetics, physiology, biotechnology, agriculture, and horticulture. Jobs requiring such preparation include teaching in secondary schools and colleges, research and development in industry and medicine, stewardship of our natural world through private and governmental programs, and research and teaching in academia.

Undergraduates interested in majoring in botany should take an introductory course or course sequence in their freshmen or sophomore years:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Option A (strongly recommended) |  |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany | 5 |
| With or without the following: |  |  |
| ZOOLOGY/ <br> BIOLOGY 101 <br> \& ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology and Animal Biology Laboratory | 5 |
| Option B (also appropriate) |  |  |
| BIOLOGY/BOTANY/ ZOOLOGY 151 | Introductory Biology | 5 |
| BIOLOGY/BOTANY/ ZOOLOGY 152 | Introductory Biology | 5 |

Option C (also appropriate)
Biology Core Curriculum

The general undergraduate botany advisor will help guide students to a botany faculty member in their field of interest, who should be chosen as soon as possible-no later than the junior year. All botany faculty members serve as advisors for their special fields.

The department encourages undergraduates to participate in its activities. Volunteers are welcome in the herbarium and greenhouses. There are a few paid positions there and in many of the research laboratories as well.

## DEGREES/MAJORS/CERTIFICATES

- Botany, B.A. (p. 491)
- Botany, B.S. (p. 495)
- Conservation Biology, B.A. (p. 498)
- Conservation Biology, B.S. (p. 504)


## PEOPLE

Professors Ane, Baum, Cameron (chair), Emshwiller, Fernandez, Gilroy, Givnish, Graham, Hotchkiss, Larget, Otegui, Spalding, Sytsma, Waller

Associate Professor Pringle
Assistant Professors Keefover-Ring, Maeda, McCulloh
Majors will eventually choose from the faculty a Senior Thesis advisor, who then will be the student's undergraduate advisor. Prospective majors should contact the general advisors directly.

## BOTANY, B.A.

The Department of Botany provides an introduction to the living world: the diversity of its organisms; its historical origins through evolution; its principles of structure, function, and ecology; and its interactions, relationships, and effects on the nonliving world. Botany is the science of plants, algae, fungi, and bacteria-all living organisms except animals. Green plants and algae provide the photosynthetic energy for fueling all other life on earth and drive global water and carbon cycles. Fungi and bacteria are the fundamental recyclers of the earth.

The study of botany provides a broad background in the principles of modern biology and gives a solid foundation for careers in environmental studies, conservation biology, ecology, systematics, evolution, genetics, physiology, biotechnology, agriculture, and horticulture. Jobs requiring such preparation include teaching in secondary schools and colleges, research and development in industry and medicine, stewardship of our natural world through private and governmental programs, and research and teaching in academia.

## HOW TO GET IN

Prospective botany majors should consult with the general undergraduate botany advisor by the beginning of the junior year to outline a course of study appropriate to the student's needs. Major Declaration may occur by meeting with the undergraduate advisor in the major.

To be accepted as a major in botany, a student must have a grade point average of 2.5 for all science courses taken during the freshman and sophomore years.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part Brequirements


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
Foreign

- Complete the fourth unit of a foreign language; OR

Language . Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

Liberal Arts and Science
Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work
Major Declare and complete at least one (1) major
Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit
Minimum $\quad 2.000$ in all coursework at UW-Madison
GPAs $\quad 2.000$ in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR
MATH, CHEMISTRY, AND PHYSICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Statistics/Mathematics ${ }^{1}$ |  | 3 |
| $\begin{aligned} & \text { STAT } 301 \\ & \text { or STAT } 371 \end{aligned}$ | Introduction to Statistical Methods Introductory Applied Statistics for the Life Sciences |  |
| General Chemistry |  | 5-9 |
| CHEM 103 \& CHEM 104 or CHEM 109 | General Chemistry I and General Chemistry II Advanced General Chemistry |  |
| Organic Chemistry ${ }^{2}$ |  | 3 |
| CHEM 341 <br> or CHEM 343 | Elementary Organic Chemistry Introductory Organic Chemistry |  |
| Physics ${ }^{3}$ |  | 3-5 |
| Select one of the following courses: |  |  |
| PHYSICS 115 | Energy (preferred) |  |
| PHYSICS 103 | General Physics |  |



## BIOLOGY AND BOTANY REQUIREMENTS

30 credits from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Introductory Biology |  | 5-10 |
| Option A, Recommended |  |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany ${ }^{1}$ |  |
| Option B: Introductory Biology |  |  |
| BOTANY/ <br> BIOLOGY/ <br> ZOOLOGY 151 | Introductory Biology |  |
| BOTANY/ <br> BIOLOGY/ <br> ZOOLOGY 152 | Introductory Biology |  |
| Option C: BIOCORE |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |
| Code | Title | Credits |
| One Intermediate/Advanced course in all four of the following areas: |  |  |
| 1. Cell, Molecular, Physiology: |  |  |
| BOTANY 300 or BOTANY 500 | Plant Anatomy Plant Physiology |  |
| 2. Ecology |  |  |


| BOTANY/F\&W ECOL 455 |  |
| :---: | :---: |
|  |  |
| or BOTANY/ <br> F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology |
| 3. Genetics, Evolution: ${ }^{2}$ |  |
| BOTANY/ <br> ANTHRO/ <br> ZOOLOGY 410 | Evolutionary Biology |
| AGRONOMY/ <br> HORT 338 | Plant Breeding and Biotechnology |
| GENETICS 466 | Principles of Genetics ${ }^{2}$ |
| GENETICS 467 | General Genetics 1 |
| GENETICS 468 | General Genetics 2 |
| 4. Diversity |  |
| BOTANY 305 | Plant Morphology and Evolution |
| BOTANY 330 | Algae |
| BOTANY/ <br> PLPATH 332 | Fungi |
| BOTANY 400 | Plant Systematics |
| BOTANY 401 | Vascular Flora of Wisconsin |
| One Intermediate/Advanced course in the following electives OR any other, additional course, from the above four areas: |  |
| BOTANY/ <br> GEOG 338 | Environmental Biogeography |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques I |
| BOTANY/ AGRONOMY/ SOIL SCI 370 | Grassland Ecology |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology |
| BOTANY 403 | Field Collections and Identification |
| BOTANY 422 | Plant Geography |
| BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach |
| BOTANY/ENTOM/ ZOOLOGY 473 | Plant-Insect Interactions |
| BOTANY/ AMER IND/ ANTHRO 474 | Ethnobotany |
| BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: Molecular and Ecological Aspects |
| BOTANY/ <br> GENETICS/ <br> HORT 561 | Introductory Cytogenetics |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data |
| BOTANY/ <br> BIOCHEM 621 | Plant Biochemistry |
| BOTANY/ <br> ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology |
| BIOCHEM 501 | Introduction to Biochemistry |


| BIOCORE 486 | Organismal Biology Laboratory |  |
| :---: | :---: | :---: |
| BIOCORE 587 | Biological Interactions |  |
| F\&W ECOL 415 | Tree Physiology |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| ZOOLOGY 570 | Cell Biology |  |
| Code | Title | Credits |
| Independent Research Experience-choose one: ${ }^{3}$ |  | 2-6 |
| BOTANY 691 \& BOTANY 692 | Senior Thesis and Senior Thesis | 4 |
| BOTANY 681 <br> \& BOTANY 682 | Senior Honors Thesis and Senior Honors Thesis | 6 |
| BOTANY 699 | Directed Study | 3-4 |

1 In addition to BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY 101 and/ or ZOOLOGY/BIOLOGY 102 will count towards 30 credits of Botany major.
Completion of the BIOCORE sequence also satisfies the Genetics, Evolution area (BIOCORE 381 \& BIOCORE 382 \& BIOCORE 383 \& BIOCORE 384 \& BIOCORE 485).
3
Students nearing completion of the major should seek out research opportunities with their advisor or faculty supervisor, and register for their project at the end of the junior year.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all BOTANY and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in BOTANY, taken on the UW-Madison campus
1 BOTANY 300-699 are considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Botany Major in consultation with the Botany undergraduate advisor.

## HONORS IN THE MAJOR IN BOTANY: REQUIREMENTS

To earn Honors in the Major in Botany, students must satisfy the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA in all courses accepted in the major
- A Senior Honors Thesis in BOTANY 681 and BOTANY 682, for a total of 6 credits, and
- 12 credits in intermediate/advanced BOTANY, taken for Honors ${ }^{1}$

1 Excluding BOTANY 681 and BOTANY 682.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Work | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Acquire and demonstrate foundational understanding of the basic properties of plant life from the subcellular to the ecosystem level of organization.
2. Acquire and demonstrate basic understanding in chemistry, physics, and mathematics to interpret biological phenomena.
3. Acquire and demonstrate detailed knowledge in at least five of these core areas of plant biology: Genetics, Physiology, Structural biology, Ecology, Systematics, Evolution, Cryptogamic biology.
4. Explore these core areas in the context of the laboratory and/or the field.
5. Engage in plant biology research (to include algae, photosynthetic bacteria, and fungi): develop hypotheses, acquire scientific information, and interpret results in the context of the historical scientific literature in one or more specialized botanical subdisciplines.
6. Develop an appreciation of communicating scientific information, especially in written form.

## ADVIIING AND CAREERS

## ADVISING

The Department of Botany encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks in the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Ane, Baum, Cameron (chair), Emshwiller, Fernandez, Gilroy, Givnish, Graham, Hotchkiss, Larget, Otegui, Spalding, Sytsma, Waller

Associate Professor Pringle
Assistant Professors Keefover-Ring, Maeda, McCulloh
Majors will eventually choose from the faculty a Senior Thesis advisor, who then will be the student's undergraduate advisor. Prospective majors should contact the general advisors directly.

## BOTANY, B.S.

The Department of Botany provides an introduction to the living world: the diversity of its organisms; its historical origins through evolution; its principles of structure, function, and ecology; and its interactions, relationships, and effects on the nonliving world. Botany is the science of plants, algae, fungi, and bacteria-all living organisms except animals. Green plants and algae provide the photosynthetic energy for fueling all other life on earth and drive global water and carbon cycles. Fungi and bacteria are the fundamental recyclers of the earth.

The study of botany provides a broad background in the principles of modern biology and gives a solid foundation for careers in environmental studies, conservation biology, ecology, systematics, evolution, genetics, physiology, biotechnology, agriculture, and horticulture. Jobs requiring such preparation include teaching in secondary schools and colleges, research and development in industry and medicine, stewardship of our natural world through private and governmental programs, and research and teaching in academia.

## HOW TO GET IN

Prospective botany majors should consult with the general undergraduate botany advisor by the beginning of the junior year to outline a course of study appropriate to the student's needs. Major Declaration may occur by meeting with the Undergraduate advisor in the major.

To be accepted as a major in botany, a student must have a grade point average of 2.5 for all science courses taken during the freshman and sophomore years.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT

## Foreign

Language
Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.

| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in |
| :--- | :--- |
|  | literature |
|  | - |
|  | Social Sciences, 12 credits |$\quad$| Natural Sciences, 12 credits: must include 6 credits |
| :--- |
|  |
|  |
|  |
|  |
| in biological science; and must include 6 credits in |

Liberal Arts 108 credits
and Science
Coursework

Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

MATH, CHEMISTRY, AND PHYSICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Statistics/Mathematics ${ }^{1}$ |  | 3 |
| STAT 301 or STAT 371 | Introduction to Statistical Methods Introductory Applied Statistics for the Life Sciences |  |
| General Chemistry |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 <br> or CHEM 109 | General Chemistry I and General Chemistry II Advanced General Chemistry |  |
| Organic Chemistry ${ }^{2}$ |  | 3 |
| CHEM 341 or CHEM 343 | Elementary Organic Chemistry Introductory Organic Chemistry |  |
| Physics ${ }^{3}$ |  | 3-5 |
| Select one of the following courses: |  |  |
| PHYSICS 115 | Energy (preferred) |  |
| PHYSICS 103 | General Physics |  |
| PHYSICS 104 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |
| PHYSICS 249 | A Modern Introduction to Physics |  |
| Total Credits |  | 14-20 |

1 STAT 371 , MATH 211 or MATH 221 are strongly recommended for students preparing for Graduate School, as these usually are required for entry into post-undergraduate programs.

PHYSICS 115 is the best choice if one course is to be taken. It is recommended that two semesters of PHYSICS be taken (PHYSICS 103/PHYSICS 104 or PHYSICS 201/PHYSICS 202 or PHYSICS 207/PHYSICS 208). Please note PHYSICS 107 and PHYSICS 109 do not fulfill this requirement.

## BIOLOGY AND BOTANY REQUIREMENTS

30 credits from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Introductory Biolo |  | 5-10 |
| Option A, Recommended |  |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany ${ }^{1}$ |  |
| Option B: Introductory Biology |  |  |
| BOTANY/ <br> BIOLOGY/ <br> ZOOLOGY 151 | Introductory Biology |  |
| BOTANY/ <br> BIOLOGY/ <br> ZOOLOGY 152 | Introductory Biology |  |
| Option C: BIOCORE |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |

Code Title Credits

One Intermediate/Advanced course in all four of the following
areas:

1. Cell, Molecular, Physiology:

| BOTANY 300 | Plant Anatomy |
| :---: | :---: |
| or BOTANY 500 | Plant Physiology |

2. Ecology

BOTANY/ The Vegetation of Wisconsin
F\&W ECOL 455
or BOTANY/ General Ecology
F\&W ECOL/
ZOOLOGY 460
3. Genetics, Evolution: ${ }^{2}$

BOTANY/ Evolutionary Biology
ANTHRO/
ZOOLOGY 410
AGRONOMY/ Plant Breeding and Biotechnology
HORT 338
GENETICS 466 Principles of Genetics ${ }^{2}$

| GENETICS 467 | General Genetics 1 |  |
| :---: | :---: | :---: |
| GENETICS 468 | General Genetics 2 |  |
| 4. Diversity |  |  |
| BOTANY 305 | Plant Morphology and Evolution |  |
| BOTANY 330 | Algae |  |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { PL PATH } 332 \end{aligned}$ | Fungi |  |
| BOTANY 400 | Plant Systematics |  |
| BOTANY 401 | Vascular Flora of Wisconsin |  |
| One Intermediate/Advanced course in the following electives OR any other, additional course, from the above four areas: |  |  |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { GEOG } 338 \end{aligned}$ | Environmental Biogeography |  |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques I |  |
| BOTANY/ <br> AGRONOMY/ <br> SOIL SCI 370 | Grassland Ecology |  |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology |  |
| BOTANY 403 | Field Collections and Identification |  |
| BOTANY 422 | Plant Geography |  |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { ZOOLOGY } 450 \end{aligned}$ | Midwestern Ecological Issues: A Case Study Approach |  |
| BOTANY/ENTOM/ <br> ZOOLOGY 473 | Plant-Insect Interactions |  |
| BOTANY/ <br> AMER IND/ <br> ANTHRO 474 | Ethnobotany |  |
| BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: <br> Molecular and Ecological Aspects |  |
| BOTANY/ <br> GENETICS/ <br> HORT 561 | Introductory Cytogenetics |  |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data |  |
| BOTANY/ <br> BIOCHEM 621 | Plant Biochemistry |  |
| BOTANY/ <br> ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology |  |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| BIOCORE 587 | Biological Interactions |  |
| F\&W ECOL 415 | Tree Physiology |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| ZOOLOGY 570 | Cell Biology |  |
| Code | Title | Credits |
| Independent Research Experience-choose one: ${ }^{3}$ |  | 2-6 |
| BOTANY 691 \& BOTANY 692 | Senior Thesis and Senior Thesis | 4 |
| BOTANY 681 <br> \& BOTANY 682 | Senior Honors Thesis and Senior Honors Thesis | 6 |

BOTANY 699 Directed Study 3-4
1 In addition to BOTANY/BIOLOGY 130,ZOOLOGY/BIOLOGY 101 and/ or ZOOLOGY/BIOLOGY 102 will count towards 30 credits of Botany major.
2 Completion of the BIOCORE sequence also satisfies the Genetics, Evolution area (BIOCORE 381 \& BIOCORE 382 \& BIOCORE 383 \& BIOCORE 384 \& BIOCORE 485).
3
Students nearing completion of the major should seek out research opportunities with their advisor or faculty supervisor, and register for their project at the end of the junior year.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all BOTANY and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in BOTANY, taken on the UW-Madison campus
1 BOTANY 300-699 are considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Botany Major in consultation with the Botany undergraduate advisor.

## HONORS IN THE MAJOR IN BOTANY: REQUIREMENTS

To earn Honors in the Major in Botany, students must satisfy the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA in all courses accepted in the major
- A Senior Honors Thesis in BOTANY 681 and BOTANY 682, for a total of 6 credits, and
- 12 credits in intermediate/advanced BOTANY, taken for Honors ${ }^{1}$ 1 Excluding BOTANY 681 and BOTANY 682.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

## Quality of Undergraduate students must maintain the minimum

 Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.
## LEARNING OUTCOMES

1. Acquire and demonstrate foundational understanding of the basic properties of plant life from the subcellular to the ecosystem level of organization.
2. Acquire and demonstrate basic understanding in chemistry, physics, and mathematics to interpret biological phenomena.
3. Acquire and demonstrate detailed knowledge in at least five of these core areas of plant biology: Genetics, Physiology, Structural biology, Ecology, Systematics, Evolution, Cryptogamic biology.
4. Explore these core areas in the context of the laboratory and/or the field.
5. Engage in plant biology research (to include algae, photosynthetic bacteria, and fungi): develop hypotheses, acquire scientific information, and interpret results in the context of the historical scientific literature in one or more specialized botanical subdisciplines.
6. Develop an appreciation of communicating scientific information, especially in written form.

## ADVISING AND CAREERS

## ADVISING

The Department of Botany encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks in the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Ane, Baum, Cameron (chair), Emshwiller, Fernandez, Gilroy, Givnish, Graham, Hotchkiss, Larget, Otegui, Spalding, Sytsma, Waller

## Associate Professor Pringle

Assistant Professors Keefover-Ring, Maeda, McCulloh
Majors will eventually choose from the faculty a Senior Thesis advisor, who then will be the student's undergraduate advisor. Prospective majors should contact the general advisors directly.

## CONSERVATION BIOLOGY, B.A.

Conservation biology is a science-based major designed to provide students broad training in biological, ecological, and related disciplines most relevant to conservation. The program emphasizes basic knowledge of natural history, whole organism biology, ecological interactions, and field biology. The major is characterized by flexibility with a broad range of opportunities allowing students to tailor the program to their interests. This major appeals to independent students capable of assembling a curriculum that takes maximum advantage of both strong background, diversity, and specialization, as well as the breadth available through an L\&S major. The program has a unique appeal to students passionate about conservation biology, from the social scientist to the theoretical ecologist, and empowers students to act as informed citizens of the natural world.

Aldo Leopold, former UW professor considered the father of wildlife management, and Norman Fassett, former UW professor of Botany, first initiated this major in the 1940s to prepare individuals for careers as game wardens, ranger naturalists, and museum workers. These opportunities continue and have expanded to include work in environmental education; forest, game and park management; endangered species research and recovery efforts; work with private conservation organizations and government agencies; and many more. The major is recommended for those seeking a liberal education in the intrinsic values of natural resources and those preparing for graduate study in the rapidly developing field of conservation biology.

## INTERNSHIP/FIELD EXPERIENCE

Students in the conservation biology major are encouraged to take field courses when possible (including suitable study abroad programs) and to gain additional experience via summer jobs and paid or unpaid internships. Students who wish to obtain academic credit for such an experience should arrange in advance to take a Directed Study (e.g., BOTANY 699 Directed Study or ZOOLOGY 699 Directed Studies in Zoology course) as elective work in the major during or immediately after their internship. A maximum of 10 credits of directed study $(698,699)$, senior honors thesis $(681,682)$, senior thesis $(691,692)$, or internships (F\&W ECOL 399 Coordinative Internship/Cooperative Education, ZOOLOGY 677 Internship in Ecology) will count toward the major.

## HOW TO GET IN

To declare the conservation biology major, students must contact or make an appointment (https://
calendar.wisc.edu/scheduling-assistant/public/profiles/ aBNbotSX.html;jsessionid=53F9D957BE6099BCF895E0A8487F3B94.primary with the conservation biology student services coordinator.

If students are not currently in the College of Letters \& Science (L\&S), they must transfer into L\&S before declaring. Students are welcome to meet with the conservation biology student services coordinator to discuss the major before transferring.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of
one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b(Q R B)$ coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

yLanguage
L\&S Breadth

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

Liberal Arts 108 credits
and Science
Coursework
Depth of Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit
Minimum GPAs

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

60 intermediate or advanced credits

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Conservation biology majors must take at least 50 credits in the major. When selecting courses to meet major requirements, students are encouraged to meet with their faculty advisor or student services coordinator to discuss courses that align with their areas of academic interest.

## INTRODUCTORY COURSES

| Code Title | Credits |
| :--- | ---: |
| Introductory Biology |  |
| Select one of the following options: | 10 |

Option 1:
BIOLOGY/ Animal Biology
ZOOLOGY 101 A

| $\begin{aligned} & \text { BIOLOGY/ } \\ & \text { ZOOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |  |
| :---: | :---: | :---: |
| BIOLOGY/ BOTANY 130 | General Botany |  |
| Option 2: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology |  |
| Select at least 10 credits from the following: |  |  |
| Option 3: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| Chemistry |  |  |
| Select one of the follo | wing: | 4-5 |
| CHEM 103 | General Chemistry I |  |
| CHEM 108 | Chemistry in Our World |  |
| CHEM 109 | Advanced General Chemistry (for those who might take more chemistry) |  |
| Physical Environment |  |  |
| Select one of the follo | wing: | 3-5 |
| $\begin{aligned} & \text { ATM OCN/GEOSCI } \\ & 105 \end{aligned}$ | Survey of Oceanography |  |
| $\begin{aligned} & \text { ENVIR ST/GEOSCI } \\ & 106 \end{aligned}$ | Environmental Geology |  |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { GEOG } 120 \end{aligned}$ | Introduction to the Earth System |  |
| ENVIR ST/ GEOG 127 | Physical Systems of the Environment |  |
| GEOSCI 100 | Introductory Geology: How the Earth Works |  |
| GEOSCI 107 | Life of the Past |  |
| GEOSCI 202 | Introduction to Geologic Structures |  |
| GEOSCI 204 | Geologic Evolution of the Earth |  |
| Ecology and Evolution |  |  |
| Select two of the followi (students are encour areas): | wing, each from a different category aged to take courses in all three | 6-7 |
| Ecology: |  |  |
| BOTANY/ <br> F\&W ECOL/ ZOOLOGY 460 | General Ecology |  |
| Evolution: |  |  |
| $\begin{aligned} & \text { GEOSCI } 110 \\ & \text { or ANTHRO/ } \\ & \text { BOTANY/ } \\ & \text { ZOOLOGY } 410 \end{aligned}$ | Evolution and Extinction Evolutionary Biology |  |

Extinction:

```
ENVIR ST/F&W Extinction of Species
ECOL/ZOOLOGY
360
```

Statistics
Select one of the following:

| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |
| :--- | :--- |
| STAT 301 | Introduction to Statistical Methods |
| STAT/F\&W ECOL/ | Statistical Methods for Bioscience I |
| HORT 571 |  |

## SPECIES \& FIELD BIOLOGY

| Code <br> 12 credits from: | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ <br> BOTANY/ <br> SOIL SCI 370 | Grassland Ecology |  |
| ENTOM/ <br> ZOOLOGY 371 | Medical Entomology |  |
| AN SCI/ <br> F\&W ECOL/ <br> ZOOLOGY 520 | Ornithology |  |
| AN SCI/ <br> F\&W ECOL/ <br> ZOOLOGY 521 | Birds of Southern Wisconsin |  |
| ANTHRO 391 | Bones for the Archaeologist |  |
| ANTHRO 458 | Primate Behavioral Ecology |  |
| ANTHRO 668 | Primate Conservation |  |
| BOTANY 330 | Algae |  |
| BOTANY/ <br> PL PATH 332 | Fungi |  |
| BOTANY 400 | Plant Systematics |  |
| BOTANY 401 | Vascular Flora of Wisconsin |  |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology |  |
| BOTANY 403 | Field Collections and Identification |  |
| BOTANY 422 | Plant Geography |  |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin |  |
| BOTANY/ENTOM/ ZOOLOGY 473 | Plant-Insect Interactions |  |
| ENTOM/ <br> ZOOLOGY 302 | Introduction to Entomology |  |
| ENTOM 331 | Taxonomy of Mature Insects |  |
| ENTOM 342 | Insect Ecology |  |
| ENTOM 432 | Taxonomy and Bionomics of Immature Insects |  |
| ENTOM 468 | Studies in Field Entomology |  |
| ENTOM/ <br> ZOOLOGY 530 | Insect Behavior |  |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { ZOOLOGY } 315 \end{aligned}$ | Limnology-Conservation of Aquatic Resources |  |
| ENVIR ST 375 | Field Ecology Workshop |  |


| ENVIR ST/ ZOOLOGY 510 | Ecology of Fishes | ECON/ENVIR ST/ POLI SCI/ | Government and Natural Resources |
| :---: | :---: | :---: | :---: |
| ENVIR ST/ | Ecology of Fishes Lab | URB R PL 449 |  |
| ZOOLOGY 511 |  | ENVIR ST/ | Living in the Global Environment: An |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology | GEOG 139 | Introduction to People-Environment Geography |
| F\&W ECOL 401 | Physiological Animal Ecology | ENVIR ST/ | Environmental Conservation |
| F\&W ECOL/ | Diseases of Wildlife | GEOG 339 |  |
| SURG SCI 548 |  | ENVIR ST/ | Environmental Law, Toxic |
| F\&W ECOL 655 | Animal Population Dynamics | M\&ENVTOX/ | Substances, and Conservation |
| GEOSCI 333 | The Age of Dinosaurs | PL PATH 368 |  |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 541 \end{aligned}$ | Paleobiology | ENVIR ST/ <br> PHILOS 441 | Environmental Ethics |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology | ENVIR ST/GEOG/ HISTORY 460 | American Environmental History |
| HORT 370 | World Vegetable Crops | ENVIR ST/GEOG/ HISTORY 469 | The Making of the American Landscape |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | GEOG 344 | The American West |
| MICROBIO 303 | nis | GEOG 359 | Australia: Environment and Society |
| MICROBIO 304 | Biology of Microorganisms Laboratory | GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development |
| M M \& I/ENTOM/ | Parasitology | ctives to attain 50 cr | credits in the major |
| PATH-BIO/ ZOOLOGY 350 | -arasitogy | AGRONOMY/ <br> HORT 328 | Integrated Weed Management |
| M M \& I/ PATH-BIO/ ZOOLOGY 351 | Parasitology Laboratory | AGRONOMY/ <br> ENTOM/ <br> F\&W ECOL/ <br> M\&ENVTOX 632 | Ecotoxicology: The Chemical Players |
| or ZOOLOGY 42 | 5Behavioral Ecology | AGRONOMY/ ENTOM/ | Ecotoxicology: Impacts on Individuals |
| PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior | F\&W ECOL/ <br> M\&ENVTOX 633 |  |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | AGRONOMY/ ENTOM/ | Ecotoxicology: Impacts on Populations, Communities and |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | F\&W ECOL/ M\&ENVTOX 634 | Ecosystems |
| ZOOLOGY 430 | Comparative Anatomy of | ANTHRO 658 | Ecological Models of Behavior |
|  | Vertebrates | ATM OCN 100 | Weather and Climate |
| Students may NOT apply both ZOOLOGY 425 Behavioral Ecology and PSYCH 449 Animal Behavior in the conservation biology program. |  | ATM OCN 101 | Weather and Climate |
|  |  | ATM OCN/ ENVIR ST/ GEOG 121 | Atmospheric Environment and Society |
| Code Social Science Elective | Title Credits | ATM OCN/ <br> ENVIR ST 171 | Global Change: Atmospheric Issues and Problems |
| At least one 3 credit course from Social Science elective list: |  | BOTANY/ <br> PLPATH 123 | Plants, Parasites, and People |
| AAE215 | Introduction to Agricultural and Applied Economics | BOTANY/ <br> ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology |
| AAE/ ENVIR ST 244 | The Environment and the Global Economy | BOTANY 300 | Plant Anatomy |
|  |  | BOTANY 305 | Plant Morphology and Evolution |
| $\begin{aligned} & \text { C\&E SOC/ } \\ & \text { SOC } 140 \end{aligned}$ | Introduction to Community and Environmental Sociology | BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach |
| C\&E SOC/ <br> F\&W ECOL/ <br> SOC 248 | Environment, Natural Resources, and Society | BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: <br> Molecular and Ecological Aspects |
| ECON 101 | Principles of Microeconomics |  |  |


| BOTANY/ <br> ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology |
| :---: | :---: |
| C\&E SOC/ <br> ENVIR ST/ <br> GEOG 434 | People, Wildlife and Landscapes |
| ENTOM/ <br> ZOOLOGY 540 | Theoretical Ecology |
| ENTOM 699 | Special Problems |
| ENVIR ST/ILS 126 | Principles of Environmental Science |
| ENVIR ST/GEOG/ SOIL SCI 230 | Soil: Ecosystem and Resource |
| ENVIR ST 307 | Literature of the Environment: Speaking for Nature |
| ENVIR ST/ SOIL SCI 324 | Soils and Environmental Quality |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology |
| ENVIR ST/ <br> CIV ENGR/ <br> GEOG 377 | An Introduction to Geographic Information Systems |
| ENVIR ST/ POP HLTH 471 | Introduction to Environmental Health |
| ENVIR ST/ PHYSICS 472 | Scientific Background to Global Environmental Problems |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy |
| ENVIR ST/ GEOG 537 | Culture and Environment |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact |
| F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: <br> Biological and Philosophical Issues |
| F\&W ECOL 379 | Principles of Wildlife Management |
| F\&W ECOL 410 | Principles of Silviculture |
| F\&W ECOL 450 | Communities and Forests |
| F\&W ECOL 550 | Forest Ecology |
| F\&W ECOL 561 | Wildlife Management Techniques |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology |
| F\&W ECOL/HORT/ STAT 571 | Statistical Methods for Bioscience I |
| F\&W ECOL/ ENTOM/ M\&ENVTOX/ PL PATH/ SOIL SCI 606 | Colloquium in Environmental Toxicology |
| F\&W ECOL 699 | Special Problems |
| GENETICS 466 | Principles of Genetics |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 320 \end{aligned}$ | Geomorphology |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 420 \end{aligned}$ | Glacial and Pleistocene Geology |
| GEOSCI/G LE 627 Hydrogeology |  |


| LAND ARC 211 | Landscape Inventory and Evaluation Methods |
| :---: | :---: |
| MICROBIO 101 | General Microbiology |
| MICROBIO 102 | General Microbiology Laboratory |
| PSYCH 606 | Hormones and Behavior |
| SOIL SCI 301 | General Soil Science |
| STAT/F\&W ECOL/ HORT 572 | Statistical Methods for Bioscience II |
| ZOOLOGY 535 | Ecosystem Analysis |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in the major, taken on the UW-Madison campus
1 Courses in the major numbered 300 through 699 are considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Conservation Biology Major in consultation with the Conservation Biology undergraduate advisor.

## HONORS IN THE CONSERVATION BIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Conservation Biology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Complete at least 16 credits, taken for Honors, with a grade of B or better, in the conservation biology major, to include a two-semester Senior Honors Thesis in an appropriate department ${ }^{1}$

1 Examples include Botany, Zoology, Environmental Studies; see the Conservation Biology advisor to verify that your thesis department will be acceptable.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work
grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Explain the basic concepts of ecology and evolution and how they underpin and apply to the science of conservation biology.
2. Understand and explain the scientific process as related to conservation biology, including the relevance of theories and how hypotheses are tested.
3. Recognize species within some particular group of organisms and explain key aspects of their ecology, phylogeny, and conservation needs.
4. Apply general ecological principles to assess and address conservation threats to particular species, communities, and ecosystems.
5. Investigate and communicate the connections between the biological and social sciences and humanities as they affect conservation programs and activities.
6. Identify, interpret, and communicate conservation ideas, needs and programs to others.

## ADVISING AND CAREERS

## ADVISING

Students in the conservation biology major are assigned to a team of advisors composed of a faculty advisor and the major's student services coordinator. See the major's advising page (https:// conservationbiology.Is.wisc.edu/advising) for a list of advisors and for the student services coordinator information.

The faculty advisor provides guidance specific to the discipline through discussions about undergraduate experiences (e.g., research, coursework, internships) that will help prepare students for graduate work or a career after graduation. The student services coordinator provides guidance specific to the discipline but helps students with major declarations, course selection, registration, DARS, L\&S degree and major requirements, and tracking progress towards graduation, as well as connecting students with important resources on campus. Because the major is so broad and involves so much choice, it is important for students to meet early and regularly with their student services coordinator and faculty advisor.

Students contemplating graduate work in a biological discipline are advised to take the following:

| Code | Title |
| :--- | :--- |
| BIOLOGY/ | Introductory Biology |
| BOTANY/ |  |
| ZOOLOGY 151 |  |
| BIOLOGY/ | Introductory Biology |
| BOTANY/ |  |
| ZOOLOGY 152 |  |
| ANTHRO/ | Evolutionary Biology |
| BOTANY/ <br> ZOOLOGY 410 |  |

```
BOTANY/ General Ecology
F&W ECOL/
ZOOLOGY 460
```

Although not required for the major, such students are also encouraged to take the following:

| Code | Title | Credits |
| :--- | :--- | :--- |
| CHEM 104 | General Chemistry II |  |
| GENETICS 466 | Principles of Genetics |  |
| PHYSICS 103 | General Physics |  |
| PHYSICS 104 | General Physics |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |

## PERSONAL STATEMENT

The Personal Statement Requirement, completed during your final year, gives you an opportunity to work with your faculty advisor on this writing requirement that connects your UW-Madison experiences to your future. Through your writing and conversations, you will be evaluated on three learning goals (https://conservationbiologymajor.wiscweb.wisc.edu/wp-content/uploads/sites/289/2017/07/Conservation-Biology-PersonalStatement.pdf).

## HOW DOES IT WORK?

1. Set up an appointment with your faculty advisor in your final year and indicate the meeting is regarding the personal statement requirement.
2. Send to your faculty advisor, in advance of the meeting, your choice of a cover letter for a job or internship position of interest, a personal plan for graduate school, or your own two-page personal statement that reviews your educational and professional history, while also looking toward career goals.
3. Bring along a hard copy of this evaluation form (https:// conservationbiologymajor.wiscweb.wisc.edu/wp-content/uploads/ sites/289/2017/07/Personal-Statement-Faculty-EvaluationForm.pdf) to be completed and signed by your faculty advisor and then submit evaluation to the Conservation Biology Student Services Coordinator, 141 Birge Hall.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Committee of Advisors: Givnish (Botany), Hotchkiss (Botany/ Environmental Studies), Ives (Zoology), Strier (Anthropology), Vander Zanden (Center for Limnology/Integrative Biology), Waller (Botany, chair of major), Zuckerberg (Forest and Wildlife Ecology)

## RESOURCES AND SCHOLARSHIPS

## ROLAND H. \& MAUDE M. BECKER SCHOLARSHIP

Established by Barbara B. Glass in 1988 in memory of her parents, the Roland \& Maude Becker scholarship (https:// conservationbiology.Is.wisc.edu/becker-scholarship) provides financial assistance to students with a major in conservation biology. The scholarship is a one-time award to help support a conservation experience related to the major. A conservation experience may include an undergraduate research experience, internship experience, study abroad program, etc. Awards will be in the amount of $\$ 500$ and up to two awards will be awarded per academic year.

## L\&S CAREER SERVICES SUMMER INTERNSHIP SCHOLARSHIP

This scholarship (http://scholarships.wisc.edu/Scholarships/ schlrDetails?scholld=4101) provides amounts ranging from \$2,000 to $\$ 5,000$ each to help students take advantage of and enable them to participate in a first time internship opportunity that is unpaid or provides a limited stipend.

## HILLDALE UNDERGRADUATE/FACULTY RESEARCH FELLOWSHIP

The Hilldale Undergraduate/Faculty Research Fellowships (https:// awards.advising.wisc.edu/all-scholarships/hilldale-undergraduatefaculty-research-fellowship) support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Approximately 97-100 Hilldale awards are available each year. The student researcher receives $\$ 3,000$, and faculty/staff research advisor receives $\$ 1,000$ to help offset research costs (e.g., supplies, faculty or student travel related to the project).

## HOLSTROM ENVIRONMENTAL SCHOLARSHIPS

The Holstrom Environmental Scholarships (https://go.wisc.edu/55ox41) support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Research proposals must have an environmental focus, and applicants must have at least a junior standing at time of application. Apply spring semester to fund work on the project during the summer or following academic year.

## UNDERGRADUATE SYMPOSIUM

The annual Undergraduate Symposium (https:// ugradsymposium.wisc.edu) showcases undergraduate creativity, achievement, research, service-learning and community-based research from all areas of study at UW-Madison including the humanities, fine arts, biological sciences, physical sciences, and social sciences. This past year nearly 700 students presented, displayed or performed their work for members of the university, the surrounding community, family and friends.

## WISCONSIN IDEA FELLOWSHIPS

Wisconsin Idea Fellowships (https://morgridge.wisc.edu/students/ wisconsin-idea-fellowships) are awarded annually to undergraduate student projects working towards solving a challenge identified along with local or global community partner. Fellowships are awarded to semester-long or year-long projects designed by an undergraduate student (or group of students) in collaboration with a community organization and a UW-Madison faculty or academic staff member.

## CONSERVATION BIOLOGY, B.S.

Conservation biology is a science-based major designed to provide students broad training in biological, ecological, and related disciplines most relevant to conservation. The program emphasizes basic knowledge of natural history, whole organism biology, ecological interactions, and field biology. The major is characterized by flexibility with a broad range of opportunities allowing students to tailor the program to their interests. This major appeals to independent students capable of assembling a curriculum that takes maximum advantage of both strong background, diversity, and specialization, as well as the breadth available through an L\&S major. The program has a unique appeal to students passionate about conservation biology, from the social scientist to the theoretical ecologist, and empowers students to act as informed citizens of the natural world.

Aldo Leopold, former UW professor considered the father of wildlife management, and Norman Fassett, former UW professor of Botany, first initiated this major in the 1940s to prepare individuals for careers as game wardens, ranger naturalists, and museum workers. These opportunities continue and have expanded to include work in environmental education; forest, game and park management; endangered species research and recovery efforts; work with private conservation organizations and government agencies; and many more. The major is recommended for those seeking a liberal education in the intrinsic values of natural resources and those preparing for graduate study in the rapidly developing field of conservation biology.

## INTERNSHIP/FIELD EXPERIENCE

Students in the conservation biology major are encouraged to take field courses when possible (including suitable study abroad programs) and to gain additional experience via summer jobs and paid or unpaid internships. Students who wish to obtain academic credit for such an experience should arrange in advance to take a Directed Study (e.g., BOTANY 699 Directed Study or ZOOLOGY 699 Directed Studies in Zoology course) as elective work in the major during or immediately after their internship. A maximum of 10 credits of directed study $(698,699)$, senior honors thesis $(681,682)$, senior thesis $(691,692)$, or internships (F\&W ECOL 399 Coordinative Internship/Cooperative Education, ZOOLOGY 677 Internship in Ecology) will count toward the major.

## HOW TO GET IN

To declare the conservation biology major, students must contact or make an appointment (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/ aBNbotSX.html;jsessionid=53F9D957BE6099BCF895E0A8487F3B94.primary) with the conservation biology student services coordinator.

If students are not currently in the College of Letters \& Science (L\&S), they must transfer into L\&S before declaring. Students are welcome to meet with the conservation biology student services coordinator to discuss the major before transferring.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Conservation biology majors must take at least 50 credits in the major. When selecting courses to meet major requirements, students are encouraged to meet with their faculty advisor or student services coordinator to discuss courses that align with their areas of academic interest.

## INTRODUCTORY COURSES



Option 2:

| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 151 | Introductory Biology |  |
| :---: | :---: | :---: |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology |  |
| Select at least 10 credits from the following: |  |  |
| Option 3: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| Chemistry |  |  |
| Select one of the following: |  | 4-5 |
| CHEM 103 | General Chemistry I |  |
| CHEM 108 | Chemistry in Our World |  |
| CHEM 109 | Advanced General Chemistry (for those who might take more chemistry) |  |
| Physical Environment |  |  |
| Select one of the follo | wing: | 3-5 |
| $\begin{aligned} & \text { ATM OCN/GEOSCI } \\ & 105 \end{aligned}$ | Survey of Oceanography |  |
| $\begin{aligned} & \text { ENVIR ST/GEOSCI } \\ & 106 \end{aligned}$ | Environmental Geology |  |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { GEOG } 120 \end{aligned}$ | Introduction to the Earth System |  |
| ENVIR ST/ GEOG 127 | Physical Systems of the <br> Environment |  |
| GEOSCI 100 | Introductory Geology: How the Earth Works |  |
| GEOSCI 107 | Life of the Past |  |
| GEOSCI 202 | Introduction to Geologic Structures |  |
| GEOSCI 204 | Geologic Evolution of the Earth |  |
| Ecology and Evolution |  |  |
| Select two of the following, each from a different category (students are encouraged to take courses in all three areas): |  | 6-7 |
| Ecology: |  |  |
| BOTANY/ <br> F\&W ECOL/ ZOOLOGY 460 | General Ecology |  |
| Evolution: |  |  |
| $\begin{aligned} & \text { GEOSCI } 110 \\ & \text { or ANTHRO/ } \\ & \text { BOTANY/ } \\ & \text { ZOOLOGY } 410 \end{aligned}$ | Evolution and Extinction Evolutionary Biology |  |
| Extinction: |  |  |
| ENVIR ST/F\&W ECOL/ZOOLOGY 360 | Extinction of Species |  |

## Statistics

Select one of the following:

| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |
| :--- | :--- |
| STAT 301 | Introduction to Statistical Methods |
| STAT/F\&W ECOL/ | Statistical Methods for Bioscience I |
| HORT 571 |  |

## SPECIES \& FIELD BIOLOGY

| Code | Title | Credits |
| :---: | :---: | :---: |
| 12 credits from: |  |  |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology |  |
| ENTOM/ <br> ZOOLOGY 371 | Medical Entomology |  |
| AN SCI/ <br> F\&W ECOL/ <br> ZOOLOGY 520 | Ornithology |  |
| AN SCI/ <br> F\&W ECOL/ <br> ZOOLOGY 521 | Birds of Southern Wisconsin |  |
| ANTHRO 391 | Bones for the Archaeologist |  |
| ANTHRO 458 | Primate Behavioral Ecology |  |
| ANTHRO 668 | Primate Conservation |  |
| BOTANY 330 | Algae |  |
| BOTANY/ <br> PL PATH 332 | Fungi |  |
| BOTANY 400 | Plant Systematics |  |
| BOTANY 401 | Vascular Flora of Wisconsin |  |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology |  |
| BOTANY 403 | Field Collections and Identification |  |
| BOTANY 422 | Plant Geography |  |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin |  |
| BOTANY/ENTOM/ ZOOLOGY 473 | Plant-Insect Interactions |  |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology |  |
| ENTOM 331 | Taxonomy of Mature Insects |  |
| ENTOM 342 | Insect Ecology |  |
| ENTOM 432 | Taxonomy and Bionomics of Immature Insects |  |
| ENTOM 468 | Studies in Field Entomology |  |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 530 \end{aligned}$ | Insect Behavior |  |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { ZOOLOGY } 315 \end{aligned}$ | Limnology-Conservation of Aquatic Resources |  |
| ENVIR ST 375 | Field Ecology Workshop |  |
| ENVIR ST/ ZOOLOGY 510 | Ecology of Fishes |  |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { ZOOLOGY } 511 \end{aligned}$ | Ecology of Fishes Lab |  |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology |  |


| F\&W ECOL 401 | Physiological Animal Ecology |
| :---: | :---: |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife |
| F\&W ECOL 655 | Animal Population Dynamics |
| GEOSCI 333 | The Age of Dinosaurs |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 541 \end{aligned}$ | Paleobiology |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology |
| HORT 370 | World Vegetable Crops |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology |
| MICROBIO 303 | Biology of Microorganisms |
| MICROBIO 304 | Biology of Microorganisms Laboratory |
| M M \& I/ENTOM/ PATH-BIO/ ZOOLOGY 350 | Parasitology |
| M M \& I/ PATH-BIO/ ZOOLOGY 351 | Parasitology Laboratory |
| $\begin{aligned} & \text { PSYCH } 449 \\ & \text { or ZOOLOGY } 42 \end{aligned}$ | Animal Behavior ${ }^{1}$ 5Behavioral Ecology |
| PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates |

## ELECTIVES

Code Title Credits

Social Science Electives
At least one 3 credit course from Social Science elective list:

| A A E 215 | Introduction to Agricultural and <br> Applied Economics |
| :--- | :--- |
| A A E/ | The Environment and the Global |
| ENVIR ST 244 | Economy |
| C\&E SOC/ | Introduction to Community and |
| SOC 140 | Environmental Sociology |
| C\&E SOC/ | Environment, Natural Resources, |
| F\&W ECOL/ | and Society |
| SOC 248 |  |
| ECON 101 | Principles of Microeconomics |
| ECON/ENVIR ST// | Government and Natural Resources |
| POLI SCI/ |  |
| URB R PL 449 |  |
| ENVIR ST/ | Living in the Global Environment: An |
| GEOG 139 | Introduction to People-Environment |
|  | Geography |


| ENVIR ST/ GEOG 339 | Environmental Conservation |
| :---: | :---: |
| ENVIR ST/ M\&ENVTOX/ <br> PLPATH 368 | Environmental Law, Toxic Substances, and Conservation |
| ENVIR ST/ <br> PHILOS 441 | Environmental Ethics |
| ENVIR ST/GEOG/ HISTORY 460 | American Environmental History |
| ENVIR ST/GEOG/ HISTORY 469 | The Making of the American Landscape |
| GEOG 344 | The American West |
| GEOG 359 | Australia: Environment and Society |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development |
| Electives to attain 50 credits in the major |  |
| AGRONOMY/ <br> HORT 328 | Integrated Weed Management |
| AGRONOMY/ <br> ENTOM/ <br> F\&W ECOL/ <br> M\&ENVTOX 632 | Ecotoxicology: The Chemical Players |
| AGRONOMY/ <br> ENTOM/ <br> F\&W ECOL/ <br> M\&ENVTOX 633 | Ecotoxicology: Impacts on Individuals |
| AGRONOMY/ <br> ENTOM/ <br> F\&W ECOL/ <br> M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems |
| ANTHRO 658 | Ecological Models of Behavior |
| ATM OCN 100 | Weather and Climate |
| ATM OCN 101 | Weather and Climate |
| ATM OCN/ <br> ENVIR ST/ <br> GEOG 121 | Atmospheric Environment and Society |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems |
| BOTANY/ <br> PLPATH 123 | Plants, Parasites, and People |
| BOTANY/ <br> ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology |
| BOTANY 300 | Plant Anatomy |
| BOTANY 305 | Plant Morphology and Evolution |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { ZOOLOGY } 450 \end{aligned}$ | Midwestern Ecological Issues: A Case Study Approach |
| BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: <br> Molecular and Ecological Aspects |
| BOTANY/ <br> ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology |
| C\&E SOC/ <br> ENVIR ST/ <br> GEOG 434 | People, Wildlife and Landscapes |


| ENTOM/ <br> ZOOLOGY 540 | Theoretical Ecology |
| :---: | :---: |
| ENTOM 699 | Special Problems |
| ENVIR ST/ILS 126 | Principles of Environmental Science |
| ENVIR ST/GEOG/ SOIL SCI 230 | Soil: Ecosystem and Resource |
| ENVIR ST 307 | Literature of the Environment: Speaking for Nature |
| ENVIR ST/ SOIL SCI 324 | Soils and Environmental Quality |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology |
| ENVIR ST/ <br> CIV ENGR/ <br> GEOG 377 | An Introduction to Geographic Information Systems |
| ENVIR ST/ POP HLTH 471 | Introduction to Environmental Health |
| ENVIR ST/ PHYSICS 472 | Scientific Background to Global Environmental Problems |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy |
| ENVIR ST/ GEOG 537 | Culture and Environment |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact |
| F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: Biological and Philosophical Issues |
| F\&W ECOL 379 | Principles of Wildlife Management |
| F\&W ECOL 410 | Principles of Silviculture |
| F\&W ECOL 450 | Communities and Forests |
| F\&W ECOL 550 | Forest Ecology |
| F\&W ECOL 561 | Wildlife Management Techniques |
| F\&W ECOL/ <br> LAND ARC/ <br> ZOOLOGY 565 | Principles of Landscape Ecology |
| $\begin{aligned} & \text { F\&W ECOL/HORT/ } \\ & \text { STAT } 571 \end{aligned}$ | Statistical Methods for Bioscience I |
| F\&W ECOL/ ENTOM/ M\&ENVTOX/ PL PATH/ SOIL SCI 606 | Colloquium in Environmental Toxicology |
| F\&W ECOL 699 | Special Problems |
| GENETICS 466 | Principles of Genetics |
| GEOG/ <br> GEOSCI 320 | Geomorphology |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 420 \end{aligned}$ | Glacial and Pleistocene Geology |
| GEOSCI/G LE 627 | Hydrogeology |
| LAND ARC 211 | Landscape Inventory and Evaluation Methods |
| MICROBIO 101 | General Microbiology |
| MICROBIO 102 | General Microbiology Laboratory |
| PSYCH 606 | Hormones and Behavior |
| SOIL SCI 301 | General Soil Science |

STAT/F\&W ECOL/ Statistical Methods for Bioscience II HORT 572

ZOOLOGY 535 Ecosystem Analysis

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in the major, taken on the UW-Madison campus
1 Courses in the major numbered 300 through 699 are considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Conservation Biology Major in consultation with the Conservation Biology undergraduate advisor.

## HONORS IN THE CONSERVATION BIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Conservation Biology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Complete at least 16 credits, taken for Honors, with a grade of B or better, in the conservation biology major, to include a two-semester Senior Honors Thesis in an appropriate department ${ }^{1}$

1 Examples include Botany, Zoology, Environmental Studies; see the Conservation Biology advisor to verify that your thesis department will be acceptable.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Explain the basic concepts of ecology and evolution and how they underpin and apply to the science of conservation biology.
2. Understand and explain the scientific process as related to conservation biology, including the relevance of theories and how hypotheses are tested.
3. Recognize species within some particular group of organisms and explain key aspects of their ecology, phylogeny, and conservation needs.
4. Apply general ecological principles to assess and address conservation threats to particular species, communities, and ecosystems.
5. Investigate and communicate the connections between the biological and social sciences and humanities as they affect conservation programs and activities.
6. Identify, interpret, and communicate conservation ideas, needs and programs to others.

## ADVISING AND CAREERS

## ADVISING

Students in the conservation biology major are assigned to a team of advisors composed of a faculty advisor and the major's student services coordinator. See the major's advising page (https:// conservationbiology.Is.wisc.edu/advising) for a list of advisors and for the student services coordinator information.

The faculty advisor provides guidance specific to the discipline through discussions about undergraduate experiences (e.g., research, coursework, internships) that will help prepare students for graduate work or a career after graduation. The student services coordinator provides guidance specific to the discipline but helps students with major declarations, course selection, registration, DARS, L\&S degree and major requirements, and tracking progress towards graduation, as well as connecting students with important resources on campus. Because the major is so broad and involves so much choice, it is important for students to meet early and regularly with their student services coordinator and faculty advisor.

Students contemplating graduate work in a biological discipline are advised to take the following:

| Code | Title | Credits |
| :--- | :--- | :--- |
| BIOLOGY/ | Introductory Biology |  |
| BOTANY/ |  |  |
| ZOOLOGY 151 |  |  |
| BIOLOGY/ | Introductory Biology |  |
| BOTANY/ |  |  |
| ZOOLOGY 152 |  |  |
| ANTHRO/ | Evolutionary Biology |  |
| BOTANY/ |  |  |
| ZOOLOGY 410 |  |  |
| BOTANY/ | General Ecology |  |
| F\&W ECOL/ |  |  |
| ZOOLOGY 460 |  |  |

Although not required for the major, such students are also encouraged to take the following:

## Code

CHEM 104

## Title

General Chemistry II

| GENETICS 466 | Principles of Genetics |
| :--- | :--- |
| PHYSICS 103 | General Physics |
| PHYSICS 104 | General Physics |
| MATH 221 | Calculus and Analytic Geometry 1 |

## PERSONAL STATEMENT

The Personal Statement Requirement, completed during your final year, gives you an opportunity to work with your faculty advisor on this writing requirement that connects your UW-Madison experiences to your future. Through your writing and conversations, you will be evaluated on three learning goals (https://conservationbiologymajor.wiscweb.wisc.edu/wp-content/uploads/sites/289/2017/07/Conservation-Biology-PersonalStatement.pdf).

## HOW DOES IT WORK?

1. Set up an appointment with your faculty advisor in your final year and indicate the meeting is regarding the personal statement requirement.
2. Send to your faculty advisor, in advance of the meeting, your choice of a cover letter for a job or internship position of interest, a personal plan for graduate school, or your own two-page personal statement that reviews your educational and professional history, while also looking toward career goals.
3. Bring along a hard copy of this evaluation form (https:// conservationbiologymajor.wiscweb.wisc.edu/wp-content/uploads/ sites/289/2017/07/Personal-Statement-Faculty-EvaluationForm.pdf) to be completed and signed by your faculty advisor and then submit evaluation to the Conservation Biology Student Services Coordinator, 141 Birge Hall.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Committee of Advisors: Professors Givnish (Botany), Hotchkiss (Botany/ Environmental Studies), Ives (Zoology), Strier (Anthropology), Townsend (Forest \& Wildlife Ecology), Vander Zanden (Center for Limnology/

Zoology), Waller (Botany, chair of major), Zuckerberg (Forest and Wildlife Ecology)

## RESOURCES AND SCHOLARSHIPS

## ROLAND H. \& MAUDE M. BECKER SCHOLARSHIP

Established by Barbara B. Glass in 1988 in memory of her parents, the Roland \& Maude Becker scholarship (https:// conservationbiology.Is.wisc.edu/becker-scholarship) provides financial assistance to students with a major in conservation biology. The scholarship is a one-time award to help support a conservation experience related to the major. A conservation experience may include an undergraduate research experience, internship experience, study abroad program, etc. Awards will be in the amount of $\$ 500$ and up to two awards will be awarded per academic year.

## L\&S CAREER SERVICES SUMMER INTERNSHIP SCHOLARSHIP

This scholarship (http://scholarships.wisc.edu/Scholarships/ schlrDetails?scholld=4101) provides amounts ranging from $\$ 2,000$ to $\$ 5,000$ each to help students take advantage of and enable them to participate in a first time internship opportunity that is unpaid or provides a limited stipend.

## HILLDALE UNDERGRADUATE/FACULTY RESEARCH FELLOWSHIP

The Hilldale Undergraduate/Faculty Research Fellowships (https:// awards.advising.wisc.edu/all-scholarships/hilldale-undergraduatefaculty-research-fellowship) support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Approximately $97-100$ Hilldale awards are available each year. The student researcher receives $\$ 3,000$, and faculty/staff research advisor receives $\$ 1,000$ to help offset research costs (e.g., supplies, faculty or student travel related to the project).

## HOLSTROM ENVIRONMENTAL SCHOLARSHIPS

The Holstrom Environmental Scholarships (https://go.wisc.edu/550x41) support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Research proposals must have an environmental focus, and applicants must have at least a junior standing at time of application. Apply spring semester to fund work on the project during the summer or following academic year.

## UNDERGRADUATE SYMPOSIUM

The annual Undergraduate Symposium (https:// ugradsymposium.wisc.edu) showcases undergraduate creativity, achievement, research, service-learning and community-based research from all areas of study at UW-Madison including the humanities, fine arts, biological sciences, physical sciences, and social sciences. This past year nearly 700 students presented, displayed or performed their work for members of the university, the surrounding community, family and friends.

## WISCONSIN IDEA FELLOWSHIPS

Wisconsin Idea Fellowships (https://morgridge.wisc.edu/students/ wisconsin-idea-fellowships) are awarded annually to undergraduate student projects working towards solving a challenge identified along with local or global community partner. Fellowships are awarded to semester-long or year-long projects designed by an undergraduate
student (or group of students) in collaboration with a community organization and a UW-Madison faculty or academic staff member.

## CENTER FOR LAW, SOCIETY, AND JUSTICE

The Center for Law, Society, and Justice offers an undergraduate major in the College of Letters \& Science. The program mission is to provide a liberal education across traditional disciplines, focusing on the theory and operation of law and legal institutions. Courses in the legal studies major expose students to the many facets of law as a social phenomenon-its evolution, function, motivating ideas and effects. The major is not intended as preparation for law school because the emphasis is on exploring broadly defined questions about law from a variety of perspectives, rather than on training for the profession. The legal studies major is, however, suitable for pre-law students.

The curriculum is designed around five themes, each of which is associated with a group of courses, and each of which incorporates comparative and historical approaches.

## THEME GROUP 1: LEGAL INSTITUTIONS

Institutions are at the core of social life. They govern our interactions, distribute power and resources, and influence how we make sense of the world. Courses in this theme group focus on those institutions involved in the creation and application of law. They explore such questions as how legal institutions evolve; how legal institutions help determine the shape of law-in doctrine and in action-and how and whether, in turn, legal institutions can be shaped to create different social outcomes. Institutions are central to the studies of society and politics throughout the disciplines, and courses in the group include perspectives from history, anthropology, sociology, political science, and political theory.

## THEME GROUP 2: PROCESSES OF LEGAL ORDER AND DISORDER

This theme examines the dynamics of order at the individual and societal level. In the course of this examination, students are made aware of the political and social biases that can underlie definitions of "order." This theme should also allow students to address how social and political biases relate to divisions of class, race and gender, and how the mechanisms of conflict resolution and order maintenance can be used to reinforce or challenge existing power structures.

## THEME GROUP 3: LAW AND SOCIAL FORCES

This theme group explores the intersection between law, social structures and social movements. Courses in this group address social inequality, generally in the U.S. context, grounded in ethno-racial, gender, and sexuality-based difference. At critical points, the struggle for equality has taken pointedly legal form, whether in the shape of campaigns for legislative change or recognition, or through the litigation of particular cases. Legal categories have informed social identities. Equally, changing social identities have pushed back on legal categories. Courses integrate broad social dynamics with the rise of organized social movements that use law as an arena in which to reassess social life and values.

## THEME GROUP 4: LAW AND CULTURE

This theme group introduces students to legal thought, institutions, and practices beyond mainstream or contemporary legal systems, specifically modern Euro-American legal cultures. Courses in this theme group present either culturally based challenges to mainstream modern legal systems or legal systems that are culturally or historically distinct from them. The comparative study of distinct legal traditions and movements forces us to reexamine the cultural presuppositions embedded in modern legal systems, revealing both good reasons for defending mainstream Euro-American laws and arguments and models for changing or questioning prevailing systems. Courses examine historical developments in or affecting law, non-Western legal thought or traditions, and the effect of cultural institutions such as religion, literature, or media on law.

## THEME GROUP 5: LAW AND THEORY

Many theoretical and philosophical questions are articulated as propositions about law: its nature, sources, contents, and relations to other aspects of social life. While only some philosophers or social, political or legal theorists work specifically in the area of "legal theory," almost literally all work in any of these areas contributes to our understanding of the sources and nature of law, legal institutions and legal practices, and for many if not most theorists explicit discussions of law are central elements of their work. Courses in this theme group focus on the ways in which "law" is treated as a working concept or as a subject of study in theoretical works, and conversely on how understandings drawn from theoretical writings inform our own understanding of law in all its dimensions.

## DEGREES/MAJORS/CERTIFICATES

- Criminal Justice, Certificate (p. 511)
- Legal Studies, B.A. (p. 514)
- Legal Studies, B.S. (p. 519)


## CRIMINAL JUSTICE, CERTIFICATE

The Criminal Justice Certificate Program includes an interdisciplinary sequence of classes and an internship, for students interested in the American criminal and juvenile justice systems. Certificate students select courses in legal studies and from the departments of Sociology, Political Science, Social Work, Psychology, Gender and Women's Studies, Anthropology, History, Human Development and Family Studies, Rehabilitation Psychology, Integrated Liberal Studies, and Counseling Psychology. Students gain a broad understanding of the philosophy, theories, and operation of the adult and juvenile justice systems.

## HOW TO GET IN

Any undergraduate regardless of major or college affiliation may earn a certificate. Students interested in earning a certificate in criminal justice must declare the certificate with the criminal justice advisor. Students are encouraged to declare the certificate as early as possible within their college careers. Field work/internship seminar courses require prerequisite courses and availability may be limited. The internship
courses are in high demand and enrollment may be determined by the date of declaration in the certificate program.

## REQUIREMENTS

To earn a criminal justice certificate, a student must complete all requirements for a bachelor's degree, requirements of the declared major(s), and graduate from UW-Madison. In addition, students must take all required certificate courses for a letter grade versus pass/fail. It is not necessary to take classes in any particular sequence; however, individual courses may have prerequisites.

## REQUIREMENTS FOR STUDENTS ENROLLED IN THE CERTIFICATE PROGRAM

The certificate requires a minimum of seven courses and 21 credits. The courses must be distributed as follows:
Code Title Credits

Select one course from each of the six defined Groups
Select one additional course from Group 3 or Group 4
GROUP 1-CRIMINAL JUSTICE SYSTEM
Code Title Credits

LEGAL ST/SOC 131 Criminal Justice in America 3-4
GROUP 2-THEORIES OF CRIME AND DEVIANT BEHAVIOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| SOC 421 | Processes of Deviant Behavior | 3-4 |
| SOC 441 | Criminology | 3-4 |
| SOC 446 | Juvenile Delinquency | 3-4 |
| PSYCH 601 | Current Topics in Psychology (Psychology of Juvenile Delinquency) ${ }^{1}$ | 3 |
| PSYCH 601 | Current Topics in Psychology (Psychopathy and Other Syndromes of Disinhibition) ${ }^{1}$ | 3 |
| PSYCH 501 | Depth Topic in Social Science (Child Psychopathology) | 4 |
| PSYCH 526 | The Criminal Mind: Forensic and Psychobiological Perspectives | 4 |
| SOC WORK 643 | Social Work and Delinquency | 2-3 |
| SOC WORK 664 | Topics in Contemporary Social Welfare (Delinquent) ${ }^{1}$ | 2-3 |

1 Topics course. Credit granted only for topics listed.

## GROUP 3-CRIME AND JUSTICE/OPERATIONS OF THE JUSTICE SYSTEM

| Code | Title | Credits |
| :--- | :--- | ---: |
| HISTORY/LEGAL ST | The History of Punishment | $3-4$ |
| 426 | Topics in Legal Studies and the |  |
| LEGAL ST 400 | Social Sciences (Civil Rights) ${ }^{1}$ | $3-4$ |


| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Gender, Crime \& Justice) ${ }^{1}$ | 3-4 | COMP LIT 350 | Problems in Comparative Literatures and Cultures (Literature \& Prison) ${ }^{1}$ | 3-4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Amer Juvenille) ${ }^{1}$ | 3-4 | COMP LIT 500 | The Comparative In and Beyond Comparative Literature (Guilt) ${ }^{1}$ | 3 |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Comparative Criminal Justice) ${ }^{1}$ | 3-4 | HISTORY 223 HISTORY/LEGAL ST | Explorations in European History <br> (H) (Underworld) ${ }^{1}$ <br> Rule of Law: Philosophical and | 3-4 3-4 |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Surveil) ${ }^{1}$ | 3-4 | 459 | Historical Models |  |
|  |  |  | HDFS 474 | Racial Ethnic Families in the U.S. | 3 |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Wrongful Convictions) ${ }^{1}$ | 3-4 | ILS 275 | Special Topics in Integrated Liberal Studies (Justice and Equity in America) ${ }^{1}$ | 3 |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Ethnicity, Race and Justice) ${ }^{1}$ | 3-4 | ILS 372 | Interdisciplinary Studies in the Social Sciences (Guns \& Society) ${ }^{1}$ | 3 |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Neighborhoods, Crime and Punishment) | 3-4 | LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Race and Law) ${ }^{1}$ | 3-4 |
|  |  |  | LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Comparative | 3-4 |
| LEGAL ST/GEN\&WS/ SOC 425 | Crime, Gender and Justice | 3 |  | Constitutional ) ${ }^{1}$ |  |
| SOC 425 LEGAL ST/LIS 460 | Surveillance, Privacy, and Police Powers | 3 | LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Immingraton, Crime and Enfo) ${ }^{1}$ | 3-4 |
| PHILOS 304 | Topics in Philosophy: Humanities (Philos and Criminal Punishment) | 3-4 | LEGAL ST 450 | Topics in Legal Studies and the Humanities (Law and Film) ${ }^{1}$ | 3-4 |
| POLI SCI 314 | Criminal Law and Justice | 3-4 | LEGAL ST 409 | Human Rights in Law and Society | 3 |
| POLI SCI 401 | Selected Topics in Political Science (U.S. Policing ) ${ }^{1}$ | 3-4 | LEGAL ST 450 | Topics in Legal Studies and the Humanities (History of Forensic | 3-4 |
| PSYCH 311 | Issues in Psychology (Psychology, Law, and Social Policies) | 1-4 |  | Science ) ${ }^{1}$ |  |
|  |  |  | LEGAL ST 450 | Topics in Legal Studies and the | 3-4 |
| PSYCH 401 | Psychology, Law, and Social Policy <br> (Psychology, Law and Social Policy) | 3 |  | Humanities (Crim Justice and Pop Culture) ${ }^{1}$ |  |
| PSYCH 601 | Current Topics in Psychology (Legal Psychology Criminal and Civil Issues) ${ }^{1}$ | 3 | POLI SCI 601 | Proseminar. Topics in Political Science (Race) ${ }^{1}$ | 3 |
|  |  |  | LEGAL ST/GEN\&WS | Women and the Law | 3 |
| SOC 496 | Topics in Sociology (Policing ) ${ }^{1}$ | 1-3 | 422 |  |  |
| SOC 496 | Topics in Sociology (Poverty) ${ }^{1}$ | 1-3 | LEGAL ST 444 | Law in Action | 3 |
| SOC 496 | Topics in Sociology (Gender, Crime and Justice) ${ }^{1}$ | 1-3 | LEGAL ST/SOC 641 | Sociology of Law | 3-4 |
|  |  |  | POLI SCI 412 | The American Constitution: Rights | 4 |
| AFROAMER 673 | Selected Topics in Afro-American Society (Race \& Policing) ${ }^{1}$ | 3 |  | and Civil Liberties |  |
|  |  |  | PSYCH 405 | Abnormal Psychology | 3-4 |
| COUN PSY 300 | Special Topics: Counseling and Counseling Psychology (Working with Refugee Families) ${ }^{1}$ | 1-4 | PSYCH 512 | Behavior Pathology-Psychoses | 3 |
|  |  |  | SOC/AMER IND/ <br> C\&E SOC 578 | Poverty and Place | 3 |
| Topics course. Credit granted only for topics listed. |  |  | SOC 620 | Comparative Racial Inequality | 3 |
|  |  |  | SOC 633 | Social Stratification | 3 |
| GROUP 4-BROADER PSYCHO/SOCIO/ECONOMIC PROCESSES RELATED TO CRIMINAL JUSTICE |  |  | SOC WORK 420 | Poverty and Social Welfare | 3 |
|  |  |  | SOC WORK 453 | Alcohol and Other Drug Abuse | 2-4 |
| Code | Title | Credits | SOC WORK 462 | Child Welfare | 3 |
| AFROAMER/ | Gender, Race and the Civil Rights | 3 | SOC WORK 523 | Family Violence | 3 |
| GEN\&WS 625 | Movement |  | SOC WORK 646 | Child Abuse and Neglect | 2-3 |
| ANTHRO 448 | Anthropology of Law | 3 | SOC WORK 674 | Topics in Contemporary Social | 2-3 |
| BOTANY 575 | Special Topics (Forensic Botany) | 1-3 |  | Welfare |  |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms (Prioson \& the | 3 | AFROAMER 671 | Selected Topics in Afro-American History (Criminalizing Blackiness) ${ }^{1}$ | 3 |

1 Topics course. Credit granted only for topics listed.

| Code | Title | Credits |
| :---: | :---: | :---: |
| COUN PSY 225 | Coming to Terms with Cultural Diversity: Invitation to Dialogue | 3 |
| COUN PSY 650 | Theory and Practice in Interviewing | 3 |
| COUN PSY 655 | Clinical Communication Skills | 3 |
| LEGAL ST 405 | Foundations of Field Education | 2 |
| SOC WORK 441 | Generalist Practice with Individuals, Families and Groups | 1-3 |
| SOC 205 | Intercultural Dialogues | 3 |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (Foundations of the Field) ${ }^{1}$ | 3-4 |

GROUP 6-FIELDWORK/INTERNSHIP SEMINAR

| Code | Title | Credits |
| :---: | :---: | :---: |
| SOC WORK 663 | Topics in Contemporary Social Welfare (Criminal) ${ }^{1}$ | 2-3 |
| or LEGAL ST/ <br> SOC 694 | Criminal Justice Field Observation |  |
| GEN\&WS 660 | Internship in Gender and Women's Studies ${ }^{2}$ | 3 |
| HDFS 601 | Internship ${ }^{2}$ | 1-8 |
| POLI SCI 315 | Legislative Internship ${ }^{2}$ | 3 |
| POLI SCI 402 | Wisconsin in Washington Internship Course ${ }^{2}$ | 4 |
| PSYCH 412 | Field Experience in Psychology ${ }^{2}$ | 3 |
| RP \& SE 630 | Internship in Rehabilitation or Special Education ${ }^{2}$ | 2-6 |
| SOC WORK 400 | Field Practice and Integrative Seminar I ${ }^{2}$ | 2-6 |
| SOC WORK 401 | Field Practice and Integrative Seminar II ${ }^{2}$ | 2-6 |

1 Summer-30 hrs/wk for 10 weeks; prereqs: Groups 1, 2, 3 \&
LEGAL ST 405 Foundations of Field Education, and 86 credits by the beginning of the summer.
Spring-12 hrs/wk for 15 weeks; prereqs: Group 1 complete, Groups 2, 3, \& COUN PSY 650 Theory and Practice in Interviewing complete or in progress by the beginning of the internship semester.
2 Must be a criminal/juvenile-justice-oriented internship; student must receive approval of placement from a criminal justice advisor before enrolling in the course.

## RESIDENCE AND QUALITY OF WORK

11 credits counting for the certificate, taken in residence
A cumulative 2.000 GPA in all courses counting for the certificate

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate is intended to be completed in the context of an undergraduate degree and for those seeking this certificate that is preferred. For students who have substantially completed this certificate at UW-Madison (at least 12 credits) and may need one or two courses
to complete the certificate, they may do so immediately after completion of the bachelor's degree by enrolling in the course as a University Special (nondegree) student. The certificate must be completed within a year of completion of the bachelor's degree. Students should keep in mind that University Special students have the last registration priority and that may limit availability of desired courses. Financial aid is not available when enrolled as a University Special student to complete an undergraduate certificate.

## LEARNING OUTCOMES

1. To develop an appreciation for how the criminal justice system works and how it affects American society as a whole.
2. To develop and improve critical thinking and analytics in written and oral communication skills.
3. To develop an appreciation of mental health and substance abuse as they intersect with the criminal justice system.
4. To develop skills transferable to future professional, community and educational pursuits.

## ADVISING AND CAREERS

## ADVISING

## ADVISING APPOINTMENTS

Carolyn Lesch, Room 8139, Sewell Social Sciences Building
Carolyn's appointment calendar (https://calendar.wisc.edu/schedulingassistant/public/profiles/chDDRtWb.html)

## Martine Delannay, Room 8137, Sewell Social Sciences Building

Martine's appointment calendar (https://calendar.wisc.edu/schedulingassistant/public/profiles/rqGGzIBy.html)

## ADVISOR EMAIL <br> cjcp@ssc.wisc.edu

Current and future UW students with a Net ID use the links above to make an appointment. All others may send an email request to cjcp@ssc.wisc.edu.

## CAREERS

CJCP graduates have secured jobs in police departments, district attorneys' offices, public defenders' offices, juvenile group homes, adult halfway houses, public schools, and prisons. They have been involved in restitution programs, deferred prosecution alternatives, victim-witness projects, and home detention/electronic monitoring experiments. The options are numerous and interesting. Many CJCP students pursue a degree in law or attend graduate school in a related field.

SuccessWorks (http://careers.Is.wisc.edu) at the College of Letters \& Science provides students with a wide range of career-related services.

## WISCONSIN EXPERIENCE

All students complete an intensive internship with an agency or organization related to the criminal and juvenile justice fields. Involvement in the CJCP provides a solid educational foundation in criminal justice. It introduces students to basic concepts about our
justice system and the individuals it serves. It encourages exploration of critical issues facing the system today and fosters investigation into realistic solutions.

## LEGAL STUDIES, B.A.

Legal studies is an undergraduate major in the College of Letters \& Science. The program's mission is to provide a liberal education across traditional disciplines, focusing on the theory and operation of law and legal institutions. The courses in the legal studies major expose students to the many facets of law as a social phenomenon-its evolution, function, motivating ideas and effects. The major is not intended as preparation for law school because the emphasis is on exploring broadly defined questions about law from a variety of perspectives, rather than on training for the profession. The legal studies major is, however, suitable for pre-law students.

The curriculum is designed around the following five themes: Legal Institutions, Processes of Legal Order and Disorder, Law and Social Forces, Law and Culture, and Law and Theory.

## Theme Group 1: Legal Institutions

Institutions are at the core of social life. They govern our interactions, distribute power and resources, and influence how we make sense of the world. Courses in this theme group focus on those institutions involved in the creation and application of law. They explore such questions as how legal institutions evolve; how legal institutions help determine the shape of law-in doctrine and in action-and how and whether, in turn, legal institutions can be shaped to create different social outcomes. Institutions are central to the studies of society and politics throughout the disciplines, and courses in the group include perspectives from history, anthropology, sociology, political science, and political theory.

## Theme Group 2: Processes of Legal Order and Disorder

This theme examines the dynamics of order at the individual and societal level. In the course of this examination, students are made aware of the political and social biases that can underlie definitions of "order." This theme should also allow students to address how social and political biases relate to divisions of class, race and gender, and how the mechanisms of conflict resolution and order maintenance can be used to reinforce or challenge existing power structures.

## Theme Group 3: Law and Social Forces

This theme group explores the intersection between law, social structures and social movements. Courses in this group address social inequality, generally in the U.S. context, grounded in ethno-racial, gender, and sexuality-based difference. At critical points, the struggle for equality has taken pointedly legal form, whether in the shape of campaigns for legislative change or recognition, or through the litigation of particular cases. Legal categories have informed social identities. Equally, changing social identities have pushed back on legal categories. Courses integrate broad social dynamics with the rise of organized social movements that use law as an arena in which to reassess social life and values.

## Theme Group 4: Law and Culture

This theme group introduces students to legal thought, institutions, and practices beyond mainstream or contemporary legal systems, specifically modern Euro-American legal cultures. Courses in this theme group present either culturally based challenges to mainstream modern legal systems or legal systems that are culturally or historically distinct from them. The comparative study of distinct legal traditions and movements forces us to reexamine the cultural presuppositions
embedded in modern legal systems, revealing both good reasons for defending mainstream Euro-American laws and arguments and models for changing or questioning prevailing systems. Courses examine historical developments in or affecting law, non-Western legal thought or traditions, and the effect of cultural institutions such as religion, literature, or media on law.

## Theme Group 5: Law and Theory

Many theoretical and philosophical questions are articulated as propositions about law: its nature, sources, contents, and relations to other aspects of social life. While only some philosophers or social, political or legal theorists work specifically in the area of "legal theory," almost literally all work in any of these areas contributes to our understanding of the sources and nature of law, legal institutions and legal practices, and for many if not most theorists explicit discussions of law are central elements of their work. Courses in this theme group focus on the ways in which "law" is treated as a working concept or as a subject of study in theoretical works, and conversely on how understandings drawn from theoretical writings inform our own understanding of law in all its dimensions.

## HOW TO GET IN

## PREREQUISITES FOR THE MAJOR

Those wishing to declare the major should schedule an appointment with the legal studies advisor.

To declare the legal studies major, students must complete three (3) prerequisite courses with grades of $C$ or better. Students may be exempt from COMM-A by their English Placement score and from QR-A by their Math Placement score.

The three prerequisite courses consist of:

- a Communication A course;
- a Quantitative Reasoning A course; and
- one "Gateway Course" chosen from the list below.


## GATEWAY COURSES

Code Title Credits

Select one of the following: 3-4
LEGAL ST/SOC Criminal Justice in America
131
LEGAL ST/POLI Law, Politics and Society SCI 217

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as
needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics

Foreign Language

L\&S Breadth

Liberal Arts
and Science
Coursework
Depth of Intermediate/
Advanced
work
Major Declare and complete at least one (1) major
Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit

Minimum $\quad 2.000$ in all coursework at UW-Madison
GPAs $\quad 2.000$ in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

In addition to the Gateway Courses, at least 11 courses are required to complete the legal studies major.

$$
\text { Code } \quad \text { Title } \quad \text { Credits }
$$

Select two courses from those listed in the Legal
Institutions Theme Group
Select four courses distributed across at least three of the following Theme Groups:

Processes of Legal Order \& Disorder
Law and Social Forces
Law and Culture
Law and Theory
Select one of the following methods courses in research
and design:

| POLI SCI 170 | Research Methods in Political Science | 3 |
| :---: | :---: | :---: |
| POLI SCI/JOURN/ URB R PL 373 | Introduction to Survey Research | 3 |
| PSYCH 225 | Research Methods | 4 |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | 3-4 |
| Select one of the following methods courses in statistics: |  |  |
| ECON 310 | Statistics: Measurement in Economics | 4 |
| GEN BUS 303 | Business Statistics | 3 |
| POLI SCI 374 | Introduction to Statistical Inference for Political Research | 3-4 |
| PSYCH 210 | Basic Statistics for Psychology | 3 |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| STAT 301 | Introduction to Statistical Methods | 3 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences | 3 |
| Select one of the following Core Perspectives courses: ${ }^{1}$ |  |  |
| HISTORY 223 | Explorations in European History (H) | 3-4 |

LEGAL ST/HISTORY American Legal History to 18603

261

| LEGAL ST/HISTORY $262$ | American Legal History, 1860 to the Present | 3 |
| :---: | :---: | :---: |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (*Civil Rights <br> *Amer Juvenile Just *Surveillance <br> *Privacy \& Pol *Race and the Law *Neighborhoods, Crime and Punishment) | 3-4 |
| LEGAL ST/GEN\&WS/ SOC 425 | Crime, Gender and Justice | 3 |
| LEGAL ST/HISTORY $426$ | The History of Punishment | 3-4 |
| LEGAL ST 450 | Topics in Legal Studies and the Humanities (*Jurisprudence *Medieval Law and Society <br> *Medico-Legal History) | 3-4 |
| LEGAL ST/ <br> HISTORY 477 | History of Forensic Science | 3 |
| LEGAL ST/LCA/ <br> RELIG ST 628 | Hindu Law | 3 |
| LEGAL ST 409 | Human Rights in Law and Society | 3 |
| LEGAL ST/LIS 460 | Surveillance, Privacy, and Police Powers | 3 |
| LEGAL ST/HISTORY $510$ | Legal Pluralism | 3 |
| LEGAL ST/ <br> HISTORY 459 | Rule of Law: Philosophical and Historical Models | 3-4 |
| LEGAL ST/SOC 641 | Sociology of Law | 3-4 |

Select one of the following:

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A Senior Thesis (6 credits) LEGAL ST 681 \&
LEGAL ST 682 or LEGAL ST 691 \& LEGAL ST 692 or
POLI SCI 681 \& POLI SCI \(682{ }^{2}\)
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Two additional courses from the five Theme Groups

## Footnotes

1 All legal studies majors are required to take one Core Perspectives course. The following courses count as Core Perspectives courses if they are taught by core legal studies faculty; if any of these courses is taught by non-legal studies faculty, the determination of whether they will count for Core Perspectives credit will be made prior to the beginning of the semester in which the course is offered. Each of these courses is intended to provide a broad and intellectually flexible perspective that can serve as a framework for gaining a deeper understanding of the material taught in other courses in the program. The Core Perspectives courses do not necessarily overlap; the criterion for inclusion of courses in the list below is that each explores its substantive content area through a range of social, scientific and humanistic approaches.
Students pursuing the senior thesis option must, in their senior year, arrange to register for 6 credits of 691/692 Senior Thesis, or 681/682 Senior Honors Thesis, in consecutive semesters for 3 credits each semester. Students are responsible for contacting a faculty member whom they would like to act as the senior thesis advisor; the major advisor can assist students in the process of selecting a senior thesis faculty advisor. Students must have the approval of the senior thesis faculty advisor before enrollment because the student will enroll for thesis credits in the department of the senior thesis faculty advisor. A student will not be able to enroll for thesis credits until after meeting with that faculty advisor. Students who plan to attend
law school or graduate school and who maintain an overall grade point average of 3.0 or better at the beginning of the senior year ( 86 credits) are strongly urged to select the senior thesis option. The purpose of the senior thesis is to allow students to focus their interests and develop knowledge in one area of the field. Students may choose any legal studies topic for the senior thesis. The project involves using the library to review existing research and conducting original research designed by the student under the supervision of a faculty advisor. Early planning is best. Students contemplating the senior thesis option should schedule a legal studies advising appointment at least one semester before enrolling in senior thesis credits. A copy of the senior thesis paper, approved by the faculty advisor, must be submitted to the major advisor upon completion of the project.

## IMPORTANT CONSIDERATIONS

No more than four (4) courses from a single department or program will count toward the legal studies major; this restriction does not apply to courses listed in or cross listed with legal studies.

Courses may appear in more than one Theme Group and/or Core Perspective but each course will only satisfy one requirement. Courses will not be double counted.

At least two courses in the major must have substantial content dealing with countries or cultures other than the United States. "A" ${ }^{1}$ in the list of courses below designates courses meeting this requirement.

## COURSES THAT SATISFY THE REQUIREMENTS TO COMPLETE THE MAJOR

Theme Group 1: Legal Institutions

| Code | Title | Credits |
| :---: | :---: | :---: |
| Theme Group 1: Legal Institutions |  |  |
| GEN BUS 301 | Business Law | 3 |
| ELPA 502 | Workshop in Educational Leadership and Policy Analysis (*Law and Public Educ) | 1-3 |
| LEGAL ST/ <br> HISTORY 261 | American Legal History to 1860 | 3 |
| LEGAL ST/ HISTORY 262 | American Legal History, 1860 to the Present | 3 |
| LEGAL ST 450 | Topics in Legal Studies and the Humanities | 3-4 |
| LEGAL ST 444 | Law in Action | 3 |
| LEGAL ST/SOC 415 | The Legal Profession | 3-4 |
| LEGAL ST 409 | Human Rights in Law and Society ${ }^{1}$ | 3 |
| LEGAL ST/LAW/ SOC 641 | Sociology of Law | 3-4 |
| POLI SCI 309 | Civil Liberties in the United States | 3-4 |
| POLI SCI 311 | United States Congress | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 411 | The American Constitution : Powers and Structures of Government | 4 |
| POLI SCI 412 | The American Constitution: Rights and Civil Liberties | 4 |
| POLI SCI 414 | The Supreme Court as a Political Institution | 3 |


| POLI SCI 417 | The American Judicial System | $3-4$ |
| :--- | :--- | ---: |
| POLI SCI/ | Administrative Law |  |
| PUB AFFR 419 |  | $3-4$ |
| POLI SCI 432 | Comparative Legal Institutions | $3-4$ |
| POLI SCI 470 | The First Amendment | $3-4$ |
| POLI SCI 510 | Politics of Government Regulation | $3-4$ |
| POLI SCI 601 | Proseminar: Topics in Political <br>  | Science |

1 This course has substantial content dealing with countries or cultures other than the United States.

| Theme Group 2: Process of Legal Order and Disorder |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Theme Group 2: Process of Legal Order and Disorder |  |  |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 671 | Communication and Social Conflict | 3 |
| ENVIR ST/ M\&ENVTOX/ PL PATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| INTL ST 601 | Topics in Global Security (International Criminal Justice: Models \& Practice) | 1-4 |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences | 3-4 |
| LEGAL ST 405 | Foundations of Field Education | 2 |
| LEGAL ST/LIS 460 | Surveillance, Privacy, and Police Powers | 3 |
| LEGAL ST/SOC 694 | Criminal Justice Field Observation | 2-3 |
| POLI SCI 314 | Criminal Law and Justice | 3-4 |
| PSYCH 601 | Current Topics in Psychology | 3 |
| PSYCH 526 | The Criminal Mind: Forensic and Psychobiological Perspectives | 4 |
| R M I 615 | Liability Risk Management | 3 |
| SOC 421 | Processes of Deviant Behavior | 3-4 |
| SOC 441 | Criminology | 3-4 |
| SOC 446 | Juvenile Delinquency | 3-4 |

## Theme Group 3: Law and Social Forces

## Code

Title
Credits
Theme Group 3: Law and Social Forces

| AFROAMER/ AFRICAN 233 | Global HipHop and Social Justice | 3 |
| :---: | :---: | :---: |
| AFROAMER 671 | Selected Topics in Afro-American History (*Crim Blkns; Race \& Inprison) | 3 |
| AFROAMER 673 | Selected Topics in Afro-American Society (*Race and Policing) | 3 |
| AMER IND 450 | Issues in American Indian Studies (*Indigenous Rights *Nat Resources) | 3 |
| ECON 522 | Law and Economics | 3-4 |



| HISTORY 201 | The Historian's Craft (*Shanghai Life) | 3-4 |
| :---: | :---: | :---: |
| HISTORY 500 | Reading Seminar in History (*Chinese Law) | 3 |
| ILS 371 | Interdisciplinary Studies in the Arts and Humanities (*Books by Crooks) | 3 |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts ${ }^{1}$ | 3 |
| LEGAL ST 450 | Topics in Legal Studies and the Humanities (*Law and Film *Medico-Legal) | 3-4 |
| LEGAL ST/ HISTORY 477 | History of Forensic Science | 3 |
| LEGAL ST/LCA/ <br> RELIG ST 628 | Hindu Law ${ }^{1}$ | 3 |
| LEGAL ST/ HISTORY 502 | Law and Colonialism ${ }^{1}$ | 3 |
| LEGAL ST/ <br> HISTORY 510 | Legal Pluralism ${ }^{1}$ | 3 |
| LITTRANS 236 | Bascom Course-In Translation (*Extreme Stories ) | 3 |

1 This course has substantial content dealing with countries or cultures other than the United States.

| Theme Group 5: Law and Theory |  | Credits |
| :---: | :---: | :---: |
| Code | Title |  |
| Theme Group 5: Law and Theory |  |  |
| HISTORY 223 | Explorations in European History (H) | 3-4 |
| LEGAL ST/HISTORY $426$ | The History of Punishment ${ }^{1}$ | 3-4 |
| LEGAL ST/ HISTORY 459 | Rule of Law: Philosophical and Historical Models ${ }^{1}$ | 3-4 |
| JOURN 675 | Topics in Government and Mass Media | 3 |
| MED HIST/ <br> PHILOS 558 | Ethical Issues in Health Care | 3 |
| PHILOS 304 | Topics in Philosophy: Humanities (Philos and Criminal Punishment) | 3-4 |
| PHILOS 341 | Contemporary Moral Issues | 3-4 |
| PHILOS 559 | Philosophy of Law | 3 |
| PHILOS/MED HIST/ AGRONOMY/C\&E SOC 565 | The Ethics of Modern Biotechnology | 3-4 |

1 This course has substantial content dealing with countries or cultures other than the United States.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all LEGAL ST and major courses
2.000 GPA on 15 upper-level major credits, taken in residence: LEGAL ST and major courses that are designated at intermediate or advanced level count as upper level.

15 credits in LEGAL ST and courses for the major, taken on campus

## HONORS IN THE MAJOR

Students may apply for admission to Honors in the Legal Studies Major in consultation with the Legal Studies undergraduate advisor(s).

## HONORS IN THE LEGAL STUDIES MAJOR: ENTRANCE REQUIREMENTS <br> - Declaration of the legal studies major <br> - A 3.300 overall university GPA <br> - A 3.500 GPA for all LEGAL ST courses, and all courses accepted in the major <br> - Completion of or current enrollment in, for Honors credit, at least one course accepted in the major

## HONORS IN THE LEGAL STUDIES MAJOR: REQUIREMENTS

To earn Honors in the Major in Legal Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all LEGAL ST courses, and all courses accepted in the major
- Complete the research design and statistics requirements for the regular major prior to enrollment in the Senior Honors Thesis (typically junior year)
- Complete 15 credits in the major, taken for Honors, earning a B or better grade in each course
- Complete a two-semester Senior Honors thesis in LEGAL ST 681 Senior Honors Thesis and LEGAL ST 682 Senior Honors Thesis, for a total of 6 credits. ${ }^{1}$

1 The equivalent course in the advisor's home department may be acceptable; please see the legal studies undergraduate advisor(s) for details.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Introduce students to the social, political, economic, and cultural determinants of law.
2. Introduce students to the social, political, and economic impacts of law at the macro level.
3. Introduce students to the impact of law and other rules on individual level decision\#making at the micro level.
4. Introduce students to the dynamics of legal ideas and ideologies.
5. Introduce students to the practical skills needed to analyze legal phenomena and to access legal resources, broadly defined.
6. Introduce students to the nature of legal reasoning and analysis in common law, civil law, and other legal systems.
7. Introduce students to the functioning of legal institutions, and how those institutions differ from other societal institutions.
8. Introduce students to the place and relevance of law within the humanities and social sciences.
9. Introduce students to the cross\#cultural and international valences of law in distinctive social orders.

## ADVISING AND CAREERS

## ADVISING APPOINTMENTS

Martine Delannay, Room 8137, Sewell Social Sciences Building
Martine's appointment calendar (https://calendar.wisc.edu/schedulingassistant/public/profiles/rqGGzIBy.html)

Carolyn Lesch, Room 8139, Sewell Social Sciences Building
Carolyn's appointment calendar (https://calendar.wisc.edu/schedulingassistant/public/profiles/chDDRtWb.html)

## ADVISOR EMAIL

Isp@ssc.wisc.edu
Current and future UW students with a Net ID use the links above to make an appointment.
All others may send an email request to Isp@ssc.wisc.edu.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## LEGAL STUDIES, B.S.

Legal studies is an undergraduate major in the College of Letters \& Science. The program's mission is to provide a liberal education across traditional disciplines, focusing on the theory and operation of law and legal institutions. The courses in the legal studies major expose students to the many facets of law as a social phenomenon-its evolution, function, motivating ideas and effects. The major is not intended as preparation for law school because the emphasis is on exploring broadly defined questions about law from a variety of perspectives, rather than on training for the profession. The legal studies major is, however, suitable for pre-law students.

The curriculum is designed around the following five themes: Legal Institutions, Processes of Legal Order and Disorder, Law and Social Forces, Law and Culture, and Law and Theory.

## Theme Group 1: Legal Institutions

Institutions are at the core of social life. They govern our interactions, distribute power and resources, and influence how we make sense of the world. Courses in this theme group focus on those institutions involved in the creation and application of law. They explore such questions as how legal institutions evolve; how legal institutions help determine the shape of law-in doctrine and in action-and how and whether, in turn, legal institutions can be shaped to create different social outcomes. Institutions are central to the studies of society and politics throughout the disciplines, and courses in the group include perspectives from history, anthropology, sociology, political science, and political theory.

## Theme Group 2: Processes of Legal Order and Disorder

This theme examines the dynamics of order at the individual and societal level. In the course of this examination, students are made aware of the political and social biases that can underlie definitions of "order." This theme should also allow students to address how social and political biases relate to divisions of class, race and gender, and how the mechanisms of conflict resolution and order maintenance can be used to reinforce or challenge existing power structures.

## Theme Group 3: Law and Social Forces

This theme group explores the intersection between law, social structures and social movements. Courses in this group address social inequality, generally in the U.S. context, grounded in ethno-racial, gender, and sexuality-based difference. At critical points, the struggle for equality has taken pointedly legal form, whether in the shape of campaigns for legislative change or recognition, or through the litigation of particular cases. Legal categories have informed social identities. Equally, changing social identities have pushed back on legal categories. Courses integrate broad social dynamics with the rise of organized social movements that use law as an arena in which to reassess social life and values.

## Theme Group 4: Law and Culture

This theme group introduces students to legal thought, institutions, and practices beyond mainstream or contemporary legal systems, specifically modern Euro-American legal cultures. Courses in this theme group present either culturally based challenges to mainstream
modern legal systems or legal systems that are culturally or historically distinct from them. The comparative study of distinct legal traditions and movements forces us to reexamine the cultural presuppositions embedded in modern legal systems, revealing both good reasons for defending mainstream Euro-American laws and arguments and models for changing or questioning prevailing systems. Courses examine historical developments in or affecting law, non-Western legal thought or traditions, and the effect of cultural institutions such as religion, literature, or media on law.

## Theme Group 5: Law and Theory

Many theoretical and philosophical questions are articulated as propositions about law: its nature, sources, contents, and relations to other aspects of social life. While only some philosophers or social, political or legal theorists work specifically in the area of "legal theory," almost literally all work in any of these areas contributes to our understanding of the sources and nature of law, legal institutions and legal practices, and for many if not most theorists explicit discussions of law are central elements of their work. Courses in this theme group focus on the ways in which "law" is treated as a working concept or as a subject of study in theoretical works, and conversely on how understandings drawn from theoretical writings inform our own understanding of law in all its dimensions.

## HOW TO GET IN

## PREREQUISITES FOR THE MAJOR

Those wishing to declare the major should schedule an appointment with the legal studies advisor.

To declare the legal studies major, students must complete three (3) prerequisite courses with grades of $C$ or better. Students may be exempt from COMM-A by their English Placement score and from QR-A by their Math Placement score.

The three prerequisite courses consist of:

- a Communication A course;
- a Quantitative Reasoning A course; and
- one "Gateway Course" chosen from the list below.


## GATEWAY COURSES

| Code | Title |
| :--- | ---: |$\quad$ Credits

LEGAL ST/SOC Criminal Justice in America
131
LEGAL ST/POLI Law, Politics and Society
SCI 217

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic
values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |


| Minimum | 2.000 in all coursework at UW-Madison |
| :--- | :--- |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

In addition to the Gateway Courses, at least 11 courses are required to complete the legal studies major.

## Code <br> Title

Select two courses from those listed in the Legal Institutions Theme Group
Select four courses distributed across at least three of the
following Theme Groups:
Processes of Legal Order \& Disorder
Law and Social Forces
Law and Culture
Law and Theory
Select one of the following methods courses in research and design:

| POLI SCI 170 | Research Methods in Political Science | 3 |
| :---: | :---: | :---: |
| POLI SCI/JOURN/ URB R PL 373 | Introduction to Survey Research | 3 |
| PSYCH 225 | Research Methods | 4 |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | 3-4 |
| Select one of the following methods courses in statistics: |  |  |
| ECON 310 | Statistics: Measurement in Economics | 4 |
| GEN BUS 303 | Business Statistics | 3 |
| POLI SCI 374 | Introduction to Statistical Inference for Political Research | 3-4 |
| PSYCH 210 | Basic Statistics for Psychology | 3 |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| STAT 301 | Introduction to Statistical Methods | 3 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences | 3 |
| Select one of the following Core Perspectives courses: ${ }^{1}$ |  |  |
| HISTORY 223 | Explorations in European History (H) | 3-4 |

LEGAL ST/HISTORY American Legal History to 1860 261

| LEGAL ST/HISTORY $262$ | American Legal History, 1860 to the Present | 3 |
| :---: | :---: | :---: |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences (*Civil Rights <br> *Amer Juvenile Just *Surveillance <br> *Privacy \& Pol *Race and the <br> Law *Neighborhoods, Crime and Punishment) | 3-4 |
| LEGAL ST/GEN\&WS/ SOC 425 | Crime, Gender and Justice | 3 |
| LEGAL ST/HISTORY $426$ | The History of Punishment | 3-4 |
| LEGAL ST 450 | Topics in Legal Studies and the Humanities (*Jurisprudence <br> *Medieval Law and Society <br> *Medico-Legal History) | 3-4 |
| LEGAL ST/ HISTORY 477 | History of Forensic Science | 3 |
| LEGAL ST/LCA/ RELIG ST 628 | Hindu Law | 3 |
| LEGAL ST 409 | Human Rights in Law and Society | 3 |
| LEGAL ST/L I S 460 | Surveillance, Privacy, and Police Powers | 3 |
| LEGAL ST/HISTORY $510$ | Legal Pluralism | 3 |
| LEGAL ST/ HISTORY 459 | Rule of Law: Philosophical and Historical Models | 3-4 |
| LEGAL ST/SOC 641 | Sociology of Law | 3-4 |

Select one of the following:
A Senior Thesis (6 credits) LEGAL ST 681 \&
LEGAL ST 682 or LEGAL ST 691 \& LEGAL ST 692 or POLI SCI 681 \& POLI SCI $682{ }^{2}$
Two additional courses from the five Theme Groups

## Footnotes

All legal studies majors are required to take one Core Perspectives course. The following courses count as Core Perspectives courses if they are taught by core legal studies faculty; if any of these courses is taught by non-legal studies faculty, the determination of whether they will count for Core Perspectives credit will be made prior to the beginning of the semester in which the course is offered. Each of these courses is intended to provide a broad and intellectually flexible perspective that can serve as a framework for gaining a deeper understanding of the material taught in other courses in the program. The Core Perspectives courses do not necessarily overlap; the criterion for inclusion of courses in the list below is that each explores its substantive content area through a range of social, scientific and humanistic approaches. arrange to register for 6 credits of 691/692 Senior Thesis, or 681/682 Senior Honors Thesis, in consecutive semesters for 3 credits each semester. Students are responsible for contacting a faculty member whom they would like to act as the senior thesis advisor; the major advisor can assist students in the process of selecting a senior thesis faculty advisor. Students must have the approval of the senior thesis faculty advisor before enrollment because the student will enroll for thesis credits in the department of the senior thesis faculty advisor. A student will not be able to enroll for thesis credits until after meeting with that faculty advisor. Students who plan to attend
law school or graduate school and who maintain an overall grade point average of 3.0 or better at the beginning of the senior year ( 86 credits) are strongly urged to select the senior thesis option. The purpose of the senior thesis is to allow students to focus their interests and develop knowledge in one area of the field. Students may choose any legal studies topic for the senior thesis. The project involves using the library to review existing research and conducting original research designed by the student under the supervision of a faculty advisor. Early planning is best. Students contemplating the senior thesis option should schedule a legal studies advising appointment at least one semester before enrolling in senior thesis credits. A copy of the senior thesis paper, approved by the faculty advisor, must be submitted to the major advisor upon completion of the project.

## IMPORTANT CONSIDERATIONS

No more than four (4) courses from a single department or program will count toward the legal studies major; this restriction does not apply to courses listed in or cross listed with legal studies.

Courses may appear in more than one Theme Group and/or Core Perspective but each course will only satisfy one requirement. Courses will not be double counted.

At least two courses in the major must have substantial content dealing with countries or cultures other than the United States. "A" ${ }^{1}$ in the list of courses below designates courses meeting this requirement.

## COURSES THAT SATISFY THE REQUIREMENTS TO COMPLETE THE MAJOR

Theme Group 1: Legal Institutions

| Code | Title | Credits |
| :---: | :---: | :---: |
| Theme Group 1: Legal Institutions |  |  |
| GEN BUS 301 | Business Law | 3 |
| ELPA 502 | Workshop in Educational Leadership and Policy Analysis (*Law and Public Educ) | 1-3 |
| LEGAL ST/ HISTORY 261 | American Legal History to 1860 | 3 |
| LEGAL ST/ HISTORY 262 | American Legal History, 1860 to the Present | 3 |
| LEGAL ST 450 | Topics in Legal Studies and the Humanities | 3-4 |
| LEGAL ST 444 | Law in Action | 3 |
| LEGAL ST/SOC 415 | The Legal Profession | 3-4 |
| LEGAL ST 409 | Human Rights in Law and Society ${ }^{1}$ | 3 |
| LEGAL ST/LAW/ SOC 641 | Sociology of Law | 3-4 |
| POLI SCI 309 | Civil Liberties in the United States | 3-4 |
| POLI SCI 311 | United States Congress | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 411 | The American Constitution : Powers and Structures of Government | 4 |
| POLI SCI 412 | The American Constitution: Rights and Civil Liberties | 4 |
| POLI SCI 414 | The Supreme Court as a Political Institution | 3 |


| POLI SCI 417 | The American Judicial System | $3-4$ |
| :--- | :--- | :---: |
| POLI SCI/ | Administrative Law |  |
| PUB AFFR 419 |  | $3-4$ |
| POLI SCI 432 | Comparative Legal Institutions | $3-4$ |
| POLI SCI 470 | The First Amendment | $3-4$ |
| POLI SCI 510 | Politics of Government Regulation | $3-4$ |
| POLI SCI 601 | Proseminar. Topics in Political <br>  | Science |

1 This course has substantial content dealing with countries or cultures other than the United States.

| Theme Group 2: Process of Legal Order and Disorder |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Theme Group 2: Process of Legal Order and Disorder |  |  |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 671 | Communication and Social Conflict | 3 |
| ENVIR ST/ M\&ENVTOX/ <br> PLPATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| INTL ST 601 | Topics in Global Security (International Criminal Justice: Models \& Practice) | 1-4 |
| LEGAL ST 400 | Topics in Legal Studies and the Social Sciences | 3-4 |
| LEGAL ST 405 | Foundations of Field Education | 2 |
| LEGAL ST/LIS 460 | Surveillance, Privacy, and Police Powers | 3 |
| LEGAL ST/SOC 694 | Criminal Justice Field Observation | 2-3 |
| POLI SCI 314 | Criminal Law and Justice | 3-4 |
| PSYCH 601 | Current Topics in Psychology | 3 |
| PSYCH 526 | The Criminal Mind: Forensic and Psychobiological Perspectives | 4 |
| R M I 615 | Liability Risk Management | 3 |
| SOC 421 | Processes of Deviant Behavior | 3-4 |
| SOC 441 | Criminology | 3-4 |
| SOC 446 | Juvenile Delinquency | 3-4 |

Theme Group 3: Law and Social Forces
Code Title Credits

Theme Group 3: Law and Social Forces

| AFROAMER/ AFRICAN 233 | Global HipHop and Social Justice | 3 |
| :---: | :---: | :---: |
| AFROAMER 671 | Selected Topics in Afro-American History (*Crim Blkns; Race \& Inprison) | 3 |
| AFROAMER 673 | Selected Topics in Afro-American Society (*Race and Policing) | 3 |
| AMER IND 450 | Issues in American Indian <br> Studies (*Indigenous Rights *Nat <br> Resources) | 3 |
| ECON 522 | Law and Economics | 3-4 |



## HONORS IN THE MAJOR

Students may apply for admission to Honors in the Legal Studies Major in consultation with the Legal Studies undergraduate advisor(s).

## HONORS IN THE LEGAL STUDIES MAJOR: ENTRANCE REQUIREMENTS

- Declaration of the legal studies major
- A 3.300 overall university GPA
- A 3.500 GPA for all LEGAL ST courses, and all courses accepted in the major
- Completion of or current enrollment in, for Honors credit, at least one course accepted in the major


## HONORS IN THE LEGAL STUDIES MAJOR: REQUIREMENTS

To earn Honors in the Major in Legal Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all LEGAL ST courses, and all courses accepted in the major
- Complete the research design and statistics requirements for the regular major prior to enrollment in the Senior Honors Thesis (typically junior year)
- Complete 15 credits in the major, taken for Honors, earning a B or better grade in each course
- Complete a two-semester Senior Honors thesis in LEGAL ST 681 Senior Honors Thesis and LEGAL ST 682 Senior Honors Thesis, for a total of 6 credits. ${ }^{1}$

1 The equivalent course in the advisor's home department may be acceptable; please see the legal studies undergraduate advisor(s) for details.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Introduce students to the social, political, economic, and cultural determinants of law.
2. Introduce students to the social, political, and economic impacts of law at the macro level.
3. Introduce students to the impact of law and other rules on individual level decision\#making at the micro level.
4. Introduce students to the dynamics of legal ideas and ideologies.
5. Introduce students to the practical skills needed to analyze legal phenomena and to access legal resources, broadly defined.
6. Introduce students to the nature of legal reasoning and analysis in common law, civil law, and other legal systems.
7. Introduce students to the functioning of legal institutions, and how those institutions differ from other societal institutions.
8. Introduce students to the place and relevance of law within the humanities and social sciences.
9. Introduce students to the cross\#cultural and international valences of law in distinctive social orders.

## ADVISING AND CAREERS

## ADVISING APPOINTMENTS

Martine Delannay, Room 8137, Sewell Social Sciences Building Martine's appointment calendar (https://calendar.wisc.edu/schedulingassistant/public/profiles/rqGGzIBy.html)

Carolyn Lesch, Room 8139, Sewell Social Sciences Building Carolyn's appointment calendar (https://calendar.wisc.edu/schedulingassistant/public/profiles/chDDRtWb.html)

## ADVISOR EMAIL

Isp@ssc.wisc.edu
Current and future UW students with a Net ID use the links above to make an appointment.
All others may send an email request to Isp@ssc.wisc.edu.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## CHEMISTRY

The mission of the Department of Chemistry is to conduct world-class, groundbreaking research in the chemical sciences while offering the highest quality of education to undergraduate students, graduate students, and postdoctoral associates. The department's leadership in research includes the traditional areas of physical, analytical, inorganic, and organic chemistry, and has rapidly evolved to encompass environmental chemistry, chemical biology, biophysical chemistry, soft and hard materials chemistry, and nanotechnology. The Department of Chemistry prides itself on its highly interactive, diverse, and collegial scientific environment. Our emphasis on collaboration connects us to colleagues across campus, around the country, and throughout the world.

The undergraduate chemistry major leads to a bachelor of science or a bachelor of arts degree awarded by the College of Letters \& Science. The curriculum provides excellent preparation in chemistry, along with a wide breadth of liberal arts coursework. At the same time, the program provides significant opportunities for students to participate in scientific inquiry, within both laboratory courses and research laboratories. Students from other colleges within the university may pursue the chemistry major as an additional major. When pursuing a chemistry major, the undergraduate student must meet university general education requirements and breadth requirements of their own college, along with the specific requirements for the chemistry major.

The chemistry major provides students with the critical thinking and problem-solving skills necessary to be successful in a wide variety of careers in the chemical industries (e.g., consumer and agricultural products, materials, energy, petroleum, paper, food, etc.), as well as environmental, pharmaceutical, and other health-related sciences. Students are also well-prepared for graduate-level work in chemistry, chemical physics, biochemistry, biophysics, materials chemistry, and other related fields. Students who excel in undergraduate chemistry coursework are often able to obtain funding for their graduate work through teaching or research assistantships and fellowships. Combined with a master's program in secondary education, the major qualifies the student to teach chemistry in secondary schools. Chemistry majors have also been successful in a variety of professional programs where they have studied medicine, pharmacy, dentistry, veterinary medicine, business, or law.

## DEGREES/MAJORS/CERTIFICATES

- Chemistry, B.A. (p. 526)
- Chemistry, B.S. (p. 532)


## PEOPLE

## PROFESSORS

## Berry, John

Blackwell, Helen

Brunold, Thomas
Burke, Steven
Burstyn, Judith (chair)
Cavagnero, Silvia
Choi, Kyoung-Shin
Coon, Joshua
Ediger, Mark
Gellman, Samuel
Hamers, Robert
Hermans, Ive
Jin, Song
Landis, Clark
McMahon, Robert
Moore, John
Nathanson, Gilbert
Record, Thomas
Schwartz, David
Shakhashiri, Bassam
Sibert, Edwin (associate chair)
Smith, Lloyd
Stahl, Shannon
Weisshaar, James
Woods, Claude
Wright, John
Yethiraj, Arun
Yoon, Tehshik
Zanni, Martin

## ASSOCIATE PROFESSORS

Bertram, Timothy
Fredrickson, Daniel
Schmidt, Jordan
Schomaker, Jennifer
Weix, Daniel

## ASSISTANT PROFESSORS

Buller, Andrew
Garand, Etienne
Goldsmith, Randall
Wickens, Zachary

## AFFILIATED PROFESSORS

Abbott, Nicholas (Professor of Chemical and Biological Engineering) Forest, Katrina (Professor of Bacteriology)
Ge, Ying (Associate Professor of Cell and Regenerative Biology)
Gilbert, Pupa (Professor of Physics)
Golden, Jennifer (Assistant Professor of Pharmacy)
Gong, Sarah (Professor of Biomedical Engineering)
Gopalan, Padma (Professor of Materials Science and Engineering) Jackson, Catherine (Assistant Professor of History of Science)
Kuech, Thomas (Professor of Chemical and Biological Engineering)
Li, Lingjun (Professor of Pharmacy)
Lynn, David (Professor of Chemical and Biological Engineering)
Mecozzi, Sandro (Associate Professor of Pharmacy)
Middlecamp, Catherine (Professor, Nelson Institute for Environmental Studies)
Pedersen, Joel (Professor of Soil Science)
Tang, Weiping (Professor of Pharmacy)
Weibel, Douglas (Professor of Biochemistry)
Yu, Lian (Professor of Pharmacy)

## INSTRUCTIONAL STAFF

Bain, Rachel (Instructional Technology Specialist)
Block, Stephen (Lecturer and General Chemistry Assistant Laboratory Director)
Bowman, Matthew (Lecturer)
Doolittle, Pamela (Analytical Chemistry Laboratory Director)
Esselman, Brian (Lecturer and Organic Chemistry Assistant Laboratory Director)
Hill, Nicholas (Organic Chemistry Laboratory Director)
Hooker, Paul (Senior Lecturer)
Lamont, Liana (Faculty Assistant)
Maynard, James (Lecture Demonstrator)
McClain, Robert (Analytical Chemistry Laboratory Director)
Stoll, Lindy (Faculty Assistant)
Tatarsky, Amy (Faculty Assistant)
Wendt, Mark (Physical Chemistry Laboratory Director)
Wilkinson, Chad (General Chemistry Laboratory Director)
Zelewski, Linda (Senior Lecturer)
Zhou, Jia (Associate Lecturer)

## CHEMISTRY LEARNING CENTER

Dang, Allice (Assistant Faculty Associate)
Jetzer, Kelly (Instructional Specialist)
Jacob, Anthony (Director)
Laboy, José (Faculty Associate)
Lee, Agnes (Faculty Associate)
Ramey, Shea (Faculty Associate)
Reitz, Tracey (Assistant Faculty Associate)
Toland, David (Associate Faculty Associate)
Zavala, Yashira (Assistant Faculty Associate)

## STUDENT SERVICES AND ADVISING

Barta, Cheri (Undergraduate Research Director)
Hamers, Jeanne (Undergraduate Chemistry Director and Chemistry Advisor)

## RESOURCES AND SCHOLARSHIPS

## ACADEMIC RESOURCES

A number of resources are available to students seeking assistance with their chemistry courses. Students are strongly encouraged to attend the office hours of the instructors for the course.

The Chemistry Learning Center (CLC) (http://www.chem.wisc.edu/areas/ clc/mission.htm) supports students in introductory chemistry courses (CHEM 103, CHEM 104, and CHEM 108) and in some sections of organic chemistry. The center welcomes as many students as possible but unfortunately does not have sufficient resources to support all students seeking help. The center is funded to work with specific groups of students, such as first-generation low-income students, underrepresented students, students on academic probation, students with disabilities, students who have trouble understanding English, new transfer students, recently returning veterans, and students at-risk of failing the course. These are general guidelines and the center considers each student seeking assistance on a case-by-case basis, taking into account available program space. Program eligibility is usually determined by an interview with a staff member.

Further assistance may be sought from various tutoring services on campus, including the Greater University Tutoring Services (GUTS)
(http://www.guts.wisc.edu), University Housing Tutoring (http:// www.housing.wisc.edu/residencehalls-academics-tutoring.htm), and the College of Engineering Undergraduate Learning Center (ULC) (https://www.engr.wisc.edu/academics/student-services/ulc). Alpha Chi Sigma (AXE) (https://win.wisc.edu/organization/axsigma) is a co-ed professional chemistry fraternity that also offers tutoring. For students seeking more individualized tutoring, the Department of Chemistry maintains a list of private tutors (https://www.chem.wisc.edu/content/ tutors) available for hire.

## SCHOLARSHIPS

Through the generosity of alumni and other friends of the department, the Department of Chemistry is able to offer scholarships and summer research support. In 2017, the department awarded 36 undergraduate scholarships that totaled more than \$150,000.

Any student who is a chemistry major or is conducting research with a chemistry faculty member is eligible to apply for the scholarships. An overall GPA of at least 3.000 is required for application; awards are based on both merit and financial need. Students may apply for academic year scholarships and/or summer research support. Learn more about chemistry scholarships (https://www.chem.wisc.edu/content/chemistryscholarships) and how to apply.

## CHEMISTRY, B.A.

The mission of the Department of Chemistry is to conduct world-class, groundbreaking research in the chemical sciences while offering the highest quality of education to undergraduate students, graduate students, and postdoctoral associates. The department's leadership in research includes the traditional areas of physical, analytical, inorganic, and organic chemistry, and has rapidly evolved to encompass environmental chemistry, chemical biology, biophysical chemistry, soft and hard materials chemistry, and nanotechnology. The Department of Chemistry prides itself on its highly interactive, diverse, and collegial scientific environment. Our emphasis on collaboration connects us to colleagues across campus, around the country, and throughout the world.

The undergraduate chemistry major leads to a bachelor of science or a bachelor of arts degree awarded by the College of Letters \& Science. The curriculum provides excellent preparation in chemistry, along with a wide breadth of liberal arts coursework. At the same time, the program provides significant opportunities for students to participate in scientific inquiry, within both laboratory courses and research laboratories. Students from other colleges within the university may pursue the chemistry major as an additional major. When pursuing a chemistry major, the undergraduate student must meet university general education requirements and breadth requirements of their own college, along with the specific requirements for the chemistry major.

The chemistry major provides students with the critical thinking and problem-solving skills necessary to be successful in a wide variety of careers in the chemical industries (e.g., consumer and agricultural products, materials, energy, petroleum, paper, food, etc.), as well as environmental, pharmaceutical, and other health-related sciences. Students are also well-prepared for graduate-level work in chemistry, chemical physics, biochemistry, biophysics, materials chemistry, and other related fields. Students who excel in undergraduate chemistry coursework are often able to obtain funding for their graduate work through teaching or research assistantships and fellowships. Combined with a master's program in secondary education, the major qualifies
the student to teach chemistry in secondary schools. Chemistry majors have also been successful in a variety of professional programs where they have studied medicine, pharmacy, dentistry, veterinary medicine, business, or law.

## HOW TO GET IN

Students may declare the chemistry major after they have completed General Chemistry (CHEM 104, CHEM 109, or CHEM 116). Transfer students may declare in their first semester at UW-Madison, if they have transfer credit for one of these courses. Students should schedule an appointment with the undergraduate chemistry advisor to declare and develop a course plan toward graduation. To better inform their decision, undecided students who are exploring chemistry along with other majors are encouraged to take an additional chemistry course or two beyond General Chemistry before declaring. Any student interested in chemistry is welcome to schedule an appointment (https://www.chem.wisc.edu/ content/undergraduate-advising) with the advisor to further explore the major.

Students are advised to declare the major no later than the end of their sophomore year. There are many advantages to declaring the chemistry major early, including access to chemistry advising, access to scholarships only available to chemistry majors, and access to announcements for chemistry majors. Students who have declared the major become a part of our chemistry community, enabling them to better connect with faculty, staff, and other chemistry majors.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4 - or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

Liberal Arts
and Science
Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

[^20]
# - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work) 

REQUIREMENTS FOR THE MAJOR
MATH \& PHYSICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics (1 course) ${ }^{1}$ |  | 5 |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| MATH 276 | Topics in Calculus II |  |
| Physics ${ }^{2}$ |  | 10 |
| First Introductory Course (1 course) |  |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| Second Introductory Course (1 course) |  |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |
| Total Credits |  | 15 |

## CHEMISTRY

| Code | Title | Credits |
| :---: | :---: | :---: |
| General Chemistry (1 course) |  | 5 |
| CHEM 104 | General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 | Chemical Principles ${ }^{3}$ |  |
| Analytical Chemistry (1 course) |  | 4-5 |
| CHEM 327 | Fundamentals of Analytical Science 4 |  |
| CHEM 329 | Fundamentals of Analytical Science |  |
| CHEM 116 | Chemical Principles II |  |
| Inorganic Chemistry (1 course) |  | 4 |
| CHEM 311 | Chemistry Across the Periodic Table |  |
| Organic Chemistry ( 3 courses) ${ }^{5}$ |  | 8 |
| CHEM 343 | Introductory Organic Chemistry |  |
| CHEM 344 | Introductory Organic Chemistry Laboratory |  |
| CHEM 345 | Intermediate Organic Chemistry |  |
| Physical Chemistry |  | 3-4 |
| Part 1 (1 course) ${ }^{6}$ |  |  |
| CHEM 561 | Physical Chemistry |  |
| CHEM 565 | Biophysical Chemistry |  |
| CBE 310 | Chemical Process Thermodynamics |  |
| M S \& E 330 | Thermodynamics of Materials |  |
| Part 2 (1 course) |  |  |
| CHEM 562 | Physical Chemistry |  |
| Part 3 (2 courses) |  |  |
| CHEM 563 | Physical Chemistry Laboratory ${ }^{7}$ |  |
| CHEM 564 | Physical Chemistry Laboratory |  |

Advanced Non-laboratory Coursework
non-laboratory courses CHEM 500-680, except
CHEM 561-567 ${ }^{8}$
BIOCHEM 500-680

| M S \& E/ <br> CHEM 421 | Polymeric Materials |  |
| :---: | :---: | :---: |
| CBE 440 | Chemical Engineering Materials |  |
| CBE 540 | Polymer Science and Technology |  |
| CBE 547 | Introduction to Colloid and Interface Science |  |
| Additional Laboratory | Work | 3 |
| CHEM 346 | Intermediate Organic Chemistry Laboratory |  |
| CHEM 524 | Chemical Instrumentation ${ }^{9}$ |  |
| CHEM 681 <br> \& CHEM 682 | Senior Honors Thesis and Senior Honors Thesis |  |
| CHEM 691 <br> \& CHEM 692 | Senior Thesis and Senior Thesis |  |
| CHEM 699 | Directed Study |  |
| BIOCHEM 681 <br> \& BIOCHEM 682 | Senior Honors Thesis and Senior Honors Thesis |  |
| BIOCHEM 691 <br> \& BIOCHEM 692 | Senior Thesis and Senior Thesis |  |
| BIOCHEM 699 | Special Problems |  |
| BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{10}$ |  |
| CBE 599 | Special Problems |  |
| Total Credits |  | 34 |

## RESIDENCE AND QUALITY OF WORK IN THE MAJOR

2.000 GPA in all CHEM and major courses
2.000 GPA in at least 15 upper-level credits in the major in residence. Upper-level work includes CHEM 346, CHEM/
M S \& E 421, CHEM 500-699, BIOCHEM 500-699, BMOLCHEM 504, CBE 310, CBE 440, CBE 540, CBE 547, CBE 599, and M S \& E 330.

15 credits in CHEM, taken at UW-Madison

## NOTES

1 MATH 234 and MATH 320 are highly recommended.
2 PHYSICS 207/PHYSICS 208 is the preferred sequence for chemistry majors, while PHYSICS 201/PHYSICS 202 is recommended for engineering students. PHYSICS 247/PHYSICS 248 is an honors sequence that may be taken by chemistry majors as well. Part land that students needing to complete physical chemistry in two semesters
may take CHEM 563 concurrently with CHEM 561 (or CHEM 565) and CHEM 564 concurrently with CHEM 562.
One credit from each of CHEM 116, CHEM 565, and BMOLCHEM 504 count toward the 5 credits. Only 2 of the 3 credits from CHEM 524 count. The other credit from CHEM 524 and the other 2 credits from BMOLCHEM 504 count toward the additional laboratory work requirement.
Only 1 of the 3 credits from CHEM 524 counts for additional laboratory work requirement. The other 2 credits count toward the advanced non-laboratory coursework.
BMOLCHEM 504 is not recommended for students who are also majoring in Biochemistry, because it overlaps significantly with required biochemistry course work. Only 2 of the 3 credits count towards the additional laboratory work. The remaining 1 credit counts toward advanced non-laboratory coursework.

## HONORS IN THE MAJOR

Students may declare Honors in the Chemistry Major in consultation with the chemistry major advisor (https://www.chem.wisc.edu/content/ undergraduate-advising). To be admitted to the Honors Program in Chemistry, students must have declared a major in chemistry and achieved a 3.200 overall GPA. They must also have achieved a 3.200 GPA in all CHEM courses taken and courses accepted for the major.

## HONORS IN THE CHEMISTRY MAJOR REQUIREMENTS

To earn Honors in the Major in Chemistry, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all CHEM courses and all courses accepted for the major
- Complete at least 3 credits of advanced work beyond those already required for the major. This requirement may be met in one of three ways:
- Additional 500-level or higher non-laboratory CHEM or BIOCHEM courses;
- Additional CHEM 699 Directed Study, BIOCHEM 699 Special Problems, or CBE 599 Special Problems credits that are not already being used to satisfy the 3 additional laboratory credits required for the major;
- Additional breadth courses in other related disciplines ${ }^{1}$
- Complete a two-semester Senior Honors Thesis in CHEM 681 Senior Honors Thesis and CHEM 682 Senior Honors Thesis, for a total of 6 credits.

1 Examples of breadth courses include engineering, physics, molecular biology, computer science, water chemistry, and business. Advancedlevel courses should be chosen in consultation with the student's research mentor.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study <br> Abroad/Study Away programs. |
| :--- | :--- |
| Quality of | Undergraduate students must maintain the minimum <br> Wrade point average specified by the school, college, or <br> Wrand <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Identify, formulate and solve integrative problems using appropriate information and approaches.
2. Demonstrate an understanding of basic chemical transformations, including the ability to predict chemical reactivity and properties.
3. Recognize the relationship between structure, bonding and the properties of molecules and materials.
4. Model chemical systems and experimental data using relevant quantitative, mathematical and computational methods.
5. Design, conduct and analyze experiments safely and successfully.
6. Locate, evaluate and use information in the chemical literature.
7. Communicate chemical knowledge effectively through written reports, oral presentations and visual aids.
8. Work collaboratively with others, both chemists and those from other disciplines, to solve problems and create new knowledge.
9. Recognize how chemistry relates to contemporary issues in our society.
10. Understand professional and ethical responsibility.

## ADVISING AND CAREERS

## ADVISING

The chemistry advisor (http://www.chem.wisc.edu/content/ undergraduate-advising) provides advising for chemistry majors and prospective chemistry majors. Appointments with the advisor can be scheduled via the Scheduling Assistant (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/OaaAyBiv.html). Drop-in advising is available during the first two weeks of the fall and spring semesters and during busy enrollment periods, typically in April and November.

Chemistry majors interested in getting involved in research should explore the undergraduate research (http://www.chem.wisc.edu/content/ get-started) pages on the chemistry website. Students needing additional information may contact the undergraduate research director by email (chem_ugr_research@chem.wisc.edu).

Students with enrollment and course access questions should first visit our enrollment inquiries (http://www.chem.wisc.edu/content/
enrollment-inquiries) web page. If further assistance is needed, students may visit the Undergraduate Chemistry Office (room 1328 Chemistry) during normal business hours, email (undergrad@chem.wisc.edu), or call 608-263-2424.

## CAREER SERVICES

The chemistry major prepares graduates for a wide variety of careers in the chemical and related industries (e.g., consumer and agricultural products, materials, energy, petroleum, paper, and food), as well as environmental, pharmaceutical, and other health-related sciences. Combined with a master's program in secondary education, the major qualifies the student to teach chemistry in secondary schools. The major prepares students for graduate-level work in chemistry, chemical physics, biochemistry, biophysics, materials chemistry, and other related fields. Students who excel in undergraduate chemistry coursework are able to obtain funding for graduate studies in chemistry and related sciences through teaching or research assistantships and fellowships. Some chemistry major graduates go on to professional schools to study medicine, pharmacy, dentistry, veterinary medicine, business, or law.

Students are encouraged to begin their career planning early and to take advantage of the numerous resources offered by SuccessWorks at the College of Letters \& Science. Information about careers, internships, resumes, cover letters, job search strategies, interviewing, and graduate school preparation are all available through SuccessWorks. Students can also register for BuckyNet (https://careers.Is.wisc.edu/httpswww-uwalumni-comservicesalumni-directorygetting-started), an online resource for students to make connections with potential employers. Current career, research, and internship opportunities of specific interest to chemistry students can be found on the Career Services (http:// www.chem.wisc.edu/content/career-services) pages of the chemistry website.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## PROFESSORS

Berry, John

Blackwell, Helen
Brunold, Thomas
Burke, Steven
Burstyn, Judith (chair)
Cavagnero, Silvia
Choi, Kyoung-Shin
Coon, Joshua
Ediger, Mark
Gellman, Samuel
Hamers, Robert
Hermans, Ive
Jin, Song
Landis, Clark
McMahon, Robert
Moore, John
Nathanson, Gilbert
Record, Thomas
Schwartz, David
Shakhashiri, Bassam
Sibert, Edwin (associate chair)
Smith, Lloyd
Stahl, Shannon
Weisshaar, James
Woods, Claude
Wright, John
Yethiraj, Arun
Yoon, Tehshik
Zanni, Martin

## ASSOCIATE PROFESSORS

Bertram, Timothy
Fredrickson, Daniel
Schmidt, Jordan
Schomaker, Jennifer
Weix, Daniel

## ASSISTANT PROFESSORS

Buller, Andrew
Garand, Etienne
Goldsmith, Randall
Wickens, Zachary

## AFFILIATED PROFESSORS

Abbott, Nicholas (Professor of Chemical and Biological Engineering) Forest, Katrina (Professor of Bacteriology)
Ge, Ying (Associate Professor of Cell and Regenerative Biology)
Gilbert, Pupa (Professor of Physics)
Golden, Jennifer (Assistant Professor of Pharmacy)
Gong, Sarah (Professor of Biomedical Engineering)
Gopalan, Padma (Professor of Materials Science and Engineering)
Jackson, Catherine (Assistant Professor of History of Science)
Kuech, Thomas (Professor of Chemical and Biological Engineering)
Li, Lingjun (Professor of Pharmacy)
Lynn, David (Professor of Chemical and Biological Engineering)
Mecozzi, Sandro (Associate Professor of Pharmacy)
Middlecamp, Catherine (Professor, Nelson Institute for Environmental Studies)
Pedersen, Joel (Professor of Soil Science)
Tang, Weiping (Professor of Pharmacy)
Weibel, Douglas (Professor of Biochemistry)
Yu, Lian (Professor of Pharmacy)

## INSTRUCTIONAL STAFF

Bain, Rachel (Instructional Technology Specialist)
Block, Stephen (Lecturer and General Chemistry Assistant Laboratory Director)
Bowman, Matthew (Lecturer)
Doolittle, Pamela (Analytical Chemistry Laboratory Director)
Esselman, Brian (Lecturer and Organic Chemistry Assistant Laboratory Director)
Hill, Nicholas (Organic Chemistry Laboratory Director)
Hooker, Paul (Senior Lecturer)
Lamont, Liana (Faculty Assistant)
Maynard, James (Lecture Demonstrator)
McClain, Robert (Analytical Chemistry Laboratory Director)
Stoll, Lindy (Faculty Assistant)
Tatarsky, Amy (Faculty Assistant)
Wendt, Mark (Physical Chemistry Laboratory Director)
Wilkinson, Chad (General Chemistry Laboratory Director)
Zelewski, Linda (Senior Lecturer)
Zhou, Jia (Associate Lecturer)

## CHEMISTRY LEARNING CENTER

Dang, Allice (Assistant Faculty Associate)
Jetzer, Kelly (Instructional Specialist)
Jacob, Anthony (Director)
Laboy, José (Faculty Associate)
Lee, Agnes (Faculty Associate)
Ramey, Shea (Faculty Associate)
Reitz, Tracey (Assistant Faculty Associate)
Toland, David (Associate Faculty Associate)
Zavala, Yashira (Assistant Faculty Associate)

## STUDENT SERVICES AND ADVISING

Barta, Cheri (Undergraduate Research Director)
Hamers, Jeanne (Undergraduate Chemistry Director and Chemistry Advisor)

## WISCONSIN EXPERIENCE

## RESEARCH

There are many research opportunities for undergraduates in the Department of Chemistry. When conducting research, students will have the opportunity to work alongside world-class faculty, staff, and graduate students to gain hands-on research experiences that will supplement their liberal arts education and prepare students for future careers. We have researchers involved in all the core areas of chemistry: analytical, chemical biology, chemical education, inorganic, materials, organic, physical, and theoretical. Many of our researchers conduct research across disciplines, including medicine, pharmacy, biology, engineering, energy, environmental sciences, and physics. Although preference is given to chemistry majors in good academic standing, any student interested in conducting chemistry research can seek out opportunities in our department. Students have the option of volunteering in a research lab or conducting research for course credit by enrolling in CHEM 299 Directed Study, CHEM 699 Directed Study, CHEM 681/CHEM 682 Senior Honors Thesis, or CHEM 691/CHEM 692 Senior Thesis. Students can also gain research experiences through the elective courses CHEM 260 Entering Research I, CHEM 261 Entering Research II, and CHEM 346 Intermediate Organic Chemistry Laboratory, as well as the required course CHEM 329 Fundamentals of Analytical Science. In some cases, experienced undergraduates may be paid to conduct research. For
additional information about undergraduate research, including how to get involved, please visit the department's Undergraduate Research (https://www.chem.wisc.edu/content/research-overview) page.

## STUDENT ORGANIZATIONS

A number of student organizations are available for students interested in the chemical sciences.

- The American Chemical Society (ACS) Student Chapter (https:// win.wisc.edu/organization/acs) facilitates opportunities for students in the chemical sciences to promote the learning and advancement of chemistry. The chapter supports students in their academic development, professional development, and research pursuits.
- Alpha Chi Sigma (AXE) (https://alphachisigmauw.wordpress.com) is a national, co-ed, professional chemistry organization that was founded at UW-Madison in 1902. The UW-Madison chapter has an active membership of about 40 students, both graduate and undergraduate. The organization also has two houses, at 619 and 621 North Lake Street, which house nearly half of the members. The houses are the primary locations for events like tutoring, chapter dinners, meetings, and social events.
- Students Participating in Chemical Education (SPICE) (http:// ice.chem.wisc.edu/SPICE.html) trains undergraduates to perform chemistry demonstrations in order to interest elementary and middle school students in chemistry and science via cool experiments, hands-on activities, and exploration stations at public venues.
- The UW-Madison student chapter of NOBCChE (https:// win.wisc.edu/organization/NOBCChE) (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers) seeks to encourage students of color to pursue graduate and professional degrees in chemistry, chemical engineering, and other chemistry-related fields. Members participate in professional development through national conference presentations, networking, and community service activities.
- SACNAS (http://uwmadisonsacnas.weebly.com) (the Society for the Advancement of Hispanics/Chicanos and Native Americans) is a society of scientists dedicated to fostering the success of Hispanic/ Chicano and Native American scientists-from college students to professionals-to attain advanced degrees, careers, and positions of leadership in science.


## CERTIFICATION/LICENSURE

## ACS CERTIFIED DEGREE

The UW-Madison Department of Chemistry is approved by the American Chemical Society (ACS) to certify the degrees of graduating students who have completed the curriculum and professional training recommended by ACS for chemistry bachelor's degree graduates. Certification indicates that the student has completed rigorous course work that provides them with the skills needed for a successful career in science.

Students graduating with the chemistry major from UW-Madison already meet most of the requirements for ACS certification. They can obtain the certification by electing to take specific courses that satisfy both the requirements of the major and the ACS guidelines. Additional requirements for certification are:

[^21]- At least 400 total laboratory hours, which can be satisfied by the combination of all the required core laboratory courses (in organic, inorganic, analytical and physical chemistry) plus two to three laboratory credits from any combination of CHEM 346 Intermediate Organic Chemistry Laboratory, CHEM 524 Chemical Instrumentation ( 3 credit course, but only one credit is a lab credit), CHEM 681/CHEM 682 Senior Honors Thesis, CHEM 691/ CHEM 692 Senior Thesis or BMOLCHEM 504 Human Biochemistry Laboratory. The exact number of lab credits required from these courses depends on how the student has satisfied the core lab requirements. Please consult the Chemistry Major Advisor (https://www.chem.wisc.edu/ content/undergraduate-advising) for more details.

The biochemistry course satisfies three of the five credits of advanced work required for the chemistry major, while two credits from CHEM 524 also count towards the advanced work. CHEM 346, 1 credit of CHEM 524, CHEM 681/CHEM 682, CHEM 691/CHEM 692 and BMOLCHEM 504 all count towards the three additional lab credits required for the major.

Note that neither CHEM 299 Directed Study nor CHEM 699 Directed Study can be used to satisfy the lab hours needed for ACS certification. However, CHEM 699 can be used to satisfy additional lab credits needed for the chemistry major.

## RESOURCES AND SCHOLARSHIPS

## ACADEMIC RESOURCES

A number of resources are available to students seeking assistance with their chemistry courses. Students are strongly encouraged to attend the office hours of the instructors for the course.

The Chemistry Learning Center (CLC) (http://www.chem.wisc.edu/areas/ clc/mission.htm) supports students in introductory chemistry courses (CHEM 103, CHEM 104, and CHEM 108) and in some sections of organic chemistry. The center welcomes as many students as possible but unfortunately does not have sufficient resources to support all students seeking help. The center is funded to work with specific groups of students, such as first-generation low-income students, underrepresented students, students on academic probation, students with disabilities, students who have trouble understanding English, new transfer students, recently returning veterans, and students at-risk of failing the course. These are general guidelines and the center considers each student seeking assistance on a case-by-case basis, taking into account available program space. Program eligibility is usually determined by an interview with a staff member.

Further assistance may be sought from various tutoring services on campus, including the Greater University Tutoring Services (GUTS) (http://www.guts.wisc.edu), University Housing Tutoring (http:// www.housing.wisc.edu/residencehalls-academics-tutoring.htm), and the College of Engineering Undergraduate Learning Center (ULC) (https://www.engr.wisc.edu/academics/student-services/ulc). Alpha Chi Sigma (AXE) (https://win.wisc.edu/organization/axsigma) is a co-ed professional chemistry fraternity that also offers tutoring. For students seeking more individualized tutoring, the Department of Chemistry maintains a list of private tutors (https://www.chem.wisc.edu/content/ tutors) available for hire.

## SCHOLARSHIPS

Through the generosity of alumni and other friends of the department, the Department of Chemistry is able to offer scholarships and summer research support. In 2017, the department awarded 36 undergraduate scholarships that totaled more than \$150,000.

Any student who is a chemistry major or is conducting research with a chemistry faculty member is eligible to apply for the scholarships. An overall GPA of at least 3.000 is required for application; awards are based on both merit and financial need. Students may apply for academic year scholarships and/or summer research support. Learn more about chemistry scholarships (https://www.chem.wisc.edu/content/chemistryscholarships) and how to apply.

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## HOW TO GET IN

Students may declare the chemistry major after they have completed General Chemistry (CHEM 104, CHEM 109, or CHEM 116). Transfer students may declare in their first semester at UW-Madison, if they have transfer credit for one of these courses. Students should schedule an appointment with the undergraduate chemistry advisor to declare and develop a course plan toward graduation. To better inform their decision, undecided students who are exploring chemistry along with other majors are encouraged to take an additional chemistry course or two beyond General Chemistry before declaring. Any student interested in chemistry is welcome to schedule an appointment (https://www.chem.wisc.edu/ content/undergraduate-advising) with the advisor to further explore the major.

Students are advised to declare the major no later than the end of their sophomore year. There are many advantages to declaring the chemistry major early, including access to chemistry advising, access to scholarships only available to chemistry majors, and access to announcements for chemistry majors. Students who have declared the major become a part of our chemistry community, enabling them to better connect with faculty, staff, and other chemistry majors.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| Foreign | Complete the third unit of a foreign language <br> Language |
| Note: A unit is one year of high school work or one <br> semester/term of college work. |  |

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR <br> MATH \& PHYSICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Mathematics (1 course) ${ }^{1}$ | 5 |  |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| MATH 276 | Topics in Calculus II | 10 |
| Physics ${ }^{2}$ |  |  |
| First Introductory |  | Course (1 course) |
| PHYSICS 207 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| Second Introductory Course (1 course) |  |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |
| Total Credits |  | 15 |

## CHEMISTRY

| Code | Title | Credits |
| :---: | :---: | :---: |
| General Chemistry (1 course) |  | 5 |
| CHEM 104 | General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 | Chemical Principles ${ }^{3}$ |  |
| Analytical Chemistry (1 course) |  | 4-5 |
| CHEM 327 | Fundamentals of Analytical Science 4 |  |
| CHEM 329 | Fundamentals of Analytical Science |  |
| CHEM 116 | Chemical Principles II |  |
| Inorganic Chemistry (1 course) |  | 4 |
| CHEM 311 | Chemistry Across the Periodic Table |  |
| Organic Chemistry ( 3 courses) ${ }^{5}$ |  | 8 |
| CHEM 343 | Introductory Organic Chemistry |  |
| CHEM 344 | Introductory Organic Chemistry Laboratory |  |
| CHEM 345 | Intermediate Organic Chemistry |  |
| Physical Chemistry |  | 3-4 |
| Part 1 (1 course) ${ }^{6}$ |  |  |
| CHEM 561 | Physical Chemistry |  |
| CHEM 565 | Biophysical Chemistry |  |
| CBE 310 | Chemical Process Thermodynamics |  |
| M S \& E 330 | Thermodynamics of Materials |  |
| Part 2 (1 course) |  |  |
| CHEM 562 | Physical Chemistry |  |
| Part 3 (2 courses) |  |  |
| CHEM 563 | Physical Chemistry Laboratory ${ }^{7}$ |  |
| CHEM 564 | Physical Chemistry Laboratory |  |
| Advanced Non-laboratory Coursework |  | 5 |
| non-laboratory courses CHEM 500-680, except CHEM 561-567 ${ }^{8}$ |  |  |
| BIOCHEM 500-680 |  |  |
| M S \& E/ <br> CHEM 421 | Polymeric Materials |  |


| CBE 440 | Chemical Engineering Materials |  |
| :---: | :---: | :---: |
| CBE 540 | Polymer Science and Technology |  |
| CBE 547 | Introduction to Colloid and Interface Science |  |
| Additional Laboratory | Work | 3 |
| CHEM 346 | Intermediate Organic Chemistry Laboratory |  |
| CHEM 524 | Chemical Instrumentation ${ }^{9}$ |  |
| CHEM 681 <br> \& CHEM 682 | Senior Honors Thesis and Senior Honors Thesis |  |
| CHEM 691 <br> \& CHEM 692 | Senior Thesis and Senior Thesis |  |
| CHEM 699 | Directed Study |  |
| BIOCHEM 681 <br> \& BIOCHEM 682 | Senior Honors Thesis and Senior Honors Thesis |  |
| BIOCHEM 691 <br> \& BIOCHEM 692 | Senior Thesis and Senior Thesis |  |
| BIOCHEM 699 | Special Problems |  |
| BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{10}$ |  |
| CBE 599 | Special Problems |  |
| Total Credits |  |  |

## RESIDENCE AND QUALITY OF WORK IN THE MAJOR

2.000 GPA in all CHEM and major courses
2.000 GPA in at least 15 upper-level credits in the major in residence. Upper-level work includes CHEM 346, CHEM/ M S \& E 421, CHEM 500-699, BIOCHEM 500-699, BMOLCHEM 504, CBE 310, CBE 440, CBE 540, CBE 547, CBE 599, and M S \& E 330.

15 credits in CHEM, taken at UW-Madison

## NOTES

MATH 234 and MATH 320 are highly recommended.

5 CHEM 343 must be taken first, followed by CHEM 345. CHEM 344 may be taken concurrently with or after CHEM 345 .
6 CBE 310 is recommended only for students who are also majoring in chemical and biological engineering. M S \& E 330 is recommended only for students also majoring in materials science and engineering. It is recommended that CHEM 563 be taken after Physical Chemistry Part I and that CHEM 564 be taken after CHEM 562. Especially strong students needing to complete physical chemistry in two semesters may take CHEM 563 concurrently with CHEM 561 (or CHEM 565) and CHEM 564 concurrently with CHEM 562.
8 One credit from each of CHEM 116, CHEM 565, and BMOLCHEM 504 count toward the 5 credits. Only 2 of the 3 credits from CHEM 524 count. The other credit from CHEM 524 and the other 2 credits
from BMOLCHEM 504 count toward the additional laboratory work requirement.
Only 1 of the 3 credits from CHEM 524 counts for additional laboratory work requirement. The other 2 credits count toward the advanced non-laboratory coursework.

10
BMOLCHEM 504 is not recommended for students who are also majoring in Biochemistry, because it overlaps significantly with required biochemistry course work. Only 2 of the 3 credits count towards the additional laboratory work. The remaining 1 credit counts toward advanced non-laboratory coursework.

## HONORS IN THE MAJOR

Students may declare Honors in the Chemistry Major in consultation with the chemistry major advisor (https://www.chem.wisc.edu/content/ undergraduate-advising). To be admitted to the Honors Program in Chemistry, students must have declared a major in chemistry and achieved a 3.200 overall GPA. They must also have achieved a 3.200 GPA in all CHEM courses taken and courses accepted for the major.

## HONORS IN THE CHEMISTRY MAJOR REQUIREMENTS

To earn Honors in the Major in Chemistry, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all CHEM courses and all courses accepted for the major
- Complete at least 3 credits of advanced work beyond those already required for the major. This requirement may be met in one of three ways:
- Additional 500-level or higher non-laboratory CHEM or BIOCHEM courses;
- Additional CHEM 699 Directed Study, BIOCHEM 699 Special Problems, or CBE 599 Special Problems credits that are not already being used to satisfy the 3 additional laboratory credits required for the major;
- Additional breadth courses in other related disciplines ${ }^{1}$
- Complete a two-semester Senior Honors Thesis in CHEM 681 Senior Honors Thesis and CHEM 682 Senior Honors Thesis, for a total of 6 credits.

1 Examples of breadth courses include engineering, physics, molecular biology, computer science, water chemistry, and business. Advancedlevel courses should be chosen in consultation with the student's research mentor.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
\(\left.$$
\begin{array}{ll}\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online } \\
\text { formats and credits earned in UW-Madison Study }\end{array}
$$ <br>

Abroad/Study Away programs.\end{array}\right\}\)| Quality of $\quad$Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |
| :--- |

## LEARNING OUTCOMES

1. Identify, formulate and solve integrative problems using appropriate information and approaches.
2. Demonstrate an understanding of basic chemical transformations, including the ability to predict chemical reactivity and properties.
3. Recognize the relationship between structure, bonding and the properties of molecules and materials.
4. Model chemical systems and experimental data using relevant quantitative, mathematical and computational methods.
5. Design, conduct and analyze experiments safely and successfully.
6. Locate, evaluate and use information in the chemical literature.
7. Communicate chemical knowledge effectively through written reports, oral presentations and visual aids.
8. Work collaboratively with others, both chemists and those from other disciplines, to solve problems and create new knowledge.
9. Recognize how chemistry relates to contemporary issues in our society.
10. Understand professional and ethical responsibility.

## ADVISING AND CAREERS

## ADVISING

The chemistry advisor (http://www.chem.wisc.edu/content/ undergraduate-advising) provides advising for chemistry majors and prospective chemistry majors. Appointments with the advisor can be scheduled via the Scheduling Assistant (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/OaaAyBiv.html). Drop-in advising is available during the first two weeks of the fall and spring semesters and during busy enrollment periods, typically in April and November.

Chemistry majors interested in getting involved in research should explore the undergraduate research (http://www.chem.wisc.edu/content/ get-started) pages on the chemistry website. Students needing additional information may contact the undergraduate research director by email (chem_ugr_research@chem.wisc.edu).

Students with enrollment and course access questions should first visit our enrollment inquiries (http://www.chem.wisc.edu/content/
enrollment-inquiries) web page. If further assistance is needed, students may visit the Undergraduate Chemistry Office (room 1328 Chemistry) during normal business hours, email (undergrad@chem.wisc.edu), or call 608-263-2424.

## CAREER SERVICES

The chemistry major prepares graduates for a wide variety of careers in the chemical and related industries (e.g., consumer and agricultural products, materials, energy, petroleum, paper, and food), as well as environmental, pharmaceutical, and other health-related sciences. Combined with a master's program in secondary education, the major qualifies the student to teach chemistry in secondary schools. The major prepares students for graduate-level work in chemistry, chemical physics, biochemistry, biophysics, materials chemistry, and other related fields. Students who excel in undergraduate chemistry coursework are able to obtain funding for graduate studies in chemistry and related sciences through teaching or research assistantships and fellowships. Some chemistry major graduates go on to professional schools to study medicine, pharmacy, dentistry, veterinary medicine, business, or law.

Students are encouraged to begin their career planning early and to take advantage of the numerous resources offered by SuccessWorks at the College of Letters \& Science. Information about careers, internships, resumes, cover letters, job search strategies, interviewing, and graduate school preparation are all available through SuccessWorks. Students can also register for BuckyNet (https://careers.Is.wisc.edu/httpswww-uwalumni-comservicesalumni-directorygetting-started), an online resource for students to make connections with potential employers. Current career, research, and internship opportunities of specific interest to chemistry students can be found on the Career Services (http:// www.chem.wisc.edu/content/career-services) pages of the chemistry website.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## PROFESSORS

Berry, John

Blackwell, Helen
Brunold, Thomas
Burke, Steven
Burstyn, Judith (chair)
Cavagnero, Silvia
Choi, Kyoung-Shin
Coon, Joshua
Ediger, Mark
Gellman, Samuel
Hamers, Robert
Hermans, Ive
Jin, Song
Landis, Clark
McMahon, Robert
Moore, John
Nathanson, Gilbert
Record, Thomas
Schwartz, David
Shakhashiri, Bassam
Sibert, Edwin (associate chair)
Smith, Lloyd
Stahl, Shannon
Weisshaar, James
Woods, Claude
Wright, John
Yethiraj, Arun
Yoon, Tehshik
Zanni, Martin

## ASSOCIATE PROFESSORS

Bertram, Timothy
Fredrickson, Daniel
Schmidt, Jordan
Schomaker, Jennifer
Weix, Daniel

## ASSISTANT PROFESSORS

Buller, Andrew
Garand, Etienne
Goldsmith, Randall
Wickens, Zachary

## AFFILIATED PROFESSORS

Abbott, Nicholas (Professor of Chemical and Biological Engineering) Forest, Katrina (Professor of Bacteriology)
Ge, Ying (Associate Professor of Cell and Regenerative Biology)
Gilbert, Pupa (Professor of Physics)
Golden, Jennifer (Assistant Professor of Pharmacy)
Gong, Sarah (Professor of Biomedical Engineering)
Gopalan, Padma (Professor of Materials Science and Engineering)
Jackson, Catherine (Assistant Professor of History of Science)
Kuech, Thomas (Professor of Chemical and Biological Engineering)
Li, Lingjun (Professor of Pharmacy)
Lynn, David (Professor of Chemical and Biological Engineering)
Mecozzi, Sandro (Associate Professor of Pharmacy)
Middlecamp, Catherine (Professor, Nelson Institute for Environmental

## Studies)

Pedersen, Joel (Professor of Soil Science)
Tang, Weiping (Professor of Pharmacy)
Weibel, Douglas (Professor of Biochemistry)
Yu, Lian (Professor of Pharmacy)

## INSTRUCTIONAL STAFF

Bain, Rachel (Instructional Technology Specialist)
Block, Stephen (Lecturer and General Chemistry Assistant Laboratory Director)
Bowman, Matthew (Lecturer)
Doolittle, Pamela (Analytical Chemistry Laboratory Director)
Esselman, Brian (Lecturer and Organic Chemistry Assistant Laboratory Director)
Hill, Nicholas (Organic Chemistry Laboratory Director)
Hooker, Paul (Senior Lecturer)
Lamont, Liana (Faculty Assistant)
Maynard, James (Lecture Demonstrator)
McClain, Robert (Analytical Chemistry Laboratory Director)
Stoll, Lindy (Faculty Assistant)
Tatarsky, Amy (Faculty Assistant)
Wendt, Mark (Physical Chemistry Laboratory Director)
Wilkinson, Chad (General Chemistry Laboratory Director)
Zelewski, Linda (Senior Lecturer)
Zhou, Jia (Associate Lecturer)

## CHEMISTRY LEARNING CENTER

Dang, Allice (Assistant Faculty Associate)
Jetzer, Kelly (Instructional Specialist)
Jacob, Anthony (Director)
Laboy, José (Faculty Associate)
Lee, Agnes (Faculty Associate)
Ramey, Shea (Faculty Associate)
Reitz, Tracey (Assistant Faculty Associate)
Toland, David (Associate Faculty Associate)
Zavala, Yashira (Assistant Faculty Associate)

## STUDENT SERVICES AND ADVISING

Barta, Cheri (Undergraduate Research Director)
Hamers, Jeanne (Undergraduate Chemistry Director and Chemistry Advisor)

## WISCONSIN EXPERIENCE

## RESEARCH

There are many research opportunities for undergraduates in the Department of Chemistry. When conducting research, students will have the opportunity to work alongside world-class faculty, staff, and graduate students to gain hands-on research experiences that will supplement their liberal arts education and prepare students for future careers. We have researchers involved in all the core areas of chemistry: analytical, chemical biology, chemical education, inorganic, materials, organic, physical, and theoretical. Many of our researchers conduct research across disciplines, including medicine, pharmacy, biology, engineering, energy, environmental sciences, and physics. Although preference is given to chemistry majors in good academic standing, any student interested in conducting chemistry research can seek out opportunities in our department. Students have the option of volunteering in a research lab or conducting research for course credit by enrolling in CHEM 299 Directed Study, CHEM 699 Directed Study, CHEM 681/CHEM 682 Senior Honors Thesis, or CHEM 691/CHEM 692 Senior Thesis. Students can also gain research experiences through the elective courses CHEM 260 Entering Research I, CHEM 261 Entering Research II, and CHEM 346 Intermediate Organic Chemistry Laboratory, as well as the required course CHEM 329 Fundamentals of Analytical Science. In some cases, experienced undergraduates may be paid to conduct research. For
additional information about undergraduate research, including how to get involved, please visit the department's Undergraduate Research (https://www.chem.wisc.edu/content/research-overview) page.

## STUDENT ORGANIZATIONS

A number of student organizations are available for students interested in the chemical sciences.

- The American Chemical Society (ACS) Student Chapter (https:// win.wisc.edu/organization/acs) facilitates opportunities for students in the chemical sciences to promote the learning and advancement of chemistry. The chapter supports students in their academic development, professional development, and research pursuits.
- Alpha Chi Sigma (AXE) (https://alphachisigmauw.wordpress.com) is a national, co-ed, professional chemistry organization that was founded at UW-Madison in 1902. The UW-Madison chapter has an active membership of about 40 students, both graduate and undergraduate. The organization also has two houses, at 619 and 621 North Lake Street, which house nearly half of the members. The houses are the primary locations for events like tutoring, chapter dinners, meetings, and social events.
- Students Participating in Chemical Education (SPICE) (http:// ice.chem.wisc.edu/SPICE.html) trains undergraduates to perform chemistry demonstrations in order to interest elementary and middle school students in chemistry and science via cool experiments, hands-on activities, and exploration stations at public venues.
- The UW-Madison student chapter of NOBCChE (https:// win.wisc.edu/organization/NOBCChE) (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers) seeks to encourage students of color to pursue graduate and professional degrees in chemistry, chemical engineering, and other chemistry-related fields. Members participate in professional development through national conference presentations, networking, and community service activities.
- SACNAS (http://uwmadisonsacnas.weebly.com) (the Society for the Advancement of Hispanics/Chicanos and Native Americans) is a society of scientists dedicated to fostering the success of Hispanic/ Chicano and Native American scientists-from college students to professionals-to attain advanced degrees, careers, and positions of leadership in science.


## CERTIFICATION/LICENSURE

## ACS CERTIFIED DEGREE

The UW-Madison Department of Chemistry is approved by the American Chemical Society (ACS) to certify the degrees of graduating students who have completed the curriculum and professional training recommended by ACS for chemistry bachelor's degree graduates. Certification indicates that the student has completed rigorous course work that provides them with the skills needed for a successful career in science.

Students graduating with the chemistry major from UW-Madison already meet most of the requirements for ACS certification. They can obtain the certification by electing to take specific courses that satisfy both the requirements of the major and the ACS guidelines. Additional requirements for certification are:

[^22]At least 400 total laboratory hours, which can be satisfied by the combination of all the required core laboratory courses (in organic, inorganic, analytical and physical chemistry) plus two to three laboratory credits from any combination of CHEM 346 Intermediate Organic Chemistry Laboratory, CHEM 524 Chemical Instrumentation (3 credit course, but only one credit is a lab credit), CHEM 681/CHEM 682 Senior Honors Thesis, CHEM 691/ CHEM 692 Senior Thesis or BMOLCHEM 504 Human Biochemistry Laboratory. The exact number of lab credits required from these courses depends on how the student has satisfied the core lab requirements. Please consult the Chemistry Major Advisor (https://www.chem.wisc.edu/ content/undergraduate-advising) for more details.

The biochemistry course satisfies three of the five credits of advanced work required for the chemistry major, while two credits from CHEM 524 also count towards the advanced work. CHEM 346, 1 credit of CHEM 524, CHEM 681/CHEM 682, CHEM 691/CHEM 692 and BMOLCHEM 504 all count towards the three additional lab credits required for the major.

Note that neither CHEM 299 Directed Study nor CHEM 699 Directed Study can be used to satisfy the lab hours needed for ACS certification. However, CHEM 699 can be used to satisfy additional lab credits needed for the chemistry major.

## RESOURCES AND SCHOLARSHIPS

## ACADEMIC RESOURCES

A number of resources are available to students seeking assistance with their chemistry courses. Students are strongly encouraged to attend the office hours of the instructors for the course.

The Chemistry Learning Center (CLC) (http://www.chem.wisc.edu/areas/ clc/mission.htm) supports students in introductory chemistry courses (CHEM 103, CHEM 104, and CHEM 108) and in some sections of organic chemistry. The center welcomes as many students as possible but unfortunately does not have sufficient resources to support all students seeking help. The center is funded to work with specific groups of students, such as first-generation low-income students, underrepresented students, students on academic probation, students with disabilities, students who have trouble understanding English, new transfer students, recently returning veterans, and students at-risk of failing the course. These are general guidelines and the center considers each student seeking assistance on a case-by-case basis, taking into account available program space. Program eligibility is usually determined by an interview with a staff member.

Further assistance may be sought from various tutoring services on campus, including the Greater University Tutoring Services (GUTS) (http://www.guts.wisc.edu), University Housing Tutoring (http:// www.housing.wisc.edu/residencehalls-academics-tutoring.htm), and the College of Engineering Undergraduate Learning Center (ULC) (https://www.engr.wisc.edu/academics/student-services/ulc). Alpha Chi Sigma (AXE) (https://win.wisc.edu/organization/axsigma) is a co-ed professional chemistry fraternity that also offers tutoring. For students seeking more individualized tutoring, the Department of Chemistry maintains a list of private tutors (https://www.chem.wisc.edu/content/ tutors) available for hire.

## SCHOLARSHIPS

Through the generosity of alumni and other friends of the department, the Department of Chemistry is able to offer scholarships and summer research support. In 2017, the department awarded 36 undergraduate scholarships that totaled more than $\$ 150,000$.

Any student who is a chemistry major or is conducting research with a chemistry faculty member is eligible to apply for the scholarships. An overall GPA of at least 3.000 is required for application; awards are based on both merit and financial need. Students may apply for academic year scholarships and/or summer research support. Learn more about chemistry scholarships (https://www.chem.wisc.edu/content/chemistryscholarships) and how to apply.

## CHICANA/O AND LATINA/O STUDIES

The Chicana/o and Latina/o Studies Program (CLS) offers a systematic and interdisciplinary analysis of Mexican- and Latin-American-origin people, cultures, and collectivities within the United States. The CLS certificate is designed to provide students with a broad knowledge base and the intellectual tools to understand the unity and diversity of U.S. Latina/o populations. The primary objective of the CLS program is to train students in the study of Chicana/o and Latina/os, as well as to introduce them to the central questions, topics, and applications that have emerged in this field of inquiry.

CLS offers a variety of courses, some focusing on particular nationalorigin groups or specific academic disciplines, and others organized around comparative topics or issues. We welcome you to join our academic community of learners.

Note: The @ ending ("a" at the center of "o") offers a simultaneous presentation of both the feminine and masculine word endings of Chicana, Chicano, Latina, and Latino and allows readers/speakers to choose the form they prefer.

## DEGREES/MAJORS/CERTIFICATES

- Chicana/o and Latina/o Studies, Certificate (p. 539)


## PEOPLE

## CHICANA/O AND LATINA/O STUDIES (CLS) DIRECTOR

- Ben Marquez (Political Science)


## FACULTY

## - Jim Escalante (Art)

- Alberta M. Gloria (Counseling Psychology)
- Mary Louise Gomez (Curriculum and Instruction)
- Taucia Gonzalez (Rehabilitation Psychology and Special Education)
- Paola Hernandez (Spanish and Portuguese)
- Armando Ibarra (School for Workers, UW-Extension)
- Susan L. Johnson (History)
- Michael Light (Chicana/o \& Latina/o Studies and Sociology)
- Ruben Medina (Spanish and Portuguese)
- Alfonso Morales (Urban and Regional Planning)
- Mariana Pacheco (Curriculum and Instruction)
- Steve Quintana (Counseling Psychology)
- Carolina Sarmiento (School of Human Ecology)
- Revel Sims (Chicana/o \& Latina/o Studies and Urban and Regional Planning)
- Lynet Uttal (Counseling Psychology)
- Carmen Valdez (Counseling Psychology)
- Kate Vieira (English)

Instructors: Kimberly Hernandez and Ana Marcela Fuentes
Emeritus Faculty: Andrea-Teresa Arenas, Consuelo López-Springfield, Francisco Scarano, and Steve Stern

## STAFF

- Rachelle Eilers (Certificate Advisor)
- Peter Haney (Program Administrator)
- Natalie Mena (Project Assistant)


## CHICANA/O AND LATINA/0 STUDIES, CERTIFICATE

The program in Chicana/o and Latina/o Studies (CLS) offers a systematic and interdisciplinary analysis of Mexican- and Latin-American-origin people, cultures, and collectivities within the United States. The CLS certificate is designed to provide students with a broad knowledge base and the intellectual tools to understand the unity and diversity of U.S. Latina/o populations. The primary objective of the CLS program is to train students in the study of Chicana/o and Latina/os, as well as to introduce them to the central questions, topics, and applications that have emerged in this field of inquiry.

## HOW TO GET IN

An undergraduate certificate in Chicana/o and Latina/o studies is available for those students from any undergraduate major who wish to pursue Chicana/o and Latina/o studies courses in a systematic manner. Information on the certificate is available in the Student Advising Office, 307 Ingraham Hall. Prospective certificate students must make an appointment with Rachelle Eilers, reilers@wisc.edu, to discuss requirements, courses, and application to the certificate.

## REQUIREMENTS

Completion of the certificate requires a minimum of 15 credits in Chicana/o and Latina/o studies. A maximum of 3 credits earned through a directed study course (CHICLA 699) can count toward the certificate.

## Code <br> Title <br> Credits

Select one Introduction Course:

| CHICLA 201 | Introduction to Chicana/o and <br> Latina/o Studies |
| :--- | :--- |

Select at least one additional 100 - or 200 -level course


| CHICLA 330 | Topics in Chicano/a Studies |
| :---: | :---: |
| CHICLA/ COM ARTS 347 | Race, Ethnicity, and Media |
| CHICLA/ HISTORY 461 | The American West tol850 |
| CHICLA/ <br> HISTORY 462 | The American West Since 1850 |
| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration |
| CHICLA 530 | Advanced Topics in Chicana/o and Latina/o Studies |
| CHICLA 699 | Directed Study ${ }^{1}$ |
| COUN PSY 300 | Special Topics: Counseling and Counseling Psychology (Immigrant Health and Well-Being) |
| COUN PSY 300 | Special Topics: Counseling and Counseling Psychology (Working w/ Latinx Populations) |
| COUN PSY 300 | Special Topics: Counseling and Counseling Psychology (Working with Refugee Families) |
| GEN\&WS/ PORTUG 460 | Carmen Miranda |
| HDFS 474 | Racial Ethnic Families in the U.S. |
| HISTORY 408 | American Labor History: 1900Present |
| HISTORY/CHICLA POLI SCI 422 | Latino History and Politics |
| POLI SCI 601 | Proseminar. Topics in Political Science (Cuba U.S. Relations: Past \& Present) |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies (US \& Latin America from Colonial Era to Present) |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies (Labor in Americas The U.S. and Mexico in Comparative and Historical Perspective) |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. (Topics in Hispanic Cultures in the U.S.) |
| CURRIC 675 | General Seminar (Language and Culture in the Borderlands) |
| CHICLA/ HISTORY/LACIS/ POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective |
| CHICLA/ <br> SPANISH 469 | Topics in Hispanic Cultures in the U.S. |
| COUN PSY 620 | Special Topics in Counseling and Guidance |
| POLI SCI 825 | Race and Politics in the United States |
| A maximum of 3 credits earned through a directed study course (CHICLA 699) can count toward the certificate. |  |

## RESIDENCE AND QUALITY OF WORK

- 8 credits in CHICLA or credits counting toward the certificate, taken in residence
- A cumulative 2.000 GPA in courses counting toward the certificate


## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Identify and discuss key contemporary expressions, situations, and theoretical interpretations of Chican@ and Latin@ life in the United States.
2. Discuss the differences and commonalities (culture, indigeneity, Diaspora, national origin, migration and immigration, citizenship, phenotype, gender, sexual orientation, sexuality, language, geography, economics, and worldviews and values) that shape the intersecting experiences and tensions within and across Chican@ and Latin@ populations.
3. Describe ways social histories, sociocultural, and sociopolitical histories of Chican@s and Latin@s in relation to the development of the United States as a nation and the role of this relationship in shaping the racialization, social stratification, and oppressions of these populations.
4. Analyze, critique, and interpret theory and research on Chican@ and Latin@ populations.
5. Engage in experiential based learning and/or applied action based research to bridge theory, action, and community service with Chican@ and Latin@ populations.

## ADVISING AND CAREERS

An undergraduate certificate in Chicana/o and Latina/o studies is available for those students from any undergraduate major who wish to pursue Chicana/o and Latina/o studies courses in a systematic manner. Academic advising for the CLS certificate is available in the Student Advising Office, 307 Ingraham Hall. Prospective and current certificate students must make an appointment with Rachelle Eilers, reilers@wisc.edu, to discuss requirements, courses, and application to the certificate.

## PEOPLE

## CHICANA/O AND LATINA/O STUDIES (CLS) DIRECTOR

\author{

- Ben Marquez (Political Science)
}


## FACULTY

- Jim Escalante (Art)
- Alberta M. Gloria (Counseling Psychology)
- Mary Louise Gomez (Curriculum and Instruction)
- Taucia Gonzalez (Rehabilitation Psychology and Special Education)
- Paola Hernandez (Spanish and Portuguese)
- Armando Ibarra (School for Workers, UW-Extension)
- Susan L. Johnson (History)
- Michael Light (Chicana/o \& Latina/o Studies and Sociology)
- Ruben Medina (Spanish and Portuguese)
- Alfonso Morales (Urban and Regional Planning)
- Mariana Pacheco (Curriculum and Instruction)
- Steve Quintana (Counseling Psychology)
- Carolina Sarmiento (School of Human Ecology)
- Revel Sims (Chicana/o \& Latina/o Studies and Urban and Regional Planning)
- Lynet Uttal (Counseling Psychology)
- Carmen Valdez (Counseling Psychology)
- Kate Vieira (English)

Instructors: Kimberly Hernandez and Ana Marcela Fuentes
Emeritus Faculty: Andrea-Teresa Arenas, Consuelo López-Springfield, Francisco Scarano, and Steve Stern

## STAFF

- Rachelle Eilers (Certificate Advisor)
- Peter Haney (Program Administrator)
- Natalie Mena (Project Assistant)


## CLASSICAL AND ANCIENT NEAR EASTERN STUDIES

The widespread influence of Greece and Rome upon our own modern society, the intrinsic attraction of ancient literature, civilization, and material culture, and the interdisciplinary nature of the discipline make classics a dynamic and popular field of study. Moreover, undergraduate training in classics demands an intellectual rigor that can prepare students for more advanced training in graduate school, supplement their studies in a variety of other disciplines in the humanities, sciences, and engineering, and help them gain admittance to professional programs in law and medicine.

To this end, the Department of Classical and Ancient Near Eastern Studies (CANES) offers three majors and a certificate, providing a number of options for students wishing to explore their interests in classical studies. For students interested in Latin and Greek, the department offers the classics major, which requires proficiency in both languages but allows students to emphasize study of one or the other. The department also offers a Latin major only, often chosen by students interested in teaching.

The classical humanities major combines language study with the study of the literature and culture of the ancient world. Finally, the department offers the classical studies certificate, preferred by students who wish to explore literature and culture without a concentration in language.

For more information about any of these options, please contact the CANES department (http://canes.wisc.edu) and/or meet with the advisor (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ YjfjFEtg.html) at any time.

## DEGREES/MAJORS/CERTIFICATES

- Classical Humanities, B.A. (p. 542)
- Classical Humanities, B.S. (p. 547)
- Classical Studies, Certificate (p. 552)
- Classics, B.A. (p. 554)
- Classics, B.S. (p. 558)
- Latin, B.A. (p. 561)
- Latin, B.S. (p. 565)


## PEOPLE

## FACULTY

For full faculty profiles, visit our website (https://canes.wisc.edu/faculty).
William Aylward: Greek and Roman archaelology
Jeffrey Beneker: Biography and historiography; Roman Republic
Jeffrey Blakely: Biblical and ancient Near Eastern archaeology
William Brockliss: Homer; Latin and Greek pedagogy
Alex Dressler: Ancient philosophy; gender and sexuality
Jeremy M. Hutton: Hebrew Bible; Northwest Semitics
Alice Mandell: Northwest Semitics; Israelite religions
Laura McClure: Greek literature; gender and reception studies
J C McKeown: Greek and Roman literature and culture
Grant Nelsestuen: Roman cultural history; Latin prose
Nandini Pandey: Latin poetry; Augustan culture
Mike Vanden Heuvel: Theater and performance theory

## AFFILIATE FACULTY

Nicholas Cahill: Ancient Greek archaeology and art history
Emily Fletcher: Ancient Greek philosophy
Paula Gottlieb: Ancient Greek philosophy; ethics
Daniel Kapust: Roman political thought; rhetoric; political theory
Marc Kleijwegt: Roman and Greek history
Leonora Neville: Roman Empire (the Byzantine Empire) in the 9th-12th centuries
Jordan Rosenblum: Rabbinic Judaism; biblical interpretation; food and religion
Claire Taylor: Greek socio-economic history; Athenian democracy; epigraphic culture

## EMERITUS FACULTY

Barry Powell
Ronald L. Troxel

## ACADEMIC STAFF

Bill Bach, Department Administrator
Toni Landis, Advisor/Student Services Coordinator

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS AND PRIZES

In addition to routinely nominating or recommending exemplary undergraduate majors for national, regional, local and university awards,

CANES offers the following competitions to classical humanities, classics, and Latin majors annually:

## RUTH M. KUHLMAN UNDERGRADUATE SCHOLARSHIP

Established in 1998 with a bequest from Myron George Kuhlman in memory of his wife, Ruth Miller Kuhlman (BS in Education '32), this is a monetary award for undergraduates to benefit and advance their studies within the field of classics. Total amount of award may be up to \$2500 and the award may not be granted every academic year depending on quality of entries and availability of funds. This competition is only open to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW page). Generally, the online application is open in early November with a deadline for submission in early February.

## GERTRUDE E. SLAUGHTER SUMMER STUDY SCHOLARSHIP

A monetary award in memory of Gertrude E. Slaughter, author and widow of Professor Moses S. Slaughter 1896-1923, for undergraduate students to advance their studies at an accredited center such as the American School in Athens or the American Academy in Rome, or to participate in an active archaeological field project. Awards will be in the amount of up to $\$ 800$. This competition is open only to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW page). Generally, the online application is open in early November with a deadline for submission in early February.

## LOGAN PRIZE FOR GREEK TRANSLATION

A monetary award in memory of Fellow of Classics, John Watson Logan (Ph.D. '23), for the translation of a passage of ancient Greek. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of ancient Greek and is normally publicized in classes and to department majors in early April.

## PILLINGER PRIZE FOR LATIN TRANSLATION

A monetary award in memory of Assistant Professor Hugh Edward Pillinger (1965-1970) for the translation of a passage in Latin. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of Latin and is normally publicized in classes and to department majors in early April.

## STUDY ABROAD

CANES offers two options for summer study: UW-Classics in Greece and UW-Classics in Italy.

Each three-week program is offered alternating summers and guided by a department faculty member.

To learn more, visit our website (http://canes.wisc.edu/classics-studyabroad.htm).

## CLASSICAL HUMANITIES, B.A.

The classical humanities major allows students to combine their love of ancient language with the exploration of the literature, civilization, and culture of Greece, Rome, and the Ancient Near East.

Students study Greek, Latin, or Biblical Hebrew in two or four semester combinations, and they choose from a wide selection of complementary courses, including topics in art, architecture, archaeology, history, literature, philosophy, and politics. In addition to supporting their language study, these subjects enable our majors to develop a more comprehensive understanding of the ancient world.

To support classical humanities majors as they pursue their educational goals, CANES provides annual scholarship opportunities. We also offer a summer study abroad program led by members of our faculty. Learn more under "Resources and Scholarships."

## HOW TO GET IN

Declaring the classical humanities major is as easy as meeting with the CANES advisor. Make an appointment today (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/YjfjFEtg.html).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

| Mathematics | Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematic requirement. |
| :---: | :---: |
| Foreign | - Complete the fourth unit of a foreign language; OR |
| Language | - Complete the third unit of a foreign language and the second unit of an additional foreign language |
|  | Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | Humanities, 12 credits: 6 of the 12 credits must be in literature |
|  | - Social Sciences, 12 credits |
|  | - Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences |


| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)


## - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work)

## REQUIREMENTS FOR THE MAJOR

The classical humanities major consists of a combination of courses in ancient culture and classical languages. The major requirements are divided into three areas: Language, Literature and Culture, and Seminar.

Students typically earn 32-34 credits from these three areas to complete the major requirements; 18 credits are required in the Literature and Culture, and Seminar categories. The requirements for the major are:

## LANGUAGE

Complete one of the following language tracks: ${ }^{1}$

| Code | Title | Credits <br> 4 semesters of Greek |
| :---: | :--- | ---: |
| GREEK 103 credits |  |  |$\quad$ First Semester Greek $\quad 14$

4 semesters of Latin
16 credits
LATIN 103 Elementary Latin
\& LATIN 104 and Elementary Latin
\& LATIN 203 and Intermediate Latin
\& LATIN 204 and Introduction to Latin Literature
2 semesters of Greek, 2 semesters of Latin 16 credits

| GREEK 103 | First Semester Greek |
| :--- | :--- |
| \& GREEK 104 | and Second Semester Greek |
| \& LATIN 103 | and Elementary Latin |
| \& LATIN 104 | and Elementary Latin |

2 semesters of Hebrew-Bible, 2 semesters of Greek 16 credits
HEBR-BIB 103 Elementary Biblical Hebrew, I
\& HEBR-BIB 104 and Elementary Biblical Hebrew, II
\& GREEK 103 and First Semester Greek
\& GREEK 104 and Second Semester Greek
2 semesters of Hebrew-Bible, 2 semesters of Latin 16 credits

| HEBR-BIB 103 | Elementary Biblical Hebrew, I |
| :--- | :--- |
| \& HEBR-BIB 104 | and Elementary Biblical Hebrew, II |
| \& LATIN 103 | and Elementary Latin |
| \& LATIN 104 | and Elementary Latin |

1 Students who place into higher than the first-semester language course may be eligible to earn retroactive language credits (p. 323).

## LITERATURE AND CULTURE

Code Title Credits

15 credits, of which 9 credits must be numbered 300 and 15
higher. A maximum 6 credits may come from courses outside of and that are not cross-listed in CLASSICS, GREEK and LATIN:

| CLASSICS 100 | Legacy of Greece and Rome in <br> Modern Culture |
| :--- | :--- |
| CLASSICS/ | The Ancient Mediterranean |
| HISTORY 110 |  |
| CLASSICS 150 | Ancient Greek and Roman Monsters |


| CLASSICS 205 | Greek and Latin Origins of Medical Terms | CLASSICS/ HIST SCI/ | Greek and Roman Medicine and Pharmacy |
| :---: | :---: | :---: | :---: |
| CLASSICS/ JEWISH/ LITTRANS/ | Introduction to Biblical Literature (in English) | HISTORY/ <br> MED HIST/ <br> S\&A PHM 561 |  |
| RELIG ST 227 |  | CLASSICS 568 | Topics in Classical Literature |
| CLASSICS/ JEWISH/ | Biblical Poetry in Translation | CLASSICS 591 | Undergraduate Seminar: Approaches to the Classical World |
| LITTRANS/ |  | CLASSICS 602 | The Ancient Mediterranean City |
| RELIG ST 237 |  | CLASSICS 681 | Senior Honors Thesis |
| CLASSICS/ JEWISH 241 | Introduction to Biblical Archaeology | CLASSICS 682 | Senior Honors Thesis |
| CLASSICS/ |  | CLASSICS 691 | Senior Thesis |
| ART HIST 300 | Greece | CLASSICS 692 | Senior Thesis |
| CLASSICS/ | The Art and Archaeology of Ancient | CLASSICS 699 | Directed Reading |
| ART HIST 304 | Rome | GREEK 401 | Greek Drama |
| CLASSICS 320 | The Greeks | GREEK 402 | Greek Drama and Lyric Poetry |
| CLASSICS 322 | The Romans | GREEK 505 | Elementary Prose Composition |
| CLASSICS 330 | Ancient Epic | GREEK 510 | Homer |
| CLASSICS/HEBR- | Prophets of the Bible | GREEK 511 | Hesiod |
| BIB/JEWISH/ |  | GREEK 512 | Greek Lyric Poets |
| LITTRANS/ |  | GREEK 520 | Greek Comedy |
| RELIG ST 332 |  | GREEK 521 | Greek Tragedy |
| CLASSICS/ | King David in History and Tradition | GREEK 532 | Thucydides |
| $\text { RELIG ST } 335$ |  | GREEK 541 | Plato |
| CLASSICS 340 | Conspiracy in the Ancient and | GREEK 551 | Attic Orators |
| CLASSICS 340 | Modern Worlds | GREEK 560 | Hellenistic Greek |
| CLASSICS/ | Jewish Literature of the Greco- | GREEK 564 | Plutarch |
| JEWISH/ | Roman Period | GREEK 681 | Honors Thesis |
| RELIG ST 346 |  | GREEK 682 | Senior Honors Thesis |
| CLASSICS/ | Rome: The Changing Shape of the | GREEK 691 | Senior Thesis |
| ITALIAN 350 | Eternal City | GREEK 692 | Senior Thesis |
| CLASSICS/ | Women and Gender in the Classical | GREEK 699 | Directed Study |
| GEN\&WS 351 | World | LATIN 301 | Latin Literature of the Roman |
| CLASSICS 370 | Classical Mythology |  | Republic |
| CLASSICS 371 | Topics in Greek Culture | LATIN 302 | Latin Literature of the Roman |
| CLASSICS 372 | Topics in Roman Culture |  | Empire |
| CLASSICS 373 | Topics in Classical Culture | LATIN 505 | Elementary Prose Composition |
| CLASSICS 376 | Love Poetry of the Ancient | LATIN 515 | Vergil |
|  | Mediterranean | LATIN 519 | Latin Poetry |
| CLASSICS 379 | Eureka! Technology and Practice in the Ancient World | LATIN 520 | Roman Drama |
| CLASSICS 430 | Topics in Classical Archaeology | LATIN 521 | Roman Elegy |
| CLASSICS/ | Biblical Archaeology | LATIN 522 | Roman Lyric Poetry |
| JEWISH 451 | Biblical Archaeology | LATIN 523 | Roman Satire |
| JeWISH 4 I |  | LATIN 524 | Roman Novel |
| HISTORY/ | Mediterranean | LATIN 539 | Latin Historical Writers |
| RELIG ST 517 |  | LATIN 549 | Latin Philosophical Writers |
| CLASSICS/ | Advanced Interdisciplinary Studies | LATIN 559 | Latin Oratory |
| FRENCH/ HISTORY/ | in Medieval Civilization | LATIN/ <br> MEDIEVAL 563 | Mediaeval Latin |
| ITALIAN/ |  | LATIN 681 | Honors Thesis |
| MEDIEVAL 550 |  | LATIN 682 | Senior Honors Thesis |
| CLASSICS 554 | Classical Backgrounds to English Literature | LATIN 691 | Senior Thesis |
| CLASSICS 556 | The Literature of Ancient Rome | LATIN 692 | Senior Thesis |


| LATIN 699 | Directed Study |
| :---: | :---: |
| ART HIST 201 | History of Western Art I: From Pyramids to Cathedrals |
| ART HIST 302 | Greek Sculpture |
| ART HIST 310 | Early Christian and Byzantine Art |
| ART HIST 405 | Cities and Sanctuaries of Ancient Greece |
| ART HIST 505 | Proseminar in Ancient Art |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 112 | The World of Late Antiquity (200-900 C.E.) |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 |
| HISTORY 303 | A History of Greek Civilization |
| HISTORY 307 | A History of Rome |
| HIST SCI/ <br> MEDIEVAL 322 | Ancient and Medieval Science |
| ILS 203 | Western Culture: Literature and the Arts I |
| ILS 205 | Western Culture: Political, Economic, and Social Thought I |
| PHILOS 430 | History of Ancient Philosophy |
| PHILOS 454 | Classical Philosophers |
| POLI SCI 265 | Development of Ancient and Medieval Western Political Thought |

Total Credits
15

## SEMINAR

Code
CLASSICS 591

## Title

Credits
Undergraduate Seminar: Approaches to the Classical World ${ }^{2}$

Total Credits
2 The Undergraduate Seminar course is typically offered every spring semester; it is normally taken senior year.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all CLASSICS, GREEK and LATIN courses and all other courses in the major
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{3}$

15 credits in CLASSICS, GREEK and LATIN, taken on the UWMadison campus

3 Courses with intermediate and advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Classical Humanities Major in consultation with the Classical Humanities undergraduate advisor.

## HONORS IN THE MAJOR IN CLASSICAL HUMANITIES: REQUIREMENTS

To earn Honors in the Major in Classical Humanities, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall iniversity GPA
- Earn a 3.500 GPA in all CLASSICS, LATIN, and GREEK courses, and all courses accepted in the major, at the intermediate or advanced level
- Complete the following coursework:
- At least 9 credits, taken for Honors, with a grade of B or better, from the list of Literature and Culture requirements above
- A two-semester Senior Honors Thesis in CLASSICS 681 Senior Honors Thesis and CLASSICS 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Gain knowledge of the ancient Roman, Greek, and Near Eastern civilizations.
2. Gain competency with contemporary scholarly questions surrounding their historical significance and interpretation.
3. Develop critical methodologies, including the ability to engage in source criticism and to approach ancient civilizations on their own terms.

## ADVISING AND CAREERS

## ADVISING

How does the classical humanities major fit into my educational goals?
While there are a wide variety of reasons to visit your major advisor, there seem to be two recurring questions:

## 1. Can I complete the major during the time I have left at UW? <br> 2. Which classes will be offered in the future?

If you like to plan, seeing your major advisor is very important; it can make the difference between fitting in Ancient Greek and Roman Monsters and Introduction to Biblical Literature before you graduate. Many students also try to complete more than one major or certificate, and discussing how you might be able to reach this goal is another primary role of your major advisor. Advisors can speak to you about course content, which
courses fit best with your interest areas, and what kinds of courses might work best with your learning style-e.g., do you prefer multiple choice or essays? Any and all of these discussions can occur during your advising appointment.

In addition to discussing the major, advisors know a lot about:

- General Education requirements
- Breadth requirements
- Interpreting university policies and deadlines
- Connecting majors to careers
- Getting involved with campus organizations
- Finding volunteer and/or internship opportunities
- Talking about your challenges and difficulties
- Connecting with tutors
- Choosing a study abroad program
- Practicing for interviews
- Talking about graduate school
- Proofreading resumes and cover letters

Ready to meet with the CANES advisor? Make an appointment today (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ YjfjFEtg.html).

## CAREERS

While many students have a difficult time believing it, a humanities major such as ours enables students who complete it to consider just about any type of career or educational pursuit. Our coursework builds the critical thinking and communication skills needed to succeed in careers ranging from politics and education to business and law.

Think about what you learn in a classroom setting as well as what you do each day to be a successful student; the skills you develop are equally important in the workplace:

- critical reading, reflection, and analysis
- proper research design and methodology
- expanded world view and exposure to new ideas/ways of thinking
- effective teamwork to advance a common project/purpose
- effective time-management and self-motivation to complete projects independently
- demonstrated writing proficiency in short and long essay format
- discussion and debate strategies
- broader knowledge of career and graduate-study options

One of the more significant skills CANES majors develop is language acquisition. Study of Greek, Latin, or Biblical Hebrew sets you apart and demonstrates your willingness to explore and expand your understanding of history and culture. In addition, the study of ancient languages shows discipline and perseverance, since they are such difficult languages to learn. Overall, you will have a wide variety of skills and talents to start you on the path to a rewarding career. Visit our website (http:// canes.wisc.edu/230.htm) for more information.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school
applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

For full faculty profiles, visit our website (https://canes.wisc.edu/faculty).
William Aylward: Greek and Roman archaelology
Jeffrey Beneker: Biography and historiography; Roman Republic
Jeffrey Blakely: Biblical and ancient Near Eastern archaeology
William Brockliss: Homer; Latin and Greek pedagogy
Alex Dressler: Ancient philosophy; gender and sexuality
Jeremy M. Hutton: Hebrew Bible; Northwest Semitics
Alice Mandell: Northwest Semitics; Israelite religions
Laura McClure: Greek literature; gender and reception studies
J C McKeown: Greek and Roman literature and culture
Grant Nelsestuen: Roman cultural history; Latin prose
Nandini Pandey: Latin poetry; Augustan culture
Mike Vanden Heuvel: Theater and performance theory

## AFFILIATE FACULTY

Nicholas Cahill: Ancient Greek archaeology and art history
Emily Fletcher: Ancient Greek philosophy
Paula Gottlieb: Ancient Greek philosophy; ethics
Daniel Kapust: Roman political thought; rhetoric; political theory
Marc Kleijwegt: Roman and Greek history
Leonora Neville: Roman Empire (the Byzantine Empire) in the 9th-12th centuries
Jordan Rosenblum: Rabbinic Judaism; biblical interpretation; food and religion
Claire Taylor: Greek socio-economic history; Athenian democracy; epigraphic culture

## EMERITUS FACULTY

Barry Powell
Ronald L. Troxel

## ACADEMIC STAFF

Bill Bach, Department Administrator
Toni Landis, Advisor/Student Services Coordinator

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS AND PRIZES

In addition to routinely nominating or recommending exemplary undergraduate majors for national, regional, local and university awards, CANES offers the following competitions to classical humanities, classics, and Latin majors annually:

## RUTH M. KUHLMAN UNDERGRADUATE SCHOLARSHIP

Established in 1998 with a bequest from Myron George Kuhlman in memory of his wife, Ruth Miller Kuhlman (BS in Education '32), this is a monetary award for undergraduates to benefit and advance their studies within the field of classics. Total amount of award may be up to \$2500 and the award may not be granted every academic year depending on quality of entries and availability of funds. This competition is only open to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW page). Generally, the online application is open in early November with a deadline for submission in early February.

## GERTRUDE E. SLAUGHTER SUMMER STUDY SCHOLARSHIP

A monetary award in memory of Gertrude E. Slaughter, author and widow of Professor Moses S. Slaughter 1896-1923, for undergraduate students to advance their studies at an accredited center such as the American School in Athens or the American Academy in Rome, or to participate in an active archaeological field project. Awards will be in the amount of up to $\$ 800$. This competition is open only to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW page). Generally, the online application is open in early November with a deadline for submission in early February.

## LOGAN PRIZE FOR GREEK TRANSLATION

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## PILLINGER PRIZE FOR LATIN TRANSLATION

A monetary award in memory of Assistant Professor Hugh Edward Pillinger (1965-1970) for the translation of a passage in Latin. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of Latin and is normally publicized in classes and to department majors in early April.

## STUDY ABROAD

CANES offers two options for summer study: UW-Classics in Greece and UW-Classics in Italy.

Each three-week program is offered alternating summers and guided by a department faculty member.

To learn more, visit our website (http://canes.wisc.edu/classics-studyabroad.htm).

## CLASSICAL HUMANITIES, B.S.

The classical humanities major allows students to combine their love of ancient language with the exploration of the literature, civilization, and culture of Greece, Rome, and the Ancient Near East.

Students study Greek, Latin, or Biblical Hebrew in two or four semester combinations, and they choose from a wide selection of complementary courses, including topics in art, architecture, archaeology, history, literature, philosophy, and politics. In addition to supporting their language study, these subjects enable our majors to develop a more comprehensive understanding of the ancient world.

To support classical humanities majors as they pursue their educational goals, CANES provides annual scholarship opportunities. We also offer a summer study abroad program led by members of our faculty. Learn more under "Resources and Scholarships."

## HOW TO GET IN

Declaring the classical humanities major is as easy as meeting with the CANES advisor. Make an appointment today (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/YjfjFEtg.html).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The classical humanities major consists of a combination of courses in ancient culture and classical languages. The major requirements are divided into three areas: Language, Literature and Culture, and Seminar.

Students typically earn 32-34 credits from these three areas to complete the major requirements; 18 credits are required in the Literature and Culture, and Seminar categories. The requirements for the major are:

## LANGUAGE

Complete one of the following language tracks: ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| 4 semesters of Greek |  | 14 credits |
| GREEK 103 <br> \& GREEK 104 <br> \& GREEK 305 <br> \& GREEK 306 | First Semester Greek and Second Semester Greek and Intermediate Greek and Intermediate Greek |  |
| 4 semesters of Latin |  | 16 credits |
| LATIN 103 <br> \& LATIN 104 <br> \& LATIN 203 <br> \& LATIN 204 | Elementary Latin and Elementary Latin and Intermediate Latin and Introduction to Latin Literature |  |
| 2 semesters of Greek, 2 semesters of Latin |  | 16 credits |
| GREEK 103 <br> \& GREEK 104 <br> \& LATIN 103 <br> \& LATIN 104 | First Semester Greek and Second Semester Greek and Elementary Latin and Elementary Latin |  |
| 2 semesters of Hebrew-Bible, 2 semesters of Greek |  | 16 credits |
| HEBR-BIB 103 <br> \& HEBR-BIB 104 <br> \& GREEK 103 <br> \& GREEK 104 | Elementary Biblical Hebrew, I and Elementary Biblical Hebrew, II and First Semester Greek and Second Semester Greek |  |
| 2 semesters of Hebrew-Bible, 2 semesters of Latin |  | 16 credits |
| HEBR-BIB 103 <br> \& HEBR-BIB 104 <br> \& LATIN 103 <br> \& LATIN 104 | Elementary Biblical Hebrew, I and Elementary Biblical Hebrew, II and Elementary Latin and Elementary Latin |  |
| 1 Students who plac course may be elig | ce into higher than the first-semest gible to earn retroactive language | $\begin{aligned} & \text { uage } \\ & \text { p. 323). } \end{aligned}$ |

## LITERATURE AND CULTURE

Code Title Credits

15 credits, of which 9 credits must be numbered 300 and
higher. A maximum 6 credits may come from courses outside of and that are not cross-listed in CLASSICS, GREEK and LATIN:

| CLASSICS 100 | Legacy of Greece and Rome in <br> Modern Culture |
| :--- | :--- |
| CLASSICS/ | The Ancient Mediterranean |
| HISTORY 110 |  |
| CLASSICS 150 | Ancient Greek and Roman Monsters |
| CLASSICS 205 | Greek and Latin Origins of Medical <br> Terms |


| CLASSICS/ JEWISH/ LITTRANS/ RELIG ST 227 | Introduction to Biblical Literature (in English) | CLASSICS/ <br> HIST SCI/ <br> HISTORY/ <br> MED HIST/ | Greek and Roman Medicine and Pharmacy |
| :---: | :---: | :---: | :---: |
| CLASSICS/ | Biblical Poetry in Translation | S\&A PHM 561 |  |
| JEWISH/ |  | CLASSICS 568 | Topics in Classical Literature |
| LITTRANS/ <br> RELIG ST 237 |  | CLASSICS 591 | Undergraduate Seminar: Approaches to the Classical World |
| CLASSICS/ | Introduction to Biblical Archaeology | CLASSICS 602 | The Ancient Mediterranean City |
| JEWISH 241 |  | CLASSICS 681 | Senior Honors Thesis |
| CLASSICS/ <br> ART HIST 300 | The Art and Archaeology of Ancient Greece | CLASSICS 682 | Senior Honors Thesis |
|  |  | CLASSICS 691 | Senior Thesis |
| ART HIST 304 | Rome | CLASSICS 692 | Senior Thesis |
| CLASSICS 320 | The Greeks | CLASSICS 699 | Directed Reading |
| CLASSICS 322 | The Romans | GREEK 401 | Greek Drama |
| CLASSICS 330 | Ancient Epic | GREEK 402 | Greek Drama and Lyric Poetry |
| CLASSICS/HEBR- | Prophets of the Bible | GREEK 505 | Elementary Prose Composition |
| BIB/JEWISH/ |  | GREEK 510 | Homer |
| LITTRANS/ |  | GREEK 511 | Hesiod |
| RELIG ST 332 |  | GREEK 512 | Greek Lyric Poets |
| CLASSICS/ | King David in History and Tradition | GREEK 520 | Greek Comedy |
| JEWISH/ |  | GREEK 521 | Greek Tragedy |
| RELIG ST 335 |  | GREEK 532 | Thucydides |
| CLASSICS 340 | Conspiracy in the Ancient and Modern Worlds | GREEK 541 | Plato |
| CLASSICS/ | Jewish Literature of the Greco- | GREEK 551 | Attic Orators |
| JEWISH/ | Roman Period | GREEK 560 | Hellenistic Greek |
| RELIG ST 346 |  | GREEK 564 | Plutarch |
| CLASSICS/ | Rome: The Changing Shape of the | GREEK 681 | Honors Thesis |
| ITALIAN 350 | Eternal City | GREEK 682 | Senior Honors Thesis |
| CLASSICS/ | Women and Gender in the Classical | GREEK 691 | Senior Thesis |
| GEN\&WS 351 | World | GREEK 692 | Senior Thesis |
| CLASSICS 370 | Classical Mythology | GREEK 699 | Directed Study |
| CLASSICS 371 | Topics in Greek Culture | LATIN 301 | Latin Literature of the Roman |
| CLASSICS 372 | Topics in Roman Culture |  | Republic |
| CLASSICS 373 | Topics in Classical Culture | LATIN 302 | Latin Literature of the Roman |
| CLASSICS 376 | Love Poetry of the Ancient |  | Empire |
|  | Mediterranean | LATIN 505 | Elementary Prose Composition |
| CLASSICS 379 | Eureka! Technology and Practice in | LATIN 515 | Vergil |
|  | the Ancient World | LATIN 519 | Latin Poetry |
| CLASSICS 430 | Topics in Classical Archaeology | LATIN 520 | Roman Drama |
| CLASSICS/ | Biblical Archaeology | LATIN 521 | Roman Elegy |
| JEWISH 451 |  | LATIN 522 | Roman Lyric Poetry |
| CLASSICS/ HISTORY/ | Religions of the Ancient Mediterranean | LATIN 523 | Roman Satire |
| RELIG ST 517 |  | LATIN 524 | Roman Novel |
| CLASSICS/ | Advanced Interdisciplinary Studies | LATIN 539 | Latin Historical Writers |
| FRENCH/ | in Medieval Civilization | LATIN 549 | Latin Philosophical Writers |
| HISTORY/ |  | LATIN 559 | Latin Oratory |
| ITALIAN/ MEDIEVAL 550 |  | LATIN/ MEDIEVAL 563 | Mediaeval Latin |
| CLASSICS 554 | Classical Backgrounds to English Literature | LATIN 681 | Honors Thesis |
|  |  | LATIN 682 | Senior Honors Thesis |
| CLASSICS 556 | The Literature of Ancient Rome | LATIN 691 | Senior Thesis |
|  |  | LATIN 692 | Senior Thesis |


| LATIN 699 | Directed Study |
| :---: | :---: |
| ART HIST 201 | History of Western Art I: From Pyramids to Cathedrals |
| ART HIST 302 | Greek Sculpture |
| ART HIST 310 | Early Christian and Byzantine Art |
| ART HIST 405 | Cities and Sanctuaries of Ancient Greece |
| ART HIST 505 | Proseminar in Ancient Art |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 112 | The World of Late Antiquity (200-900 C.E.) |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 |
| HISTORY 303 | A History of Greek Civilization |
| HISTORY 307 | A History of Rome |
| HIST SCI/ <br> MEDIEVAL 322 | Ancient and Medieval Science |
| ILS 203 | Western Culture: Literature and the Arts I |
| ILS 205 | Western Culture: Political, Economic, and Social Thought I |
| PHILOS 430 | History of Ancient Philosophy |
| PHILOS 454 | Classical Philosophers |
| POLI SCI 265 | Development of Ancient and Medieval Western Political Thought |

Total Credits
15

## SEMINAR

Code
CLASSICS 591

## Title

Undergraduate Seminar: Approaches to the Classical World ${ }^{2}$

Total Credits
2 The Undergraduate Seminar course is typically offered every spring semester; it is normally taken senior year.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all CLASSICS, GREEK and LATIN courses and all other courses in the major
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{3}$

15 credits in CLASSICS, GREEK and LATIN, taken on the UWMadison campus

3 Courses with intermediate and advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Classical Humanities Major in consultation with the Classical Humanities undergraduate advisor.

## HONORS IN THE MAJOR IN CLASSICAL HUMANITIES: REQUIREMENTS

To earn Honors in the Major in Classical Humanities, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall iniversity GPA
- Earn a 3.500 GPA in all CLASSICS, LATIN, and GREEK courses, and all courses accepted in the major, at the intermediate or advanced level
- Complete the following coursework:
- At least 9 credits, taken for Honors, with a grade of B or better, from the list of Literature and Culture requirements above
- A two-semester Senior Honors Thesis in CLASSICS 681 Senior Honors Thesis and CLASSICS 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| formats and credits earned in UW-Madison Study |  |

## LEARNING OUTCOMES

1. Gain knowledge of the ancient Roman, Greek, and Near Eastern civilizations.
2. Gain competency with contemporary scholarly questions surrounding their historical significance and interpretation.
3. Develop critical methodologies, including the ability to engage in source criticism and to approach ancient civilizations on their own terms.

## ADVISING AND CAREERS

## ADVISING

How does the classical humanities major fit into my educational goals?
While there are a wide variety of reasons to visit your major advisor, there seem to be two recurring questions:

## 1. Can I complete the major during the time I have left at UW? <br> 2. Which classes will be offered in the future?

If you like to plan, seeing your major advisor is very important; it can make the difference between fitting in Ancient Greek and Roman Monsters and Introduction to Biblical Literature before you graduate. Many students also try to complete more than one major or certificate, and discussing how you might be able to reach this goal is another primary role of your major advisor. Advisors can speak to you about course content, which
courses fit best with your interest areas, and what kinds of courses might work best with your learning style-e.g., do you prefer multiple choice or essays? Any and all of these discussions can occur during your advising appointment.

In addition to discussing the major, advisors know a lot about:

- General Education requirements
- Breadth requirements
- Interpreting university policies and deadlines
- Connecting majors to careers
- Getting involved with campus organizations
- Finding volunteer and/or internship opportunities
- Talking about your challenges and difficulties
- Connecting with tutors
- Choosing a study abroad program
- Practicing for interviews
- Talking about graduate school
- Proofreading resumes and cover letters

Ready to meet with the CANES advisor? Make an appointment today (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ YjfjFEtg.html).

## CAREERS

While many students have a difficult time believing it, a humanities major such as ours enables students who complete it to consider just about any type of career or educational pursuit. Our coursework builds the critical thinking and communication skills needed to succeed in careers ranging from politics and education to business and law.

Think about what you learn in a classroom setting as well as what you do each day to be a successful student; the skills you develop are equally important in the workplace:

- critical reading, reflection, and analysis
- proper research design and methodology
- expanded world view and exposure to new ideas/ways of thinking
- effective teamwork to advance a common project/purpose
- effective time-management and self-motivation to complete projects independently
- demonstrated writing proficiency in short and long essay format
- discussion and debate strategies
- broader knowledge of career and graduate-study options

One of the more significant skills CANES majors develop is language acquisition. Study of Greek, Latin, or Biblical Hebrew sets you apart and demonstrates your willingness to explore and expand your understanding of history and culture. In addition, the study of ancient languages shows discipline and perseverance, since they are such difficult languages to learn. Overall, you will have a wide variety of skills and talents to start you on the path to a rewarding career. Visit our website (http:// canes.wisc.edu/230.htm) for more information.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school
applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

For full faculty profiles, visit our website (https://canes.wisc.edu/faculty).
William Aylward: Greek and Roman archaelology
Jeffrey Beneker: Biography and historiography; Roman Republic
Jeffrey Blakely: Biblical and ancient Near Eastern archaeology
William Brockliss: Homer; Latin and Greek pedagogy
Alex Dressler: Ancient philosophy; gender and sexuality
Jeremy M. Hutton: Hebrew Bible; Northwest Semitics
Alice Mandell: Northwest Semitics; Israelite religions
Laura McClure: Greek literature; gender and reception studies
J C McKeown: Greek and Roman literature and culture
Grant Nelsestuen: Roman cultural history; Latin prose
Nandini Pandey: Latin poetry; Augustan culture
Mike Vanden Heuvel: Theater and performance theory

## AFFILIATE FACULTY

Nicholas Cahill: Ancient Greek archaeology and art history
Emily Fletcher: Ancient Greek philosophy
Paula Gottlieb: Ancient Greek philosophy; ethics
Daniel Kapust: Roman political thought; rhetoric; political theory
Marc Kleijwegt: Roman and Greek history
Leonora Neville: Roman Empire (the Byzantine Empire) in the 9th-12th

## centuries

Jordan Rosenblum: Rabbinic Judaism; biblical interpretation; food and religion
Claire Taylor: Greek socio-economic history; Athenian democracy; epigraphic culture

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## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS AND PRIZES

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## PILLINGER PRIZE FOR LATIN TRANSLATION

A monetary award in memory of Assistant Professor Hugh Edward Pillinger (1965-1970) for the translation of a passage in Latin. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of Latin and is normally publicized in classes and to department majors in early April.

## STUDY ABROAD

CANES offers two options for summer study: UW-Classics in Greece and UW-Classics in Italy.

Each three-week program is offered alternating summers and guided by a department faculty member.

To learn more, visit our website (http://canes.wisc.edu/classics-studyabroad.htm).

## CLASSICAL STUDIES, CERTIFICATE

The classical studies certificate allows students to explore the literature, civilization, and culture of the ancient world. It is especially ideal for students drawn to Greek, Roman or Ancient Near Eastern society but less interested in language study.

Both the flexibility and variety are additional features that make the certificate attractive to students. Course options include topics in art, architecture, archaeology, history, literature, philosophy, and politics. Students are free to explore their individual interests on the way to developing a more comprehensive understanding of the ancient world.

Finally, in addition to completing requirements for the certificate, many of the courses fulfill General Education requirements, such as Communications Part B, and Breadth requirements, such as Humanities and Literature.

## HOW TO GET IN

Declaring the classical studies certificate is as easy as meeting with the CANES advisor. Make an appointment today (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/YjfjFEtg.html).

Please note: Classical humanities majors are not allowed to declare the certificate.

## REQUIREMENTS

## REQUIREMENTS FOR THE CERTIFICATE IN CLASSICAL STUDIES

In order to receive the certificate in classical studies, students are required to complete:
Code Title Credits

18 total credits in CLASSICS or select courses from

## related disciplines, chosen from the Course Lists below.

6 credits may be numbered below 300
12 credits must be numbered 300 and higher

## Residence and Quality of Work:

Students must maintain a 2.000 GPA in all courses required for the certificate.
At least 9 credits for the certificate must be earned in residence.

CLASSICS COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| CLASSICS 100 | Legacy of Greece and Rome in <br> Modern Culture | 3 |
| CLASSICS/ | The Ancient Mediterranean | 4 |
| HISTORY 110 | Greek and Latin Origins of Medical <br> CLASSICS 205 | 3 |


| CLASSICS/ <br> ART HIST 300 | The Art and Archaeology of Ancient Greece | 3-4 |
| :---: | :---: | :---: |
| CLASSICS/ <br> ART HIST 304 | The Art and Archaeology of Ancient Rome | 3-4 |
| CLASSICS 320 | The Greeks | 3 |
| CLASSICS 322 | The Romans | 3 |
| CLASSICS/ <br> ITALIAN 350 | Rome: The Changing Shape of the Eternal City | 3-4 |
| CLASSICS/ GEN\&WS 351 | Women and Gender in the Classical World | 3-4 |
| CLASSICS 370 | Classical Mythology | 3 |
| CLASSICS 371 | Topics in Greek Culture | 1-3 |
| CLASSICS 372 | Topics in Roman Culture | 1-3 |
| CLASSICS 373 | Topics in Classical Culture | 1-3 |
| CLASSICS 376 | Love Poetry of the Ancient Mediterranean | 3 |
| CLASSICS 379 | Eureka! Technology and Practice in the Ancient World | 3 |
| CLASSICS 430 | Topics in Classical Archaeology | 3 |
| CLASSICS/HISTORY/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| CLASSICS 554 | Classical Backgrounds to English Literature | 3 |
| CLASSICS 556 | The Literature of Ancient Rome | 3 |
| CLASSICS/HIST SCI/ HISTORY/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |
| CLASSICS 591 | Undergraduate Seminar: Approaches to the Classical World | 3 |
| CLASSICS 602 | The Ancient Mediterranean City | 3 |
| CLASSICS 150 | Ancient Greek and Roman Monsters | 3 |
| CLASSICS/JEWISH/ LITTRANS/ RELIG ST 227 | Introduction to Biblical Literature (in English) | 4 |
| CLASSICS/JEWISH/ LITTRANS/ RELIG ST 237 | Biblical Poetry in Translation | 3 |
| CLASSICS/ JEWISH 241 | Introduction to Biblical Archaeology | 4 |
| CLASSICS 330 | Ancient Epic | 3 |
| CLASSICS/HEBRBIB/JEWISH/ LITTRANS/ RELIG ST 332 | Prophets of the Bible | 4 |
| CLASSICS/JEWISH/ RELIG ST 335 | King David in History and Tradition | 3 |
| CLASSICS 340 | Conspiracy in the Ancient and Modern Worlds | 3 |
| CLASSICS/JEWISH/ RELIG ST 346 | Jewish Literature of the GrecoRoman Period | 3 |
| CLASSICS/ GEN\&WS 361 | Sex and Power in Greece and Rome | 3 |
| CLASSICS/ JEWISH 451 | Biblical Archaeology | 3 |


| CLASSICS/FRENCH/ | Advanced Interdisciplinary Studies | 3 |
| :--- | :--- | ---: |
| HISTORY/ITALIAN/ | in Medieval Civilization |  |
| MEDIEVAL 550 |  | $1-3$ |
| CLASSICS 568 | Topics in Classical Literature | $1-3$ |

## COURSES IN RELATED DISCIPLINES

Code Title Credits
Art History

| ART HIST 201 | History of Western Art I: From <br> Pyramids to Cathedrals | 4 |
| :--- | :--- | ---: |
| ART HIST/ | The Art and Archaeology of Ancient | $3-4$ |


| CLASSICS 300 | Greece |  |
| :--- | :--- | :--- |
| ART HIST 301 | Myths, Loves, and Lives in Greek |  |


|  | Vases |  |
| :--- | :--- | :--- |
| ART HIST 302 | Greek Sculpture | $3-4$ |

ART HIST/ The Art and Archaeology of Ancient 3-4
CLASSICS 304 Rome
ART HIST 310 Early Christian and Byzantine Art 3-4
ART HIST 405 Cities and Sanctuaries of Ancient 3

## Greece

ART HIST 505 Proseminar in Ancient Art 3

| History |  |
| :--- | :--- |
| HISTORY/ The Ancient Mediterranean |  |

CLASSICS 110
HISTORY/ The World of Late Antiquity 4

MEDIEVAL/ (200-900 C.E.)
RELIG ST 112
HISTORY/ Western Intellectual and Religious 3-4

| RELIG ST 208 | History to 1500 | $3-4$ |
| :--- | :--- | :--- |

HISTORY 223 Explorations in European History 3-4
(H) (Only the Roman Gladiators topic counts)
HISTORY 307 A History of Rome 3-4
History of Science
HIST SCI/ Ancient and Medieval Science 3

MEDIEVAL 322
Integrated Liberal Studies

| ILS 203 | Western Culture: Literature and the <br> Arts I | 3 |
| :--- | :--- | :--- |
| ILS 205 | $\left.\begin{array}{l}\text { Western Culture: Political, } \\ \\ \end{array} \begin{array}{ll}\text { Economic, and Social Thought I } & 3\end{array}\right)$ |  |

Philosophy

| PHILOS 430 | History of Ancient Philosophy | $3-4$ |
| :--- | :--- | ---: |
| PHILOS 454 | Classical Philosophers |  |

## Political Science

| POLI SCI 265 | Development of Ancient and <br> Medieval Western Political Thought | $3-4$ |
| :--- | :--- | :--- |

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Gain knowledge of the ancient Roman, Greek, and Near Eastern civilizations.
2. Gain competency with contemporary scholarly questions surrounding their historical significance and interpretation.
3. Develop critical methodologies, including the ability to engage in source criticism and to approach ancient civilizations on their own terms.

## ADVISING AND CAREERS

How does the classical studies certificate fit into my educational goals?
While there are a wide variety of reasons to visit your major advisor, there seem to be two recurring questions:

1. Can I complete the certificate during the time I have left at UW?
2. Which classes will be offered in the future?

If you like to plan, seeing your advisor is very important; it can make the difference between fitting in Ancient Greek and Roman Monsters and Introduction to Biblical Literature before you graduate. Many students also try to complete more than one major or certificate, and discussing how you might be able to reach this goal is another primary role of your major advisor. Advisors can speak to you about course content, which courses fit best with your interest areas, and what kinds of courses might work best with your learning style-e.g., do you prefer multiple choice or essays? Any and all of these discussions can occur during your advising appointment.

In addition to discussing the major, advisors know a lot about:

- General Education requirements
- Breadth requirements
- Interpreting university policies and deadlines
- Connecting majors to careers
- Getting involved with campus organizations
- Finding volunteer and/or internship opportunities
- Talking about your challenges and difficulties
- Connecting with tutors
- Choosing a study abroad program
- Practicing for interviews
- Talking about graduate school
- Proofreading resumes and cover letters

Ready to meet with the CANES advisor? Make an appointment today (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ YjfjFEtg.html).

## PEOPLE

## FACULTY

For full faculty profiles, visit our website (https://canes.wisc.edu/faculty).
William Aylward: Greek and Roman archaelology
Jeffrey Beneker: Biography and historiography; Roman Republic
Jeffrey Blakely: Biblical and ancient Near Eastern archaeology
William Brockliss: Homer; Latin and Greek pedagogy
Alex Dressler: Ancient philosophy; gender and sexuality
Jeremy M. Hutton: Hebrew Bible; Northwest Semitics
Alice Mandell: Northwest Semitics; Israelite religions
Laura McClure: Greek literature; gender and reception studies
J C McKeown: Greek and Roman literature and culture
Grant Nelsestuen: Roman cultural history; Latin prose
Nandini Pandey: Latin poetry; Augustan culture
Mike Vanden Heuvel: Theater and performance theory

## AFFILIATE FACULTY

Nicholas Cahill: Ancient Greek archaeology and art history
Emily Fletcher: Ancient Greek philosophy
Paula Gottlieb: Ancient Greek philosophy; ethics
Daniel Kapust: Roman political thought; rhetoric; political theory
Marc Kleijwegt: Roman and Greek history
Leonora Neville: Roman Empire (the Byzantine Empire) in the 9th-12th centuries
Jordan Rosenblum: Rabbinic Judaism; biblical interpretation; food and religion
Claire Taylor: Greek socio-economic history; Athenian democracy; epigraphic culture

## EMERITUS FACULTY

Barry Powell
Ronald L. Troxel

## ACADEMIC STAFF

Bill Bach, Department Administrator
Toni Landis, Advisor/Student Services Coordinator

## CLASSICS, B.A.

The classics major allows students to achieve proficiency in both Greek and Latin. Majors who choose an emphasis in Greek, also complete four semesters of Latin, and likewise, those who choose an emphasis in Latin, complete four semesters of Greek as well.

Such comprehensive training enables classics majors to explore Greek and Roman literature in the original languages. From a practical standpoint, students develop analytical and critical thinking skills, and they may also become thoughtful and gifted writers in their native languages thanks to the intensive grammatical training required by the study of ancient languages.

To support our classics majors as they pursue their educational goals, CANES provides annual scholarship opportunities. We also offer a summer study abroad program led by members of our faculty. Learn more under "Resources and Scholarships."

## HOW TO GET IN

Declaring the classics major is as easy as meeting with the CANES advisor. Make an appointment today (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/YjfjFEtg.html).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.


## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

A major in classics allows students to place primary emphasis on learning Greek or Latin, yet gain some language training in both. Both tracks total 23 credits, and assume students have taken the first two semesters of both languages prior to entering the major.

## CLASSICS-LATIN EMPHASIS

| Code | Title | Credits |
| :--- | :--- | ---: |
| 17 credits of LATIN beyond the first year |  |  |
| LATIN 203 | Intermediate Latin | 4 |
| LATIN 204 | Introduction to Latin Literature | 4 |
| LATIN 301 | Latin Literature of the Roman | 3 |


| LATIN 302 | Latin Literature of the Roman Empire | 3 |
| :---: | :---: | :---: |
| One LATIN cour | mbered 500 and above | 3 |
| 6 credits of Greek beyond the first year |  |  |
| GREEK 305 | Intermediate Greek | 3 |
| GREEK 306 | Intermediate Greek | 3 |
| Total Credits |  | 23 |
| CLASSICS-GREEK EMPHASIS |  |  |
| Code | Title | Credits |
| 15 credits of GREEK beyond the first year |  |  |
| GREEK 305 | Intermediate Greek | 3 |
| GREEK 306 | Intermediate Greek | 3 |
| GREEK 401 | Greek Drama | 3 |
| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| One GREEK course numbered 500 and above |  | 3 |
| 8 credits of Latin beyond the first year |  |  |
| LATIN 203 | Intermediate Latin | 4 |
| LATIN 204 | Introduction to Latin Literature | 4 |
| Total Credits |  | 23 |

## RESIDENCE AND QUALITY OF WORK IN THE MAJOR

2.000 GPA in all CLASSICS and major courses
2.000 GPA on at least 15 credits of upper-level work in the major. ${ }^{1}$

15 credits in CLASSICS, taken at UW-Madison.
${ }^{1}$ Upper-level work in the major includes any intermediate or advanced CLASSICS or major course.

## HONORS IN THE MAJOR

Students may declare Honors in the Classics Major in consultation with the Classics undergraduate advisor.

## HONORS IN THE MAJOR IN CLASSICS: REQUIREMENTS

To earn Honors in the Major in Classics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all courses accepted in the major, at the intermediate or advanced level
- Complete the following coursework, with a grade of B or better:
- CLASSICS 591 Undergraduate Seminar. Approaches to the Classical World and
- A two-semester Senior Honors Thesis in CLASSICS 681 Senior Honors Thesis and CLASSICS 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. 3

Credits


## Residency <br> Quality of Work

2. Develop close reading skills that emphasize accuracy and precision in translation.
3. Develop critical reading skills, especially the ability to engage in source criticism.
4. Gain competency with core texts of the ancient western and near eastern literary canon.

## ADVISING AND CAREERS

## How does the classics major fit into my educational goals?

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## CAREERS

While many students have a difficult time believing it, a humanities major such as ours enables students who complete it to consider just about any type of career or educational pursuit. Our coursework builds the critical thinking and communication skills needed to succeed in careers ranging from politics and education to business and law.

Think about what you learn in a classroom setting as well as what you do each day to be a successful student; the skills you develop are equally important in the workplace:

- critical reading, reflection, and analysis
- proper research design and methodology
- expanded world view and exposure to new ideas/ways of thinking
- effective teamwork to advance a common project/purpose
- effective time-management and self-motivation to complete projects independently
- demonstrated writing proficiency in short and long essay format
- discussion and debate strategies
- broader knowledge of career and graduate-study options

One of the more significant skills CANES majors develop is language acquisition. Study of Greek, Latin, or Biblical Hebrew sets you apart and demonstrates your willingness to explore and expand your understanding of history and culture. In addition, the study of ancient languages shows discipline and perseverance, since they are such difficult languages to learn. Overall, you will have a wide variety of skills and talents to start you on the path to a rewarding career. Visit our website (http:// canes.wisc.edu/230.htm) for more information.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

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Toni Landis, Advisor/Student Services Coordinator

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS AND PRIZES

In addition to routinely nominating or recommending exemplary undergraduate majors for national, regional, local and university awards, CANES offers the following competitions to classical humanities, classics, and Latin majors annually:

## RUTH M. KUHLMAN UNDERGRADUATE SCHOLARSHIP

Established in 1998 with a bequest from Myron George Kuhlman in memory of his wife, Ruth Miller Kuhlman (BS in Education '32), this is a monetary award for undergraduates to benefit and advance their studies within the field of classics. Total amount of award may be up to $\$ 2500$ and the award may not be granted every academic year depending on quality of entries and availability of funds. This competition is only open to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW
page). Generally, the online application is open in early November with a deadline for submission in early February.

## GERTRUDE E. SLAUGHTER SUMMER STUDY SCHOLARSHIP

A monetary award in memory of Gertrude E. Slaughter, author and widow of Professor Moses S. Slaughter 1896-1923, for undergraduate students to advance their studies at an accredited center such as the American School in Athens or the American Academy in Rome, or to participate in an active archaeological field project. Awards will be in the amount of up to $\$ 800$. This competition is open only to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW page). Generally, the online application is open in early November with a deadline for submission in early February.

## LOGAN PRIZE FOR GREEK TRANSLATION

A monetary award in memory of Fellow of Classics, John Watson Logan (Ph.D. '23), for the translation of a passage of ancient Greek. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of ancient Greek and is normally publicized in classes and to department majors in early April.

## PILLINGER PRIZE FOR LATIN TRANSLATION

A monetary award in memory of Assistant Professor Hugh Edward Pillinger (1965-1970) for the translation of a passage in Latin. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of Latin and is normally publicized in classes and to department majors in early April.

## STUDY ABROAD

CANES offers two options for summer study: UW-Classics in Greece and UW-Classics in Italy.

Each three-week program is offered alternating summers and guided by a department faculty member.

To learn more, visit our website (http://canes.wisc.edu/classics-studyabroad.htm).

## CLASSICS, B.S.

The classics major allows students to achieve proficiency in both Greek and Latin. Majors who choose an emphasis in Greek, also complete four semesters of Latin, and likewise, those who choose an emphasis in Latin, complete four semesters of Greek as well.

Such comprehensive training enables classics majors to explore Greek and Roman literature in the original languages. From a practical standpoint, students develop analytical and critical thinking skills, and they may also become thoughtful and gifted writers in their native languages thanks to the intensive grammatical training required by the study of ancient languages.

To support our classics majors as they pursue their educational goals, CANES provides annual scholarship opportunities. We also offer a
summer study abroad program led by members of our faculty. Learn more under "Resources and Scholarships."

## HOW TO GET IN

Declaring the classics major is as easy as meeting with the CANES advisor. Make an appointment today (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/YjfjFEtg.html).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of <br> one 4- or 5-credit course with a laboratory component; <br> or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |

## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.

| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| :---: | :---: |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

A major in classics allows students to place primary emphasis on learning Greek or Latin, yet gain some language training in both. Both tracks total 23 credits, and assume students have taken the first two semesters of both languages prior to entering the major.

## CLASSICS-LATIN EMPHASIS

| Code | Title | Credits |
| :--- | :--- | ---: |
| 17 credits of LATIN beyond the first year | 4 |  |
| LATIN 203 | Intermediate Latin | 4 |
| LATIN 204 | Introduction to Latin Literature |  |
| LATIN 301 | Latin Literature of the Roman <br> Republic | 3 |
| LATIN 302 | Latin Literature of the Roman <br> Empire | 3 |
| 6 credits of Greek beyond the first year |  |  |
| GREEK 305 | Intermediate Greek | 3 |


| GREEK 306 | Intermediate Greek | 3 |
| :--- | :--- | ---: |
| Total Credits |  | 23 |
| CLASSICS-GREEK EMPHASIS |  |  |
| Code | Title | Credits |
| 15 credits of GREEK beyond the first year |  |  |
| GREEK 305 | Intermediate Greek | 3 |
| GREEK 306 | Intermediate Greek | 3 |
| GREEK 401 | Greek Drama | 3 |
| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| One GREEK course numbered 500 and above | 3 |  |
| 8 credits of Latin beyond the first year | 4 |  |
| LATIN 203 | Intermediate Latin | 4 |
| LATIN 204 | Introduction to Latin Literature | 23 |

## RESIDENCE AND QUALITY OF WORK IN THE MAJOR

2.000 GPA in all CLASSICS and major courses
2.000 GPA on at least 15 credits of upper-level work in the major. ${ }^{1}$

15 credits in CLASSICS, taken at UW-Madison.
${ }^{1}$ Upper-level work in the major includes any intermediate or advanced CLASSICS or major course.

## HONORS IN THE MAJOR

Students may declare Honors in the Classics Major in consultation with the Classics undergraduate advisor.

## HONORS IN THE MAJOR IN CLASSICS: REQUIREMENTS

To earn Honors in the Major in Classics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all courses accepted in the major, at the intermediate or advanced level
- Complete the following coursework, with a grade of B or better.
- CLASSICS 591 Undergraduate Seminar: Approaches to the Classical World and
- A two-semester Senior Honors Thesis in CLASSICS 681 Senior Honors Thesis and CLASSICS 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| Grade point average specified by the school, college, or |  |
| academic program to remain in good academic standing. |  |
| Students whose academic performance drops below |  |
| these minimum thresholds will be placed on academic |  |
| probation. |  |

## LEARNING OUTCOMES

1. Gain knowledge of the ancient languages.
2. Develop close reading skills that emphasize accuracy and precision in translation.
3. Develop critical reading skills, especially the ability to engage in source criticism.
4. Gain competency with core texts of the ancient western and near eastern literary canon.

## ADVISING AND CAREERS

## How does the classics major fit into my educational goals?

While there are a wide variety of reasons to visit your major advisor, there seem to be two recurring questions:

1. Can I complete the major during the time I have left at UW?
2. Which classes will be offered in the future?

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## CAREERS

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## L\&S CAREER RESOURCES

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- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


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William Brockliss: Homer; Latin and Greek pedagogy
Alex Dressler: Ancient philosophy; gender and sexuality
Jeremy M. Hutton: Hebrew Bible; Northwest Semitics
Alice Mandell: Northwest Semitics; Israelite religions
Laura McClure: Greek literature; gender and reception studies
J C McKeown: Greek and Roman literature and culture
Grant Nelsestuen: Roman cultural history; Latin prose
Nandini Pandey: Latin poetry; Augustan culture
Mike Vanden Heuvel: Theater and performance theory

## AFFILIATE FACULTY

Nicholas Cahill: Ancient Greek archaeology and art history
Emily Fletcher: Ancient Greek philosophy
Paula Gottlieb: Ancient Greek philosophy; ethics
Daniel Kapust: Roman political thought; rhetoric; political theory
Marc Kleijwegt: Roman and Greek history
Leonora Neville: Roman Empire (the Byzantine Empire) in the 9th-12th centuries
Jordan Rosenblum: Rabbinic Judaism; biblical interpretation; food and religion
Claire Taylor: Greek socio-economic history; Athenian democracy; epigraphic culture

## EMERITUS FACULTY

Barry Powell
Ronald L. Troxel

## ACADEMIC STAFF

Bill Bach, Department Administrator
Toni Landis, Advisor/Student Services Coordinator

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS AND PRIZES

In addition to routinely nominating or recommending exemplary undergraduate majors for national, regional, local and university awards, CANES offers the following competitions to classical humanities, classics, and Latin majors annually:

## RUTH M. KUHLMAN UNDERGRADUATE SCHOLARSHIP

Established in 1998 with a bequest from Myron George Kuhlman in memory of his wife, Ruth Miller Kuhlman (BS in Education '32), this is a monetary award for undergraduates to benefit and advance their studies within the field of classics. Total amount of award may be up to \$2500 and the award may not be granted every academic year depending on quality of entries and availability of funds. This competition is only open to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW
page). Generally, the online application is open in early November with a deadline for submission in early February.

## GERTRUDE E. SLAUGHTER SUMMER STUDY SCHOLARSHIP

A monetary award in memory of Gertrude E. Slaughter, author and widow of Professor Moses S. Slaughter 1896-1923, for undergraduate students to advance their studies at an accredited center such as the American School in Athens or the American Academy in Rome, or to participate in an active archaeological field project. Awards will be in the amount of up to $\$ 800$. This competition is open only to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW page). Generally, the online application is open in early November with a deadline for submission in early February.

## LOGAN PRIZE FOR GREEK TRANSLATION

A monetary award in memory of Fellow of Classics, John Watson Logan (Ph.D. '23), for the translation of a passage of ancient Greek. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of ancient Greek and is normally publicized in classes and to department majors in early April.

## PILLINGER PRIZE FOR LATIN TRANSLATION

A monetary award in memory of Assistant Professor Hugh Edward Pillinger (1965-1970) for the translation of a passage in Latin. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of Latin and is normally publicized in classes and to department majors in early April.

## STUDY ABROAD

CANES offers two options for summer study: UW-Classics in Greece and UW-Classics in Italy.

Each three-week program is offered alternating summers and guided by a department faculty member.

To learn more, visit our website (http://canes.wisc.edu/classics-studyabroad.htm).

## LATIN, B.A.

Students who pursue the Latin major read a wide variety of authors and can expect to achieve a high level of competency in the ancient language of the Romans. Coursework includes such favorites as Vergil, Ovid, Cicero, Julius Caesar, and Catullus, but students can expect to be able to read other authors like the historians (Livy, Sallust, and Tacitus) and genres like lyric, satire, and drama.

To support Latin majors as they pursue their educational goals, CANES provides annual scholarship opportunities. We also offer a summer study abroad program led by members of our faculty. Learn more under Resources and Scholarships.

For those who are interested in teaching Latin at the secondary level, the School of Education (p. 1528) offers certification. Students of this
program take Latin courses in our department, while receiving their teacher training in the School of Education.

## HOW TO GET IN

Declaring the Latin major is as easy as meeting with the CANES advisor. Make an appointment today (https://calendar.wisc.edu/schedulingassistant/public/profiles/YjfjFEtg.html).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4 - or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | Quantitative Reasoning Part A \& Part B * |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b$ ( $Q R B$ ) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
\(\left.\begin{array}{ll}Foreign \& - <br>
Language \& Complete the fourth unit of a foreign language; O R <br>
\& Complete the third unit of a foreign language and the <br>

second unit of an additional foreign language\end{array}\right\}\)| Note: A unit is one year of high school work or one |
| :--- |
| semester/term of college work. |

Liberal Arts 108 credits and Science Coursework

Depth of Intermediate/
Advanced
work
Major Declare and complete at least one (1) major

Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit
Minimum $\quad 2.000$ in all coursework at UW-Madison
GPAs
2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The Latin major requires 26 total credits of coursework beyond the first two semesters of Latin.

Majors interested in teaching Latin in high school should consult the undergraduate advisor and the School of Education (p. 1380) about requirements for teaching certification.

Note about Language: The College of Letters \& Science will award degree credit for foreign language work successfully completed in high school under certain circumstances and if an additional foreign language course is taken at UW-Madison. For more information, consult the Retroactive Credits policy under Policies and Regulations (p. 323).

| Code | Title |  |
| :--- | :--- | ---: |
| LATIN 203 |  |  |
| \& LATIN 204 | Intermediate Latin <br> and Introduction to Latin Literature <br> LATIN 301 <br> \& LATIN 302 | Latin Literature of the Roman <br> Republic <br> and Latin Literature of the Roman <br> Empire |
| Select four courses at the 500 level or above |  |  |$\quad 6$

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all LATIN courses and courses that count toward the major
2.000 GPA on 15 upper-level credits in residence ${ }^{1}$

15 credits in LATIN, taken on campus
1 LATIN courses marked as Intermediate or Advanced count as upper level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Latin Major in consultation with the departmental undergraduate advisor.

## HONORS IN THE LATIN MAJOR: REQUIREMENTS

To earn Honors in the Major in Latin, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 in all major courses at the intermediate or advanced level
- Complete CLASSICS 591 Undergraduate Seminar. Approaches to the Classical World
- Complete a two-semester Senior Honors Thesis in CLASSICS 681 Senior Honors Thesis and CLASSICS 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Quality of |
| Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Gain knowledge of the ancient languages.
2. Develop close reading skills that emphasize accuracy and precision in translation.
3. Develop critical reading skills, especially the ability to engage in source criticism.
4. Gain competency with core texts of the ancient western and near eastern literary canon.

## ADVISING AND CAREERS

## How does the Latin major fit into my educational goals?

While there are a wide variety of reasons to visit your major advisor, there seem to be two recurring questions:

1. Can I complete the major during the time I have left at UW?
2. Which classes will be offered in the future?

If you like to plan, seeing your major advisor is very important; it can make the difference between fitting in Vergil or Ovid before you graduate. Many students also try to complete more than one major or certificate, and discussing how you might be able to reach this goal is another primary role of your major advisor. Advisors can speak to you about course content, which courses fit best with your interest areas, and what kinds of courses might work best with your learning style-e.g., do you prefer multiple choice or essays? Any and all of these discussions can occur during your advising appointment.

In addition to discussing the major, advisors know a lot about:

- General Education requirements
- Breadth requirements
- Interpreting university policies and deadlines
- Connecting majors to careers
- Getting involved with campus organizations
- Finding volunteer and/or internship opportunities
- Talking about your challenges and difficulties
- Connecting with tutors
- Choosing a study abroad program
- Practicing for interviews
- Talking about graduate school
- Proofreading resumes and cover letters

Ready to meet with the CANES advisor? Make an appointment today (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ YjfjFEtg.html).

## CAREERS

While many students have a difficult time believing it, a humanities major such as ours enables students who complete it to consider just about any type of career or educational pursuit. Our coursework builds the critical thinking and communication skills needed to succeed in careers ranging from politics and education to business and law.

Think about what you learn in a classroom setting as well as what you do each day to be a successful student; the skills you develop are equally important in the workplace:

- critical reading, reflection, and analysis
- proper research design and methodology
- expanded world view and exposure to new ideas/ways of thinking
- effective teamwork to advance a common project/purpose
- effective time-management and self-motivation to complete projects independently
- demonstrated writing proficiency in short and long essay format
- discussion and debate strategies
- broader knowledge of career and graduate-study options

One of the more significant skills CANES majors develop is language acquisition. Study of Greek, Latin, or Biblical Hebrew sets you apart and demonstrates your willingness to explore and expand your understanding of history and culture. In addition, the study of ancient languages shows discipline and perseverance, since they are such difficult languages to learn. Overall, you will have a wide variety of skills and talents to start you on the path to a rewarding career. Visit our website (http:// canes.wisc.edu/230.htm) for more information.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.ls.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

For full faculty profiles, visit our website (https://canes.wisc.edu/faculty).
William Aylward: Greek and Roman archaelology
Jeffrey Beneker: Biography and historiography; Roman Republic
Jeffrey Blakely: Biblical and ancient Near Eastern archaeology
William Brockliss: Homer; Latin and Greek pedagogy
Alex Dressler: Ancient philosophy; gender and sexuality
Jeremy M. Hutton: Hebrew Bible; Northwest Semitics
Alice Mandell: Northwest Semitics; Israelite religions
Laura McClure: Greek literature; gender and reception studies
J C McKeown: Greek and Roman literature and culture
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Marc Kleijwegt: Roman and Greek history
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## SCHOLARSHIPS AND PRIZES

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## PILLINGER PRIZE FOR LATIN TRANSLATION

A monetary award in memory of Assistant Professor Hugh Edward Pillinger (1965-1970) for the translation of a passage in Latin. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of Latin and is normally publicized in classes and to department majors in early April.

## STUDY ABROAD

CANES offers two options for summer study: UW-Classics in Greece and UW-Classics in Italy.

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## LATIN, B.S.

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to read other authors like the historians (Livy, Sallust, and Tacitus) and genres like lyric, satire, and drama.

To support Latin majors as they pursue their educational goals, CANES provides annual scholarship opportunities. We also offer a summer study abroad program led by members of our faculty. Learn more under Resources and Scholarships.

For those who are interested in teaching Latin at the secondary level, the School of Education (p. 1528) offers certification. Students of this program take Latin courses in our department, while receiving their teacher training in the School of Education.

## HOW TO GET IN

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## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)
$\left.\begin{array}{ll}\text { BACHELOR OF SCIENCE DEGREE REQUIREMENTS } \\ \text { Mathematics } \\ & \begin{array}{l}\text { Two (2) } 3+\text { credits of intermediate/advanced level MATH, } \\ \text { COMP SCI, STAT }\end{array} \\ \text { Limit one each: COMP SCI, STAT }\end{array}\right]$

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The Latin major requires 26 total credits of coursework beyond the first two semesters of Latin.

Majors interested in teaching Latin in high school should consult the undergraduate advisor and the School of Education (p. 1380) about requirements for teaching certification.

Note about Language: The College of Letters \& Science will award degree credit for foreign language work successfully completed in high school under certain circumstances and if an additional foreign language course is taken at UW-Madison. For more information, consult the Retroactive Credits policy under Policies and Regulations (p. 323).

| Code | Title | Credits |
| :--- | :--- | ---: |
| LATIN 203 | Intermediate Latin |  |
| \& LATIN 204 | and Introduction to Latin Literature | 8 |
| LATIN 301 |  |  |
| \& LATIN 302 | Latin Literature of the Roman <br> Republic <br> and Latin Literature of the Roman <br> Empire |  |
| Select four courses at the 500 level or above | 6 |  |
| LATIN 505 | Elementary Prose Composition |  |
| LATIN 515 | Vergil |  |
| LATIN 519 | Latin Poetry |  |
| LATIN 520 | Roman Drama |  |
| LATIN 521 | Roman Elegy |  |
| LATIN 522 | Roman Lyric Poetry |  |
| LATIN 523 | Roman Satire |  |
| LATIN 524 | Roman Novel |  |
| LATIN 539 | Latin Historical Writers |  |
| LATIN 549 | Latin Philosophical Writers |  |
| LATIN 559 | Latin Oratory |  |
| LATIN/ | Mediaeval Latin |  |
| MEDIEVAL 563 |  |  |
| LATIN 681 | Honors Thesis |  |
| LATIN 682 | Senior Honors Thesis |  |
| LATIN 691 | Senior Thesis |  |
| LATIN 692 | Senior Thesis |  |
| LATIN 699 | Directed Study |  |

Additional electives to reach the 26 credit minimum for the major ${ }^{1}$
Total Credits
26

1 LATIN 203 through LATIN 699 can be used as additional electives to meet the 26 -credit minimum.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all LATIN courses and courses that count toward the major
2.000 GPA on 15 upper-level credits in residence ${ }^{1}$

15 credits in LATIN, taken on campus
1 LATIN courses marked as Intermediate or Advanced count as upper level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Latin Major in consultation with the departmental undergraduate advisor.

## HONORS IN THE LATIN MAJOR: REQUIREMENTS

To earn Honors in the Major in Latin, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 in all major courses at the intermediate or advanced level
- Complete CLASSICS 591 Undergraduate Seminar. Approaches to the Classical World
- Complete a two-semester Senior Honors Thesis in CLASSICS 681 Senior Honors Thesis and CLASSICS 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

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1. Gain knowledge of the ancient languages.
2. Develop close reading skills that emphasize accuracy and precision in translation.
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- Interpreting university policies and deadlines
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- Finding volunteer and/or internship opportunities
- Talking about your challenges and difficulties
- Connecting with tutors
- Choosing a study abroad program
- Practicing for interviews
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- Proofreading resumes and cover letters

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## CAREERS

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## L\&S CAREER RESOURCES

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SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

[^23]- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

For full faculty profiles, visit our website (https://canes.wisc.edu/faculty).
William Aylward: Greek and Roman archaelology
Jeffrey Beneker: Biography and historiography; Roman Republic
Jeffrey Blakely: Biblical and ancient Near Eastern archaeology
William Brockliss: Homer; Latin and Greek pedagogy
Alex Dressler: Ancient philosophy; gender and sexuality
Jeremy M. Hutton: Hebrew Bible; Northwest Semitics
Alice Mandell: Northwest Semitics; Israelite religions
Laura McClure: Greek literature; gender and reception studies
J C McKeown: Greek and Roman literature and culture
Grant Nelsestuen: Roman cultural history; Latin prose
Nandini Pandey: Latin poetry; Augustan culture
Mike Vanden Heuvel: Theater and performance theory

## AFFILIATE FACULTY

Nicholas Cahill: Ancient Greek archaeology and art history
Emily Fletcher: Ancient Greek philosophy
Paula Gottlieb: Ancient Greek philosophy; ethics
Daniel Kapust: Roman political thought; rhetoric; political theory
Marc Kleijwegt: Roman and Greek history
Leonora Neville: Roman Empire (the Byzantine Empire) in the 9th-12th centuries
Jordan Rosenblum: Rabbinic Judaism; biblical interpretation; food and religion
Claire Taylor: Greek socio-economic history; Athenian democracy; epigraphic culture

## EMERITUS FACULTY

Barry Powell
Ronald L. Troxe

## ACADEMIC STAFF

Bill Bach, Department Administrator
Toni Landis, Advisor/Student Services Coordinator

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS AND PRIZES

In addition to routinely nominating or recommending exemplary undergraduate majors for national, regional, local and university awards, CANES offers the following competitions to classical humanities, classics, and Latin majors annually:

## RUTH M. KUHLMAN UNDERGRADUATE SCHOLARSHIP

Established in 1998 with a bequest from Myron George Kuhlman in memory of his wife, Ruth Miller Kuhlman (BS in Education '32), this is a monetary award for undergraduates to benefit and advance their studies within the field of classics. Total amount of award may be up to \$2500 and the award may not be granted every academic year depending on quality of entries and availability of funds. This competition is only open to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW page). Generally, the online application is open in early November with a deadline for submission in early February.

## GERTRUDE E. SLAUGHTER SUMMER STUDY SCHOLARSHIP

A monetary award in memory of Gertrude E. Slaughter, author and widow of Professor Moses S. Slaughter 1896-1923, for undergraduate students to advance their studies at an accredited center such as the American School in Athens or the American Academy in Rome, or to participate in an active archaeological field project. Awards will be in the amount of up to $\$ 800$. This competition is open only to classics, classical humanities, and Latin majors. Students should apply via Scholarships@UW (which can be accessed through their MyUW page). Generally, the online application is open in early November with a deadline for submission in early February.

## LOGAN PRIZE FOR GREEK TRANSLATION

A monetary award in memory of Fellow of Classics, John Watson Logan (Ph.D. '23), for the translation of a passage of ancient Greek. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of ancient Greek and is normally publicized in classes and to department majors in early April.

## PILLINGER PRIZE FOR LATIN TRANSLATION

A monetary award in memory of Assistant Professor Hugh Edward Pillinger (1965-1970) for the translation of a passage in Latin. The passage will be selected each year by the chair of the Prize Committee and awards may not be granted every academic year depending on quality of entries. This competition is open to all undergraduate students who have completed at least one semester of Latin and is normally publicized in classes and to department majors in early April.

## STUDY ABROAD

CANES offers two options for summer study: UW-Classics in Greece and UW-Classics in Italy.

Each three-week program is offered alternating summers and guided by a department faculty member.

To learn more, visit our website (http://canes.wisc.edu/classics-studyabroad.htm).

## COMMUNICATION ARTS

The communication arts major offers a liberal arts approach to studying communication. The value of the liberal arts approach is that students not only learn specific skills, they also gain a deep understanding of communication theory, history, research, and criticism. Majors learn to apply communication principles in different contexts and with a variety
of different media. As a result, the communication arts major prepares students for a wide range of jobs and careers, including those that don't exist yet.

Courses in communication arts deal with a diverse range of communication-related topics and approach them from a variety of theoretical, practical, and aesthetic perspectives. The curriculum is designed to foster an understanding of communication processes, improve communication and digital literacy skills, and develop the capacity for critical appraisal and reflection.

The Department of Communication Arts offers two concentrations in the major.

1. Communication Science and Rhetorical Studies: Students explore the social, psychological, and practical aspects of communication and human behavior with a focus on public, mass, online, organizational, group, and interpersonal communication.
2. Radio-Television-Film: Students explore the history, theory, criticism, cultural uses, and production practices of television, film radio, and digital media.

## DIGITAL STUDIES CERTIFICATE

The digital studies certificate allows students seeking more experience with digital media and other technologies to select courses from across several departments, including communication arts, to create their own individualized digital curriculum. See the Digital Studies (p. 583) section in this Guide for requirements and course options.

## DEGREES/MAJORS/CERTIFICATES

- Communication Arts, B.A. (p. 569)
- Communication Arts, B.S. (p. 576)
- Digital Studies, Certificate (p. 583)


## PEOPLE

Please see the People (https://commarts.wisc.edu/people) section of the Department of Communication Arts website for additional information.

## FACULTY

COMMUNICATION SCIENCE AND RHETORICAL STUDIES
Robert Asen, Professor; Robert Glenn Howard, Professor; Jenell Johnson, Associate Professor; Stephen Lucas, Professor; Marie-Louise Mares, Professor; Sara McKinnon, Associate Professor; Zhongdang Pan, Professor; Catalina Toma, Associate Professor; Lyn Van Swol, Professor; Michael Xenos, Professor; Susan Zaeske, Associate Dean and Professor

## RADIO-TELEVISION-FILM

Maria Belodubrovskaya, Assistant Professor; Kelley Conway, Professor; Jonathan Gray, Professor; Eric Hoyt, Associate Professor; Lea Jacobs, Associate Vice Chancellor for Arts \& Humanities and Professor; Derek Johnson, Associate Professor; Lori Lopez, Associate Professor; Jeremy Morris, Associate Professor; J.J. Murphy, Professor; Ben Singer, Associate Professor; Jeff Smith, Professor

## INSTRUCTIONAL STAFF

Aaron Granat, Lecturer; Erik Gunneson, Faculty Associate; Jason Lopez, Visiting Assistant Professor; Sarah Jedd, Associate Faculty Associate; Mary McCoy, Faculty Associate

ACADEMIC ADVISING

Steffie Halverson, Academic Advisor
Mary Rossa, Senior Student Services Coordinator

## CAREER ADVISING

Pam Garcia-Rivera, Senior Student Services Coordinator

## COMMUNICATION ARTS, B.A.

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2. Radio-Television-Film: Students explore the history, theory, criticism, cultural uses, and production practices of television, film radio, and digital media.

## HOW TO GET IN

## DECLARING THE MAJOR

Students interested in pursuing the communication arts major are encouraged to meet with a communication arts advisor. To declare the major, Letters \& Science students complete a major declaration form. Forms are available in the communication arts academic advising offices and the communication arts main office. Non-Letters \& Science students will need permission from their school or college to pursue an additional major in communication arts. Students may not declare communication arts as a second major if they have earned more than 100 credits.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b$ (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS IN THE MAJOR

Communication arts offers two options within the major:

- Communication Science and Rhetorical Studies
- Radio-Television-Film

Students declare one of the two options and complete a minimum of 10 courses and at least 30 credits in the major. Please note that COM ARTS courses numbered below 200 as well as COM ARTS 605, COM ARTS 614, and COM ARTS 615 do not in the major.

## STUDENTS MUST SELECT ONE OF THE FOLLOWING OPTIONS:

- Communication Arts: Communication Science and Rhetorical Studies (p. 573)
- Communication Arts: Radio-Television-Film (p. 575)
- Communication Arts: Radio-TV-Film/Communication Science and Rhetorical Studies (p. 576)


## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all COM ARTS and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{3}$

15 credits in COM ARTS, taken on campus
3 Intermediate- and advanced-level COM ARTS courses are upper level in the major.

## DISTINCTION IN THE MAJOR

Students not enrolled for Honors in this major, and who have earned a 3.750 or higher GPA in COM ARTS and major courses are eligible for Distinction in the major.

## HONORS IN THE MAJOR IN COMMUNICATION ARTS

Students may apply to pursue honors in the communication arts major in consultation with a communication arts undergraduate advisor. To be accepted students must have:

- Completed the fundamentals course and the two core courses for their declared option and
- Earned a 3.500 GPA in all COM ARTS courses


## HONORS IN THE COMMUNICATION ARTS MAJOR REQUIREMENTS

To earn honors in the major in communication arts, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all COM ARTS courses
- Complete the requirements for the declared major option, to include:
- All theory, history, criticism courses taken to meet the regular major requirements within the declared option must be 400 level or higher
- One additional theory, history, criticism course at the 400 level or higher
- Three theory, history and criticism courses must be completed on campus. ${ }^{1}$
- A two-semester senior honors thesis in COM ARTS 681 Senior Honors Thesis and COM ARTS 682 Senior Honors Thesis, for a total of 6 credits ${ }^{2}$

Online courses taken through the University of Wisconsin-Madison Department of Communication Arts are considered on-campus for this purpose

2
Submission and approval of a Senior Honors Thesis Proposal is required prior to the term in which students enroll for COM ARTS 681 Senior Honors Thesis. See the Communication Arts undergraduate advisor for current process. Approval of the completed thesis by the thesis advisor and a second Communication Arts faculty member is required.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Demonstrate an understanding of core content in either of the two tracks: Communication Science and Rhetorical Studies or Radio-TV-Film.
2. Conduct theoretical, historical, and critical analyses of communication.
3. Demonstrate an ability to communicate effectively in writing, orally, or via the creation of media content (e.g., digital, film).

## ADVISING AND CAREERS

## COMMUNICATION ARTS ACADEMIC ADVISING

Communication arts academic advisors (https://commarts.wisc.edu/ undergraduate/advising) assist students throughout their undergraduate studies. They offer individual appointments, drop-in advising, and group advising.

## CONTACT INFORMATION:

Steffie Halverson, 6070 Vilas Hall, 608-262-2285,
advising@commarts.wisc.edu
Mary Rossa, 6068 Vilas Hall, 608-262-0992,
advising@commarts.wisc.edu

## CAREER ADVISING

The communication and media career advisor (https:// journalism.wisc.edu/career-services/advising) assists students with career preparation, such as exploring career options, learning internship and job search strategies, and writing resumes and cover letters.

## CONTACT INFORMATION:

Pam Garcia-Rivera, 5114 Vilas Hall, 608-890-1046, pgarciariver@wisc.edu

## CAREER EXPLORATION AND PREPARATION

## GAIN EXPERIENCE

The Department of Communication Arts encourages students to apply the knowledge and skills they attain through coursework to professional settings. Internships and part-time jobs at television networks, nonprofit organizations, talent agencies, magazines, radio stations, advertising agencies, production companies, government agencies, and other communication-related businesses help students gain work-related experience and explore career options. Advising emails, tweets (https:// twitter.com/uwcommarts_adv), and postings provide communication arts majors with information on opportunities across the country.

Communication arts offers a 1-credit, online academic course to accompany a student's internship experience: COM ARTS 614 Field Experience in Communication and COM ARTS 615 Second Field Experience in Communication .

## ATTEND EVENTS

Throughout the academic year, students have the opportunity to participate in several communication-focused, career-related events, such as guest speakers, career panels, and the advertising and communications career fair.

## COMMUNICATION ARTS ALUMNI CAREERS AT A GLANCE

After completing a liberal arts education with a communication arts major, communication arts alumni pursue a variety of careers. In a recent survey, communication arts alumni were asked to provide and categorize their occupation. The results are available on the Department of Communication Arts website:

- Communication Science \& Rhetorical Studies Alumni Careers (https://commarts.wisc.edu/sites/default/files/ files/2017/11/22/CA\%20career\%20alumni\%20by\%20area\%20C \%26R.pdf)
- Radio-Television-Film Alumni Careers (https:// commarts.wisc.edu/sites/default/files/files/2017/11/22/CA \%20career\%20alumni\%20by\%20area\%20RTF.pdf)


## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Please see the People (https://commarts.wisc.edu/people) section of the Department of Communication Arts website for additional information.

## FACULTY <br> COMMUNICATION SCIENCE AND RHETORICAL STUDIES

Robert Asen, Professor; Robert Glenn Howard, Professor; Jenell Johnson, Associate Professor; Stephen Lucas, Professor; Marie-Louise Mares, Professor; Sara McKinnon, Associate Professor; Zhongdang Pan, Professor; Catalina Toma, Associate Professor; Lyn Van Swol, Professor; Michael Xenos, Professor; Susan Zaeske, Associate Dean and Professor

## RADIO-TELEVISION-FILM

Maria Belodubrovskaya, Assistant Professor; Kelley Conway, Professor; Jonathan Gray, Professor; Eric Hoyt, Associate Professor; Lea Jacobs, Associate Vice Chancellor for Arts \& Humanities and Professor; Derek Johnson, Associate Professor; Lori Lopez, Associate Professor; Jeremy Morris, Associate Professor; J.J. Murphy, Professor; Ben Singer, Associate Professor; Jeff Smith, Professor

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## ACADEMIC ADVISING

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Mary Rossa, Senior Student Services Coordinator

## CAREER ADVISING

Pam Garcia-Rivera, Senior Student Services Coordinator

## WISCONSIN EXPERIENCE

## WISCONSIN EXPERIENCE STUDENT ORGANIZATIONS

UW-Madison offers many opportunities to get involved. Communication arts majors join student organizations across their areas of interest.

## Department-Affiliated Organizations:

- Communication Arts Student Association (CASA)
- Hollywood Badgers
- Badger Podcast Network

See the Department of Communication Arts website for a sampling of other UW student organizations (https://commarts.wisc.edu/ undergraduate/opportunities) that may be of interest to communicationfocused students.

## STUDYING ABROAD

Communications arts majors are encouraged to look at study abroad programs and opportunities across the globe. Our students have studied
in cities such as London, Rome, Tel Aviv, Prague, Galway, Sydney, Madrid, Bologna, Cape Town, Paris, Copenhagen, and Buenos Aires. When planning for their semester abroad, students should think beyond courses required for their major. Students are encouraged to take courses from a variety of subjects to satisfy requirements and elective credits for their degree.

## RESEARCH OPPORTUNITIES

Communication science research team members gain hands-on research experience. Undergraduate research assistants may learn to code and enter data, interview participants, gather and prepare research materials, run experiments, and perform other activities required to complete a research study. Reading and writing assignments related to the research activities are assigned throughout the semester. Opportunities to participate in a research team vary from semester to semester.

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS

Students apply for scholarships online through My Scholarships (https:// scholarships.wisc.edu/Scholarships). The Department of Communication Arts offers the following scholarships:

- Christopher Neal Heinlein Memorial Scholarships
- Charline M. Wackman Awards for Summer Session
- Charline M. Wackman Awards (Fall Term)
- Keith Harris Wyche Memorial Scholarships

See the scholarship section (https://commarts.wisc.edu/undergraduate/ scholarships) of the department website for additional details.

> COMMUNICATION ARTS: COMMUNICATION SCIENCE AND RHETORICAL STUDIES

## REQUIREMENTS

## COMMUNICATION SCIENCE AND RHETORICAL STUDIES

This option deals with social, psychological, and practical aspects of communication and human behavior. Students focus on public, mass, online, organizational, group, and interpersonal communication. They develop qualitative and quantitative research skills, conceptual and analytical thinking, and effective oral and written communication.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Fundamentals | 3 |  |
| COM ARTS 260 | Communication and Human <br> Behavior | 3 |
| Core - Part One (1 course) |  |  |
| COM ARTS 360 | Introduction to Rhetoric in Politics <br> and Culture |  |
| COM ARTS 370 | Great Speakers and Speeches |  |


| COM ARTS 372 | Rhetoric of Campaigns and Revolutions |  |
| :---: | :---: | :---: |
| Core - Part Two (1 course) ${ }^{1}$ |  | 3 |
| COM ARTS 361 | Introduction to Quantitative Research in Communication |  |
| COM ARTS 368 | Theory and Practice of Persuasion |  |
| Applied Communication (1 course) |  | 3 |
| COM ARTS 262 | Theory and Practice of Argumentation and Debate |  |
| COM ARTS 263 | Speech Composition |  |
| COM ARTS 266 | Theory and Practice of Group Discussion |  |
| COM ARTS 272 | Introduction to Interpersonal Communication |  |
| COM ARTS 273 | Theory and Practice of Interpersonal Communication |  |
| Theory-History-Criticism (3 courses) |  | 9 |
| COM ARTS 310 | Topics in Rhetoric and Communication Science |  |
| COM ARTS 317 | Rhetoric and Health |  |
| COM ARTS 325 | Media and Human Behavior |  |
| COM ARTS 345 | Online Communication and Personal Relationships |  |
| COM ARTS 360 | Introduction to Rhetoric in Politics and Culture |  |
| COM ARTS 361 | Introduction to Quantitative Research in Communication |  |
| COM ARTS 368 | Theory and Practice of Persuasion |  |
| COM ARTS 370 | Great Speakers and Speeches |  |
| COM ARTS 371 | Communication and Conflict Resolution |  |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions |  |
| COM ARTS 373 | Intercultural Communication \& Rhetoric |  |
| COM ARTS/ RELIG ST 374 | The Rhetoric of Religion |  |
| COM ARTS 377 | Topics in Digital Studies (Communication Science \& Rhetoric) |  |
| COM ARTS 378 | The Rhetoric of African American Discourse |  |
| COM ARTS 402 | The Psychology of Communication |  |
| COM ARTS 470 | Contemporary Political Discourse |  |
| COM ARTS 472 | Rhetoric and Technology |  |
| COM ARTS 476 | Nature of Criticism-The Public Arts of Communication |  |
| COM ARTS 478 | Rhetoric and Power on the Internet |  |
| COM ARTS 509 | Digital Media and Political Communication |  |
| COM ARTS/ <br> FOLKLORE 522 | Digitally Documenting Everyday Communication |  |
| COM ARTS 525 | Media, Deliberation, and Public Issues |  |

COM ARTS 560 Communication Theory

| COM ARTS 562 | Theories of Deliberation and Controversy |  |
| :---: | :---: | :---: |
| COM ARTS 565 | Communication and Interethnic Behavior |  |
| COM ARTS 570 | Classical Rhetorical Theory |  |
| COM ARTS 571 | Contemporary Rhetorical Theory |  |
| COM ARTS 573 | Rhetoric of Globalization and Transnationalism |  |
| COM ARTS 574 | Rhetoric of US Immigration and Naturalization |  |
| COM ARTS 575 | Communication in Complex Organizations |  |
| COM ARTS 576 | Principles of Rhetorical Criticism |  |
| COM ARTS 577 | Dynamics of Online Relationships |  |
| COM ARTS 610 | Special Topics in Rhetoric and Public Address |  |
| COM ARTS 612 | Special Topics in Communication Science |  |
| COM ARTS/HDFS/ JOURN 616 | Mass Media and Youth |  |
| COM ARTS/ JOURN/LSC 617 | Health Communication in the Information Age |  |
| COM ARTS 667 | History of American Public Address |  |
| COM ARTS 671 | Communication and Social Conflict |  |
| COM ARTS 675 | Rhetoric of Women's Social and Political Discourse |  |
| Radio-TV-Film (1 co | urse) | 3 |
| COM ARTS 300 | Film Comedy |  |
| COM ARTS 313 | Topics in Film and Media Studies |  |
| COM ARTS 346 | Critical Internet Studies |  |
| COM ARTS/ CHICLA 347 | Race, Ethnicity, and Media |  |
| COM ARTS 350 | Introduction to Film |  |
| COM ARTS 351 | Television Industries |  |
| COM ARTS 352 | Film History to 1960 |  |
| COM ARTS 354 | Film Genres |  |
| COM ARTS 355 | Introduction to Media Production |  |
| COM ARTS 357 | History of the Animated Film |  |
| COM ARTS 358 | History of Documentary Film |  |
| COM ARTS 359 | Sports Media |  |
| COM ARTS 375 | Ethics of Entertainment Media |  |
| COM ARTS 376 | Topics in Digital Studies (Radio, Television, \& Film) |  |
| COM ARTS 400 | The Films of Alfred Hitchcock |  |
| COM ARTS/ GEN\&WS 418 | Gender, Sexuality, and the Media |  |
| COM ARTS/ CHICLA 419 | Latino/as and Media |  |
| COM ARTS/ ASIAN AM 420 | Asian Americans and Media |  |
| COM ARTS 448 | Media and National Identity |  |
| COM ARTS 449 | Sound Cultures: Podcasting and Music |  |
| COM ARTS 450 | Cultural History of Broadcasting |  |
| COM ARTS 451 | Television Criticism |  |


| COM ARTS 454 | Critical Film Analysis |
| :---: | :---: |
| COM ARTS 455 | French Film |
| COM ARTS 456 | Russian and Soviet Film |
| COM ARTS 458 | Global Media Cultures |
| COM ARTS 459 | New Media and Society |
| COM ARTS/ ITALIAN 460 | Italian Film |
| COM ARTS 461 | Global Art Cinema |
| COM ARTS 462 | American Independent Cinema |
| COM ARTS 463 | Avant-Garde Film |
| COM ARTS 465 | Editing and Post-production for Video and Film |
| COM ARTS 466 | Writing for Television and Film |
| COM ARTS 467 | Cinematography and Sound Recording |
| COM ARTS 468 | Producing for Internet TV and Video |
| COM ARTS 540 | Television Genres |
| COM ARTS 547 | Digital Game Cultures |
| COM ARTS 552 | Contemporary Hollywood Cinema |
| COM ARTS 556 | The American Film Industry in the Era of the Studio System |
| COM ARTS 557 | Contemporary Media Industries |
| COM ARTS/ JOURN 558 | Public, Community, and Alternative Media |
| COM ARTS 608 | Special Topics in Media and Cultural Studies |
| COM ARTS 609 | Special Topics in Production |
| COM ARTS 613 | Special Topics in Film |
| COM ARTS 651 | Advanced Video Production and Direction |
| COM ARTS/ GERMAN 655 | German Film |
| COM ARTS 659 | Advanced Motion Picture Production Workshop |
| COM ARTS 662 | Media and Cultural Theory I |
| COM ARTS 663 | Media and Cultural Theory II |
| COM ARTS 664 | Classical Film Theory |
| COM ARTS 665 | Contemporary Film Theory |

Electives ..... 6
Two COM ARTS courses numbered 200-699 ${ }^{2}$

## Total Credits

30
1 Can be applied to only one requirement within the major.
2 Excluding COM ARTS 605, COM ARTS 614 and COM ARTS 615.

## COMMUNICATION ARTS: RADIO-TELEVISION-FILM

## REQUIREMENTS

## RADIO-TELEVISION-FILM

This option focuses on the history, theory, criticism, cultural uses, and production practices of television, film, radio, and digital media. While there is no production major, students are required to take a media production course in order to gain a concrete understanding of the possibilities of these media. Emphasis is on critical analysis, creative expression, and an understanding of how media functions in our society.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Fundamentals |  |  |
| COM ARTS 250 | Survey of Contemporary Media | 3 |
| Radio-TV-Film Core |  |  |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 351 | Television Industries | 3 |
| Production (1 course) |  | 3-4 |
| COM ARTS 355 | Introduction to Media Production |  |
| COM ARTS 465 | Editing and Post-production for Video and Film |  |
| COM ARTS 466 | Writing for Television and Film |  |
| COM ARTS 467 | Cinematography and Sound Recording |  |
| COM ARTS 659 | Advanced Motion Picture Production Workshop |  |
| Theory-History-Criticism (3 courses) |  | 9 |
| COM ARTS 300 | Film Comedy |  |
| COM ARTS 313 | Topics in Film and Media Studies |  |
| COM ARTS 346 | Critical Internet Studies |  |
| COM ARTS/ <br> CHICLA 347 | Race, Ethnicity, and Media |  |
| COM ARTS 352 | Film History to 1960 |  |
| COM ARTS 354 | Film Genres |  |
| COM ARTS 357 | History of the Animated Film |  |
| COM ARTS 358 | History of Documentary Film |  |
| COM ARTS 359 | Sports Media |  |
| COM ARTS 375 | Ethics of Entertainment Media |  |
| COM ARTS 376 | Topics in Digital Studies (Radio, Television, \& Film) |  |
| COM ARTS 400 | The Films of Alfred Hitchcock |  |
| COM ARTS/ GEN\&WS 418 | Gender, Sexuality, and the Media |  |
| COM ARTS/ <br> CHICLA 419 | Latino/as and Media |  |
| COM ARTS/ ASIAN AM 420 | Asian Americans and Media |  |
| COM ARTS 448 | Media and National Identity |  |
| COM ARTS 449 | Sound Cultures: Podcasting and Music |  |


| COM ARTS 450 | Cultural History of Broadcasting |  |
| :---: | :---: | :---: |
| COM ARTS 451 | Television Criticism |  |
| COM ARTS 454 | Critical Film Analysis |  |
| COM ARTS 455 | French Film |  |
| COM ARTS 456 | Russian and Soviet Film |  |
| COM ARTS 458 | Global Media Cultures |  |
| COM ARTS 459 | New Media and Society |  |
| COM ARTS/ <br> ITALIAN 460 | Italian Film |  |
| COM ARTS 461 | Global Art Cinema |  |
| COM ARTS 462 | American Independent Cinema |  |
| COM ARTS 463 | Avant-Garde Film |  |
| COM ARTS 540 | Television Genres |  |
| COM ARTS 547 | Digital Game Cultures |  |
| COM ARTS 552 | Contemporary Hollywood Cinema |  |
| COM ARTS 556 | The American Film Industry in the Era of the Studio System |  |
| COM ARTS 557 | Contemporary Media Industries |  |
| COM ARTS/ JOURN 558 | Public, Community, and Alternative Media |  |
| COM ARTS 608 | Special Topics in Media and Cultural Studies |  |
| COM ARTS 613 | Special Topics in Film |  |
| COM ARTS/ GERMAN 655 | German Film |  |
| COM ARTS 662 | Media and Cultural Theory I |  |
| COM ARTS 663 | Media and Cultural Theory II |  |
| COM ARTS 664 | Classical Film Theory |  |
| COM ARTS 665 | Contemporary Film Theory |  |
| Communication Science and Rhetorical Studies (1 course) |  | 3 |
| COM ARTS 260 | Communication and Human Behavior |  |
| COM ARTS 262 | Theory and Practice of Argumentation and Debate |  |
| COM ARTS 263 | Speech Composition |  |
| COM ARTS 266 | Theory and Practice of Group Discussion |  |
| COM ARTS 272 | Introduction to Interpersonal Communication |  |
| or COM ARTS 273heory and Practice of Interpersonal Communication |  |  |
| COM ARTS 273 | Theory and Practice of Interpersonal Communication |  |
| COM ARTS 310 | Topics in Rhetoric and Communication Science |  |
| COM ARTS 317 | Rhetoric and Health |  |
| COM ARTS 325 | Media and Human Behavior |  |
| COM ARTS 345 | Online Communication and Personal Relationships |  |
| COM ARTS 360 | Introduction to Rhetoric in Politics and Culture |  |
| COM ARTS 361 | Introduction to Quantitative Research in Communication |  |
| COM ARTS 368 | Theory and Practice of Persuasion |  |


| COM ARTS 370 | Great Speakers and Speeches |
| :---: | :---: |
| COM ARTS 371 | Communication and Conflict Resolution |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions |
| COM ARTS 373 | Intercultural Communication \& Rhetoric |
| COM ARTS/ <br> RELIG ST 374 | The Rhetoric of Religion |
| COM ARTS 377 | Topics in Digital Studies (Communication Science \& Rhetoric) |
| COM ARTS 378 | The Rhetoric of African American Discourse |
| COM ARTS 402 | The Psychology of Communication |
| COM ARTS 410 | Miscommunication |
| COM ARTS 470 | Contemporary Political Discourse |
| COM ARTS 472 | Rhetoric and Technology |
| COM ARTS 476 | Nature of Criticism-The Public Arts of Communication |
| COM ARTS 478 | Rhetoric and Power on the Internet |
| COM ARTS 509 | Digital Media and Political Communication |
| COM ARTS/ FOLKLORE 522 | Digitally Documenting Everyday Communication |
| COM ARTS 525 | Media, Deliberation, and Public Issues |
| COM ARTS 560 | Communication Theory |
| COM ARTS 562 | Theories of Deliberation and Controversy |
| COM ARTS 565 | Communication and Interethnic Behavior |
| COM ARTS 570 | Classical Rhetorical Theory |
| COM ARTS 571 | Contemporary Rhetorical Theory |
| COM ARTS 573 | Rhetoric of Globalization and Transnationalism |
| COM ARTS 574 | Rhetoric of US Immigration and Naturalization |
| COM ARTS 575 | Communication in Complex Organizations |
| COM ARTS 576 | Principles of Rhetorical Criticism |
| COM ARTS 577 | Dynamics of Online Relationships |
| COM ARTS 610 | Special Topics in Rhetoric and Public Address |
| COM ARTS 612 | Special Topics in Communication Science |
| COM ARTS/HDFS/ JOURN 616 | Mass Media and Youth |
| COM ARTS/ JOURN/LSC 617 | Health Communication in the Information Age |
| COM ARTS 667 | History of American Public Address |
| COM ARTS 671 | Communication and Social Conflict |
| COM ARTS 675 | Rhetoric of Women's Social and Political Discourse |

Electives

Two COM ARTS courses numbered 200-699 ${ }^{2}$
Total Credits
30-31
2 Excluding COM ARTS 605, COM ARTS 614 and COM ARTS 615.

## COMMUNICATION ARTS: RADIO-TVFILM/COMMUNICATION SCIENCE AND RHETORICAL STUDIES

Admissions to the Communication Arts: Radio-TV-Film/Communication Science and Rhetorical Studies B.A. have been suspended as of fall 2018. If you have any questions, please contact the department (info@commarts.wisc.edu).

## COMMUNICATION ARTS, B.S.

The communication arts major offers a liberal arts approach to studying communication. The value of the liberal arts approach is that students not only learn specific skills, they also gain a deep understanding of communication theory, history, research, and criticism. Majors learn to apply communication principles in different contexts and with a variety of different media. As a result, the communication arts major prepares students for a wide range of jobs and careers, including those that don't exist yet.

Courses in communication arts deal with a diverse range of communication-related topics and approach them from a variety of theoretical, practical, and aesthetic perspectives. The curriculum is designed to foster an understanding of communication processes, improve communication and digital literacy skills, and develop the capacity for critical appraisal and reflection.

The Department of Communication Arts offers two concentrations in the major.

1. Communication Science and Rhetorical Studies: Students explore the social, psychological, and practical aspects of communication and human behavior with a focus on public, mass, online, organizational, group, and interpersonal communication.
2. Radio-Television-Film: Students explore the history, theory, criticism, cultural uses, and production practices of television, film radio, and digital media.

## HOW TO GET IN

## DECLARING THE MAJOR

Students interested in pursuing the communication arts major are encouraged to meet with a communication arts advisor. To declare the major, Letters \& Science students complete a major declaration form. Forms are available in the communication arts academic advising offices and the communication arts main office. Non-Letters \& Science students will need permission from their school or college to pursue an additional major in communication arts. Students may not declare communication arts as a second major if they have earned more than 100 credits.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits
and Science
Coursework

Depth of 60 intermediate or advanced credits

## Intermediate/

Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS IN THE MAJOR

Communication arts offers two options within the major:

- Communication Science and Rhetorical Studies
- Radio-Television-Film

Students declare one of the two options and complete a minimum of 10 courses and at least 30 credits in the major. Please note that COM ARTS courses numbered below 200 as well as COM ARTS 605, COM ARTS 614, and COM ARTS 615 do not in the major.

## STUDENTS MUST SELECT ONE OF THE FOLLOWING OPTIONS:

- Communication Arts: Communication Science and Rhetorical Studies (p. 573)
- Communication Arts: Radio-Television-Film (p. 575)
- Communication Arts: Radio-TV-Film/Communication Science and Rhetorical Studies (p. 576)


## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all COM ARTS and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{3}$

15 credits in COM ARTS, taken on campus
3 Intermediate- and advanced-level COM ARTS courses are upper level in the major.

## DISTINCTION IN THE MAJOR

Students not enrolled for Honors in this major, and who have earned a 3.750 or higher GPA in COM ARTS and major courses are eligible for Distinction in the major.

## HONORS IN THE MAJOR IN COMMUNICATION ARTS

Students may apply to pursue honors in the communication arts major in consultation with a communication arts undergraduate advisor. To be accepted students must have

- Completed the fundamentals course and the two core courses for their declared option and
- Earned a 3.500 GPA in all COM ARTS courses


## HONORS IN THE COMMUNICATION ARTS MAJOR REQUIREMENTS

To earn honors in the major in communication arts, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all COM ARTS courses
- Complete the requirements for the declared major option, to include:
- All theory, history, criticism courses taken to meet the regular major requirements within the declared option must be 400 level or higher
- One additional theory, history, criticism course at the 400 level or higher
- Three theory, history and criticism courses must be completed on campus. ${ }^{1}$
- A two-semester senior honors thesis in COM ARTS 681 Senior Honors Thesis and COM ARTS 682 Senior Honors Thesis, for a total of 6 credits ${ }^{2}$

1 Online courses taken through the University of Wisconsin-Madison Department of Communication Arts are considered on-campus for this purpose

2
Submission and approval of a Senior Honors Thesis Proposal is required prior to the term in which students enroll for COM ARTS 681 Senior Honors Thesis. See the Communication Arts undergraduate advisor for current process. Approval of the completed thesis by the thesis advisor and a second Communication Arts faculty member is required.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

Residency
Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation

## LEARNING OUTCOMES

1. Demonstrate an understanding of core content in either of the two tracks: Communication Science and Rhetorical Studies or Radio-TV-Film.
2. Conduct theoretical, historical, and critical analyses of communication
3. Demonstrate an ability to communicate effectively in writing, orally, or via the creation of media content (e.g., digital, film)

## ADVISING AND CAREERS

## COMMUNICATION ARTS ACADEMIC ADVISING

Communication arts academic advisors (https://commarts.wisc.edu/ undergraduate/advising) assist students throughout their undergraduate studies. They offer individual appointments, drop-in advising, and group advising.

## CONTACT INFORMATION:

Steffie Halverson, 6070 Vilas Hall, 608-262-2285,
advising@commarts.wisc.edu
Mary Rossa, 6068 Vilas Hall, 608-262-0992,
advising@commarts.wisc.edu

## CAREER ADVISING

The communication and media career advisor (https:// journalism.wisc.edu/career-services/advising) assists students with career preparation, such as exploring career options, learning internship and job search strategies, and writing resumes and cover letters.

## CONTACT INFORMATION:

Pam Garcia-Rivera, 5114 Vilas Hall, 608-890-1046, pgarciariver@wisc.edu

## CAREER EXPLORATION AND PREPARATION

## GAIN EXPERIENCE

The Department of Communication Arts encourages students to apply the knowledge and skills they attain through coursework to professional settings. Internships and part-time jobs at television networks, nonprofit organizations, talent agencies, magazines, radio stations, advertising agencies, production companies, government agencies, and other communication-related businesses help students gain work-related experience and explore career options. Advising emails, tweets (https:// twitter.com/uwcommarts_adv), and postings provide communication arts majors with information on opportunities across the country.

Communication arts offers a 1-credit, online academic course to accompany a student's internship experience: COM ARTS 614 Field

Experience in Communication and COM ARTS 615 Second Field Experience in Communication .

## ATTEND EVENTS

Throughout the academic year, students have the opportunity to participate in several communication-focused, career-related events, such as guest speakers, career panels, and the advertising and communications career fair.

## COMMUNICATION ARTS ALUMNI CAREERS AT A GLANCE

After completing a liberal arts education with a communication arts major, communication arts alumni pursue a variety of careers. In a recent survey, communication arts alumni were asked to provide and categorize their occupation. The results are available on the Department of Communication Arts website:

- Communication Science \& Rhetorical Studies Alumni Careers (https://commarts.wisc.edu/sites/default/files/ files/2017/11/22/CA\%20career\%20alumni\%20by\%20area\%20C \%26R.pdf)
- Radio-Television-Film Alumni Careers (https:// commarts.wisc.edu/sites/default/files/files/2017/11/22/CA
\%20career\%20alumni\%20by\%20area\%20RTF.pdf)


## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Please see the People (https://commarts.wisc.edu/people) section of the Department of Communication Arts website for additional information.

## FACULTY

COMMUNICATION SCIENCE AND RHETORICAL STUDIES
Robert Asen, Professor; Robert Glenn Howard, Professor; Jenell Johnson, Associate Professor; Stephen Lucas, Professor; Marie-Louise Mares, Professor; Sara McKinnon, Associate Professor; Zhongdang Pan, Professor; Catalina Toma, Associate Professor; Lyn Van Swol, Professor; Michael Xenos, Professor; Susan Zaeske, Associate Dean and Professor

## RADIO-TELEVISION-FILM

Maria Belodubrovskaya, Assistant Professor; Kelley Conway, Professor; Jonathan Gray, Professor; Eric Hoyt, Associate Professor; Lea Jacobs, Associate Vice Chancellor for Arts \& Humanities and Professor; Derek Johnson, Associate Professor; Lori Lopez, Associate Professor; Jeremy Morris, Associate Professor; J.J. Murphy, Professor; Ben Singer, Associate Professor; Jeff Smith, Professor

## INSTRUCTIONAL STAFF

Aaron Granat, Lecturer; Erik Gunneson, Faculty Associate; Jason Lopez, Visiting Assistant Professor; Sarah Jedd, Associate Faculty Associate; Mary McCoy, Faculty Associate

## ACADEMIC ADVISING

Steffie Halverson, Academic Advisor Mary Rossa, Senior Student Services Coordinator

## CAREER ADVISING

Pam Garcia-Rivera, Senior Student Services Coordinator

## WISCONSIN EXPERIENCE

## WISCONSIN EXPERIENCE STUDENT ORGANIZATIONS

UW-Madison offers many opportunities to get involved. Communication arts majors join student organizations across their areas of interest.

## Department-Affiliated Organizations:

- Communication Arts Student Association (CASA)
- Hollywood Badgers
- Badger Podcast Network

See the Department of Communication Arts website for a sampling of other UW student organizations (https://commarts.wisc.edu/ undergraduate/opportunities) that may be of interest to communicationfocused students.

## STUDYING ABROAD

Communications arts majors are encouraged to look at study abroad programs and opportunities across the globe. Our students have studied in cities such as London, Rome, Tel Aviv, Prague, Galway, Sydney, Madrid, Bologna, Cape Town, Paris, Copenhagen, and Buenos Aires. When planning for their semester abroad, students should think beyond courses required for their major. Students are encouraged to take courses from a variety of subjects to satisfy requirements and elective credits for their degree.

## RESEARCH OPPORTUNITIES

Communication science research team members gain hands-on research experience. Undergraduate research assistants may learn to code and enter data, interview participants, gather and prepare research materials, run experiments, and perform other activities required to complete a research study. Reading and writing assignments related to the research activities are assigned throughout the semester. Opportunities to participate in a research team vary from semester to semester.

## RESOURCES AND SCHOLARSHIPS

## SCHOLARSHIPS

Students apply for scholarships online through My Scholarships (https:// scholarships.wisc.edu/Scholarships). The Department of Communication Arts offers the following scholarships:

- Christopher Neal Heinlein Memorial Scholarships
- Charline M. Wackman Awards for Summer Session
- Charline M. Wackman Awards (Fall Term)
- Keith Harris Wyche Memorial Scholarships

See the scholarship section (https://commarts.wisc.edu/undergraduate/ scholarships) of the department website for additional details.

## COMMUNICATION ARTS: <br> COMMUNICATION SCIENCE AND RHETORICAL STUDIES

REQUIREMENTS

## COMMUNICATION SCIENCE AND RHETORICAL STUDIES

This option deals with social, psychological, and practical aspects of communication and human behavior. Students focus on public, mass, online, organizational, group, and interpersonal communication. They develop qualitative and quantitative research skills, conceptual and analytical thinking, and effective oral and written communication.

| Code <br> Fundamentals | Title | Credits |
| :--- | :--- | ---: |
| COM ARTS 260 | Communication and Human <br> Behavior | 3 |
| Core - Part One (1 course) |  |  |
| COM ARTS 360 | Introduction to Rhetoric in Politics <br> and Culture |  |
| COM ARTS 370 | Great Speakers and Speeches |  |
| COM ARTS 372 | Rhetoric of Campaigns and <br> Revolutions |  |
| Core - Part Two (1 course) ${ }^{1}$ |  |  |

$\begin{array}{ll}\text { COM ARTS 273 } & \begin{array}{l}\text { Theory and Practice of } \\ \text { Interpersonal Communication }\end{array}\end{array}$
Theory-History-Criticism (3 courses) 9
COM ARTS 310 Topics in Rhetoric and Communication Science
COM ARTS 317 Rhetoric and Health
COM ARTS 325 Media and Human Behavior
COM ARTS 345 Online Communication and Personal Relationships
COM ARTS 360 Introduction to Rhetoric in Politics and Culture
COM ARTS 361 Introduction to Quantitative Research in Communication
COM ARTS 368 Theory and Practice of Persuasion
COM ARTS 370 Great Speakers and Speeches
COM ARTS 371 Communication and Conflict Resolution
COM ARTS 372 Rhetoric of Campaigns and Revolutions
COM ARTS 373 Intercultural Communication \& Rhetoric

COM ARTS/ The Rhetoric of Religion
RELIG ST 374
COM ARTS 377 Topics in Digital Studies (Communication Science \& Rhetoric)
COM ARTS 378 The Rhetoric of African American Discourse
COM ARTS 402 The Psychology of Communication
COM ARTS 470 Contemporary Political Discourse
COM ARTS 472 Rhetoric and Technology
COM ARTS 476 Nature of Criticism-The Public Arts of Communication
COM ARTS 478 Rhetoric and Power on the Internet
COM ARTS 509 Digital Media and Political Communication
COM ARTS/ Digitally Documenting Everyday
FOLKLORE 522 Communication
COM ARTS 525 Media, Deliberation, and Public Issues
COM ARTS 560 Communication Theory
COM ARTS 562 Theories of Deliberation and Controversy
COM ARTS 565 Communication and Interethnic Behavior
COM ARTS 570 Classical Rhetorical Theory
COM ARTS 571 Contemporary Rhetorical Theory
COM ARTS 573 Rhetoric of Globalization and Transnationalism
COM ARTS 574 Rhetoric of US Immigration and Naturalization
COM ARTS 575 Communication in Complex Organizations
COM ARTS 576 Principles of Rhetorical Criticism
COM ARTS 577 Dynamics of Online Relationships


| COM ARTS 467 | Cinematography and Sound Recording |  |
| :---: | :---: | :---: |
| COM ARTS 468 | Producing for Internet TV and Video |  |
| COM ARTS 540 | Television Genres |  |
| COM ARTS 547 | Digital Game Cultures |  |
| COM ARTS 552 | Contemporary Hollywood Cinema |  |
| COM ARTS 556 | The American Film Industry in the Era of the Studio System |  |
| COM ARTS 557 | Contemporary Media Industries |  |
| COM ARTS/ JOURN 558 | Public, Community, and Alternative Media |  |
| COM ARTS 608 | Special Topics in Media and Cultural Studies |  |
| COM ARTS 609 | Special Topics in Production |  |
| COM ARTS 613 | Special Topics in Film |  |
| COM ARTS 651 | Advanced Video Production and Direction |  |
| COM ARTS/ GERMAN 655 | German Film |  |
| COM ARTS 659 | Advanced Motion Picture Production Workshop |  |
| COM ARTS 662 | Media and Cultural Theory I |  |
| COM ARTS 663 | Media and Cultural Theory II |  |
| COM ARTS 664 | Classical Film Theory |  |
| COM ARTS 665 | Contemporary Film Theory |  |
| Electives |  | 6 |
| Two COM ARTS courses numbered 200-699 ${ }^{2}$ |  |  |
| Total Credits |  | 30 |

1 Can be applied to only one requirement within the major.
2 Excluding COM ARTS 605, COM ARTS 614 and COM ARTS 615.

## COMMUNICATION ARTS: RADIO-TELEVISION-FILM

## REQUIREMENTS

## RADIO-TELEVISION-FILM

This option focuses on the history, theory, criticism, cultural uses, and production practices of television, film, radio, and digital media. While there is no production major, students are required to take a media production course in order to gain a concrete understanding of the possibilities of these media. Emphasis is on critical analysis, creative expression, and an understanding of how media functions in our society.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Fundamentals |  |  |
| COM ARTS 250 | Survey of Contemporary Media |  |
| Radio-TV-Film Core |  | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 351 | Television Industries | $3-4$ |
| Production (1 course) |  |  |


| COM ARTS 465 | Editing and Post-production for <br> Video and Film |
| :--- | :--- |
| COM ARTS 466 | Writing for Television and Film |
| COM ARTS 467 | Cinematography and Sound <br> Recording |
| COM ARTS 659 | Advanced Motion Picture <br> Production Workshop |


| Theory-History-Criticism (3 courses) |  |
| :--- | :--- |
| COM ARTS 300 | Film Comedy |
| COM ARTS 313 | Topics in Film and Media Studies |
| COM ARTS 346 | Critical Internet Studies |
| COM ARTS/ | Race, Ethnicity, and Media |
| CHICLA 347 |  |
| COM ARTS 352 | Film History to 1960 |
| COM ARTS 354 | Film Genres |
| COM ARTS 357 | History of the Animated Film |
| COM ARTS 358 | History of Documentary Film |
| COM ARTS 359 | Sports Media |
| COM ARTS 375 | Ethics of Entertainment Media |
| COM ARTS 376 | Topics in Digital Studies (Radio, |
| COM ARTS 400 | Television, \& Film) |
| COM ARTS/ | Gender, Sexuality, and the Media |
| GEN\&WS 418 |  |
| COM ARTS/ | Latino/as and Media |
| CHICLA 419 |  |

COM ARTS/ Asian Americans and Media ASIAN AM 420
COM ARTS 448 Media and National Identity
COM ARTS 449 Sound Cultures: Podcasting and Music
COM ARTS 450 Cultural History of Broadcasting
COM ARTS 451 Television Criticism
COM ARTS 454 Critical Film Analysis
COM ARTS 455 French Film
COM ARTS 456 Russian and Soviet Film
COM ARTS 458 Global Media Cultures
COM ARTS 459 New Media and Society
COM ARTS/ Italian Film
ITALIAN 460
COM ARTS 461 Global Art Cinema
COM ARTS 462 American Independent Cinema
COM ARTS 463 Avant-Garde Film
COM ARTS 540 Television Genres
COM ARTS 547 Digital Game Cultures
COM ARTS 552 Contemporary Hollywood Cinema
COM ARTS 556 The American Film Industry in the
Era of the Studio System
COM ARTS 557 Contemporary Media Industries
COM ARTS/ Public, Community, and Alternative
JOURN 558 Media
COM ARTS 608 Special Topics in Media and Cultural Studies
COM ARTS 613 Special Topics in Film

| COM ARTS/ | German Film |
| :--- | :--- |
| GERMAN 655 |  |
| COM ARTS 662 | Media and Cultural Theory I |
| COM ARTS 663 | Media and Cultural Theory II |
| COM ARTS 664 | Classical Film Theory |
| COM ARTS 665 | Contemporary Film Theory |

Communication Science and Rhetorical Studies (1 course) 3
COM ARTS 260 Communication and Human Behavior
COM ARTS 262 Theory and Practice of Argumentation and Debate
COM ARTS 263 Speech Composition
COM ARTS 266 Theory and Practice of Group Discussion
COM ARTS 272 Introduction to Interpersonal Communication
or COM ARTS 27Theory and Practice of Interpersonal Communication
COM ARTS 273 Theory and Practice of Interpersonal Communication
COM ARTS 310 Topics in Rhetoric and Communication Science
COM ARTS 317 Rhetoric and Health
COM ARTS 325 Media and Human Behavior
COM ARTS 345 Online Communication and Personal Relationships
COM ARTS 360 Introduction to Rhetoric in Politics and Culture
COM ARTS 361 Introduction to Quantitative Research in Communication
COM ARTS 368 Theory and Practice of Persuasion
COM ARTS 370 Great Speakers and Speeches
COM ARTS 371 Communication and Conflict Resolution
COM ARTS 372 Rhetoric of Campaigns and Revolutions
COM ARTS 373 Intercultural Communication \& Rhetoric
COM ARTS/ The Rhetoric of Religion
RELIG ST 374
COM ARTS 377 Topics in Digital Studies
(Communication Science \&
Rhetoric)
COM ARTS 378 The Rhetoric of African American Discourse
COM ARTS 402 The Psychology of Communication
COM ARTS 410 Miscommunication
COM ARTS 470 Contemporary Political Discourse
COM ARTS 472 Rhetoric and Technology
COM ARTS 476 Nature of Criticism-The Public Arts of Communication
COM ARTS 478 Rhetoric and Power on the Internet
COM ARTS 509 Digital Media and Political
Communication

| COM ARTS/ <br> FOLKLORE 522 | Digitally Documenting Everyday Communication |
| :---: | :---: |
| COM ARTS 525 | Media, Deliberation, and Public Issues |
| COM ARTS 560 | Communication Theory |
| COM ARTS 562 | Theories of Deliberation and Controversy |
| COM ARTS 565 | Communication and Interethnic Behavior |
| COM ARTS 570 | Classical Rhetorical Theory |
| COM ARTS 571 | Contemporary Rhetorical Theory |
| COM ARTS 573 | Rhetoric of Globalization and Transnationalism |
| COM ARTS 574 | Rhetoric of US Immigration and Naturalization |
| COM ARTS 575 | Communication in Complex Organizations |
| COM ARTS 576 | Principles of Rhetorical Criticism |
| COM ARTS 577 | Dynamics of Online Relationships |
| COM ARTS 610 | Special Topics in Rhetoric and Public Address |
| COM ARTS 612 | Special Topics in Communication Science |
| COM ARTS/HDFS/ JOURN 616 | Mass Media and Youth |
| COM ARTS/ JOURN/LSC 617 | Health Communication in the Information Age |
| COM ARTS 667 | History of American Public Address |
| COM ARTS 671 | Communication and Social Conflict |
| COM ARTS 675 | Rhetoric of Women's Social and Political Discourse |
| Electives | 6 |
| Two COM ARTS courses numbered 200-699 ${ }^{2}$ |  |
| Total Credits | 30-31 |
| 2 Excluding COM AR | RTS 605, COM ARTS 614 and COM ARTS 615. |

> COMMUNICATION ARTS: RADIO-TVFILM/COMMUNICATION SCIENCE AND RHETORICAL STUDIES

Admissions to the Communication Arts: Radio-TV-Film/Communication Science and Rhetorical Studies B.S. have been suspended as of fall 2018. If you have any questions, please contact the department (info@commarts.wisc.edu).

## DIGITAL STUDIES, CERTIFICATE

Digital studies at the University of Wisconsin-Madison explores the relationship between communication and digital forms of media by asking four questions:

- How do digital media affect the ways we communicate?
- How do we use digital tools to best communicate with each other?
- What roles do the visual, sound and interactive elements of digital media play and how can we use them?
- How do digital technologies affect the way we access and understand information?

It forges new connections across disciplinary boundaries by addressing distinct yet overlapping areas of intellectual activity:

- Digital information structures-the consideration and assessment of how we use and create digital archives, databases, and other digital information architectures
- Digital media-the consideration of how we consume and assess communication that is mediated by digital technologies such as Internet, mobile, and smart devices including digital video and audio content as well as games and simulations produced both in everyday discourse and by media professionals
- Digital forms-the analysis and assessment of both mechanical and aesthetic elements of design in digital content including visual, audio, interactive and other components
- Digital practices-the acquisition of skills that allow us to create expressive and strategic communication content using digital tools such as digital video and audio equipment as well as software for video and audio editing, Web-design, database and information architecture design, app design, computer simulation, and digital gaming

The digital studies certificate brings together departments from across campus and allows students to choose from over fifty courses to create their own individualized digital curriculum, where students have the opportunity to both produce digital content and critically assess the digital content they encounter.

## HOW TO GET IN

## DECLARING THE DIGITAL STUDIES CERTIFICATE

The certificate is available to students working for a baccalaureate degree in any UW-Madison school or college.

Students must meet with the Digital Studies advisor to declare the certificate. Students can either schedule an appointment or stop in during walk-in hours. After the meeting, students must complete the Declaration Survey emailed to them by the digital studies advisor.

See the Digital Studies Advising (http://digitalstudies.wisc.edu/advising) page for information about meeting with the advisor.

## REQUIREMENTS

To earn a digital studies certificate, students must complete all requirements for a bachelor's degree, requirements of the declared major(s), and graduate from UW-Madison. In addition, students must take all required certificate courses for a letter grade versus pass/fail and the capstone course is grade as credit/no credit.

The certificate requires a minimum of six courses, totaling at least 16 credits. Students must complete one core course, one course from each of the four topics areas, and the capstone course.

Code
Title
Credits
Certificate Requirements
Digital Studies Core Course

| Digital Information Structures Topics Course (I) | $3-4$ |  |
| :--- | ---: | ---: |
| Digital Media Topics Course (M) | $3-4$ |  |
| Digital Forms Topics Course (F) | $3-4$ |  |
| Digital Practices Topics Course (P) | $3-4$ |  |
| COM ARTS 605 $\quad$ Digital Studies Capstone ${ }^{1}$ | 1 |  |
| Total Credits |  | $16-21$ |

## Code <br> Title

Credits

## Residence and Quality of Work

Students must maintain a cumulative GPA of 2.000 for courses counting toward the certificate.

9 credits counting toward the certificate must be in residence.

1 The capstone course cannot be completed until students have completed or are enrolled in their final course toward the certificate.

## COURSE LIST

Below is the list of all courses that count toward the certificate. To see which courses are being offered during a specific term, please visit the Digital Studies website (http://digitalstudies.wisc.edu/courses).

## CORE COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| COM ARTS 200 | Introduction to Digital | 3 |
|  | Communication |  |
| ENGL 178 | Digital Media, Literature, and Culture | 3 |
| JOURN 175 | Media Fluency for the Digital Age | 3 |
| LIS 201 | The Information Society | 4 |

DIGITAL INFORMATION STRUCTURES (I) COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| COM ARTS 345 | Online Communication and Personal Relationships | 3 |
| COM ARTS 472 | Rhetoric and Technology | 3 |
| COM ARTS 478 | Rhetoric and Power on the Internet | 3 |
| COM ARTS/ FOLKLORE 522 | Digitally Documenting Everyday Communication | 3 |
| COM ARTS/JOURN/ LSC 617 | Health Communication in the Information Age | 3 |
| CURRIC 209 | Digital Media and Literacy | 3 |
| GEOG 572 | Graphic Design in Cartography | 3-4 |
| GEOG 575 | Interactive Cartography \& Geovisualization | 4 |
| LIS 202 | Informational Divides and Differences in a Multicultural Society | 3 |
| LIS 301 | Information Literacies in Online Spaces | 3 |
| LIS 340 | Topics in Information Studies Social Aspects | 3 |
| L I S 341 | Topics in Information Studies Technological Aspects | 1-3 |
| LIS 350 | History and Future of Books | 3 |
| LIS 351 | Introduction to Digital Information | 3 |
| LIS 500 | Code and Power | 3 |


| LIS/NURSING/ | Digital Health: Information <br> OCC THER 517 Technologies Supporting | 3 |
| :--- | :--- | :--- |
|  | Consumers and Patients |  |
| LIS 661 | Information Ethics and Policy | 3 |
| LIS/LEGAL ST 663 | Introduction to Cyberlaw | 3 |

## DIGITAL MEDIA (M) COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| COM ARTS 345 | Online Communication and | 3 |
|  | Personal Relationships |  |$\quad 3$

## DIGITAL FORMS (F) COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 107 | Introduction to Digital Forms | 3 |
| ART 428 | Digital Imaging Studio | 4 |
| ART 429 | 3D Digital Studio I | 4 |
| ART 529 | 3D Digital Studio II | 4 |
| ART 629 | 3D Digital Studio III | 4 |
| ART 656 | Design Portfolio and Professional | 4 |
|  | Practice |  |
| ART 660 | Art and Technology | 4 |
| COM ARTS 155 | Introduction to Digital Media | 4 |
|  | Production | 4 |
| COM ARTS 355 | Introduction to Media Production | 4 |
| COM ARTS 465 | Editing and Post-production for | 4 |
|  | Video and Film |  |


| COM ARTS 467 | Cinematography and Sound <br> Recording | 4 |
| :--- | :--- | ---: |
| COM ARTS 468 | Producing for Internet TV and Video |  |
| COM ARTS 651 | Advanced Video Production and <br> Direction | 3 |
| COM ARTS 659 | Advanced Motion Picture <br> Production Workshop | 3 |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG 572 | Graphic Design in Cartography | 4 |
| GEOG 575 |  <br> Geovisualization | $3-4$ |
| JOURN 411 | Multimedia Design | 4 |
| JOURN 417 | Magazine Publishing | 4 |
| JOURN/L S 677 | Concepts and Tools for Data <br> Analysis and Visualization | 4 |
| PSC 332 | Print and Electronic Media Design | 3 |
| LSC 350 | Visualizing Science and Technology | 3 |
| LSC 450 | Documentary Photography for the <br> Sciences <br> LSC 532 | 3 |

DIGITAL PRACTICES (P) COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| ART 107 | Introduction to Digital Forms | 3 |
| ART 309 | Digital Art and Code | 4 |
| ART 409 | Digital Fabrication Studio | 4 |
| ART 428 | Digital Imaging Studio | 4 |
| ART 429 | 3D Digital Studio I | 4 |
| ART 528 | Digital Interactive Studio | 4 |
| ART 529 | 3D Digital Studio II | 4 |
| ART 629 | 3D Digital Studio III | 4 |
| ART 656 | Design Portfolio and Professional Practice | 4 |
| ART 660 | Art and Technology | 4 |
| COM ARTS 155 | Introduction to Digital Media Production | 4 |
| COM ARTS 355 | Introduction to Media Production | 4 |
| COM ARTS 449 | Sound Cultures: Podcasting and Music | 3 |
| COM ARTS 651 | Advanced Video Production and Direction | 3 |
| COM ARTS 465 | Editing and Post-production for Video and Film | 4 |
| COM ARTS 467 | Cinematography and Sound Recording | 4 |
| COM ARTS 468 | Producing for Internet TV and Video | 3 |
| COM ARTS/ FOLKLORE 522 | Digitally Documenting Everyday Communication | 3 |
| COM ARTS 659 | Advanced Motion Picture Production Workshop | 4 |
| COMP SCI 200 | Programming I | 3 |
| COMP SCI 202 | Introduction to Computation | 3 |
| COMP SCI 301 | Introduction to Data Programming | 3 |
| CURRIC 209 | Digital Media and Literacy | 3 |
| ENGL 271 | Writing with New Media | 3 |


| ENGL 571 | Remix, Mashup, and Digital Design | 3 |
| :---: | :---: | :---: |
| GEOG 370 | Introduction to Cartography | 4 |
| JOURN 411 | Multimedia Design | 4 |
| JOURN 417 | Magazine Publishing | 4 |
| JOURN 425 | Video Journalism | 4 |
| JOURN 445 | Creative Campaign Messages | 4 |
| JOURN 449 | Account Planning and Strategy | 4 |
| JOURN 463 | Digital Media Strategies | 4 |
| JOURN 464 | Public Relations Strategies | 4 |
| JOURN 670 | Community Service Learning: Technology for Social Change | 3 |
| L I S 301 | Information Literacies in Online Spaces | 3 |
| L I S 341 | Topics in Information Studies Technological Aspects | 1-3 |
| L I S 351 | Introduction to Digital Information | 3 |
| L I S 500 | Code and Power | 3 |
| LSC 314 | Introduction to Digital Video Production | 3 |
| LSC 332 | Print and Electronic Media Design | 3 |
| LSC 360 | Information Radio | 3 |
| LSC 432 | Social Media for the Life Sciences | 3 |
| LSC 450 | Documentary Photography for the Sciences | 3 |
| LSC 532 | Web Design for the Sciences | 3 |
| LSC 614 | Advanced Video Production | 3 |

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. To understand key theories and concepts related to digital studies and the historical context surrounding the creation of digital technologies.
2. To gain familiarity with methods, concepts and tools needed to research and evaluate information related to digital studies.
3. To think critically about how digital technologies work and their impact on society.
4. To be able to create strategic communication content and selfexpression using digital tools.
5. To understand the professional and ethical principles related to the field of digital studies.

## ADVISING AND CAREERS

## DIGITAL STUDIES ACADEMIC ADVISING

Students who would like to learn more about the certificate, declare, or go over requirements should meet with the digital studies advisor. Advising
is offered via appointments (scheduled through the Scheduling Assistant) or walk-in hours, listed here (http://digitalstudies.wisc.edu/advising).

## CONTACT INFORMATION

Amy Schultz, 6072 Vilas Hall, 608-262-2547,
digitalstudies@commarts.wisc.edu

## CAREER ADVISING

The communication and media career advisor (https:// journalism.wisc.edu/career-services/advising) assists students with career preparation, such as exploring career options, learning internship and job search strategies, and writing resumes and cover letters.

## CONTACT INFORMATION

Pam Garcia-Rivera, 5114 Vilas Hall, 608-890-1046, pgarciariver@wisc.edu

## PEOPLE

## DIGITAL STUDIES EXECUTIVE COMMITTEE

Robert Howard, Professor, Director, Department of Communication Arts Kristin Eschenfelder, Professor, Information School

Stephen Hilyard, Professor, Art Department
Thomas Purnell, Professor, Department of English
Hemant Shah, Professor, School of Journalism and Mass Communication
Michael Xenos, Professor, Department of Communication Arts

## ADVISING

Amy Schultz, Student Services Coordinator

## FACULTY AND INSTRUCTIONAL STAFF

The faculty and instructional staff for the digital studies certificate come from a wide variety of disciplines and regularly teach the courses offered through the certificate program.

## ART DEPARTMENT

Michael Connors, Professor; Stephen Hilyard, Professor; Dennis Miller, Professor; Meg Mitchell, Assistant Professor

## DEPARTMENT OF COMMUNICATION ARTS

Erik Gunneson, Faculty Associate; Robert Howard, Professor; Eric Hoyt, Associate Professor; Derek Johnson, Associate Professor; Jenell Johnson, Associate Professor; Jeremy Morris, Associate Professor; J.J. Murphy, Professor; Catalina Toma, Associate Professor; Michael Xenos, Professor

## DEPARTMENT OF COMPUTER SCIENCES

Gary Dahl, Associate Faculty Associate; Laura Hobbes Legault, Assistant Faculty Associate; Jim Williams, Associate Faculty Associate

## DEPARTMENT OF CURRICULUM AND INSTRUCTION

Erica Halverson, Professor

DEPARTMENT OF ENGLISH

Mark Vareschi, Assistant Professor

## DEPARTMENT OF GEOGRAPHY

Robert Roth, Associate Professor

SCHOOL OF JOURNALISM AND MASS COMMUNICATION
Kathleen Culver, Assistant Professor; Stacy Forster, Faculty Associate; Patricia Hastings, Faculty Associate; Douglas McLeod, Professor; Debra Pierce, Faculty Associate; Christopher Wells, Associate Professor

## INFORMATION SCHOOL

Anuj Desai, Professor; Alan Rubel, Associate Professor; Dorothea Salo, Faculty Associate; Jonathan Senchyne, Assistant Professor; Deb Shapiro, Faculty Associate; Catherine Smith, Associate Professor; Rebekah Willett, Associate Professor

DEPARTMENT OF LIFE SCIENCES COMMUNICATION<br>Sarah Botham, Faculty Associate; Patty Loew, Professor; Larry Meiller, Professor Emeritus; Shiela Reaves, Professor; Donald Stanley, Faculty Associate

## WISCONSIN EXPERIENCE

As an interdisciplinary certificate, students are encouraged to explore courses across disciplines and areas of interest. Once declared, students have access to unique and exciting courses where they not only study digital media, but learn to be savvy users and creators of digital media that they can use in their professional lives. Examples of work that students create include websites, videos, illustrations, posters, podcasts, and more.

Digital studies certificate students also have access to networking and alumni events featuring careers in digital media, internship and job opportunities emailed directly to them, technology resources through the Instructional Media Center (https://commarts.wisc.edu/imc), and design consulting services through DesignLab (https://designlab.wisc.edu). Through advising, students receive tailored recommendations based on their interests and are encouraged to seek out ways to apply the knowledge they are learning in the classroom through involvement in student organizations, volunteering, and internships.

## COMMUNICATION SCIENCES AND DISORDERS

The major in communication sciences and disorders provides students with opportunities for study in the areas of speech-language pathology, audiology, and the normal aspects of speech, hearing, and language. Most students pursue this major because they hope to practice as licensed and/or certified clinicians in educational and medical-alliedhealth settings, assisting clients with communicative impairments arising from disease, trauma, predisposition, maladaptive learning, or unknown causes. Professional clinical practice follows completion of a master's degree in speech-language pathology (http://guide.wisc.edu/graduate/
communication-sciences-disorders/communication-sciences-disordersms ), or a doctor of audiology degree (http://guide.wisc.edu/graduate/ communication-sciences-disorders/audiology-aud), and involves evaluation and treatment based upon a firm theoretical understanding of normal processes of hearing, and of speech and language formulation, production, and perception. Some students pursue the undergraduate major as a foundation for a research career in speech, language or hearing sciences. Others pursue the major as a preliminary step toward advanced training in other professional fields (e.g., law, medicine, nursing, special education).

Students are urged to consult with an undergraduate academic advisor in the department as soon as they have decided to major in this field. Course sequencing in the major is not flexible. Certain courses are prerequisites to others. Many of the courses are offered only once a year. To declare the major, students must earn a grade point average of 3.000 or better for the three courses CS\&D 201 Speech Science, CS\&D 202 Normal Aspects of Hearing, and CS\&D 240 Language Development in Children and Adolescents, the first time these courses are attempted. Prospective majors typically begin taking this three-course "gateway" sequence as sophomores. Major declaration forms may be obtained from an advisor after the gateway criterion has been satisfied, and should be returned to the advisor for processing.

The major in communication sciences and disorders can be completed through the College of Letters \& Science, or through the School of Education (p. 1380). Students select one program to follow, and should be aware that the two programs differ somewhat in their requirements for the major. Moreover, each program (L\&S and Education) has its own general liberal studies requirements involving, for example, sciences, math, foreign language, social studies, and humanities. Students should plan to complete many of these general requirements as well as some courses in communication sciences and disorders during their first and second years on this campus.

The department is accredited in speech-language pathology and in audiology by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA). Therefore, academic courses and clinical practica in the Department of Communication Sciences and Disorders may be applied toward clinical certification by ASHA (speech language pathology or audiology), and toward state licensure.

## DEGREES/MAJORS/CERTIFICATES

- Communication Sciences and Disorders, B.A. (p. 587)
- Communication Sciences and Disorders, B.S. (p. 591)


## PEOPLE

Professors Connor, Ellis Weismer, Fowler, Hustad, Kaushanskaya, Litovsky, Thibeault

Associate Professor Ciucci
Assistant Professors Boothalingam, Parrell, Niziolek, Sterling
Visiting Assistant Professors Easwar, Finney, Rountrey
Clinical Professor Quinn

Clinical Associate Professors Buhr-Lawler, Caul, Cohen, Douglas, Eith, Hartman, Kroll, Krug, Lee, Seidel

Lecturer Johnson

## COMMUNICATION SCIENCES AND DISORDERS, B.A.

The major in communication sciences and disorders provides students with opportunities for study in the areas of speech-language pathology, audiology, and the normal aspects of speech, hearing, and language. Most students pursue this major because they hope to work as a licensed and certified clinical speech-language pathologist or audiologist, assisting clients with communication impairments arising from acquired neurological conditions, developmental conditions, genetic conditions, or unknown causes. Professional clinical practice follows completion of a master's degree in speech-language pathology, or a doctor of audiology degree. Some students pursue the undergraduate major as a foundation for a research career in speech, language or hearing sciences. Others pursue the major as a preliminary step toward advanced training in other professional fields (e.g., medicine, nursing, special education), or as a liberal arts degree that could lead to a variety of different career paths (speech-language pathology assistant, educational assistant, line therapist).

The major in communication sciences and disorders can be completed through the College of Letters \& Science, or through the School of Education. Students select one program to follow, and should be aware that the two programs differ somewhat in their requirements. Moreover, each program (L\&S and Education) has its own general liberal studies requirements. Students should plan to complete many of these general requirements as well as some courses in communication sciences and disorders during their first and second years on this campus.

The department is accredited in speech-language pathology and in audiology by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA). Therefore, academic courses and clinical practica in the Department of Communication Sciences and Disorders may be applied toward clinical certification by ASHA (speech language pathology or audiology), and toward state licensure.

## HOW TO GET IN

Students are urged to consult with an undergraduate academic advisor as soon as they have decided to major in this field. Course sequencing in the major is not flexible. Certain courses are prerequisites to others.

## DECLARING THE MAJOR

To declare a major in CS\&D, send an email to undergrad@csd.wisc.edu:

- State that you would like to declare a major in CS\&D
- Include your full name and student ID number


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b$ ( $Q R B$ ) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR CS\&D COURSES
10 courses and 30 credits from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| CS\&D 201 | Speech Science | 3 |
| CS\&D 202 | Normal Aspects of Hearing | 3 |
| CS\&D 210 | Neural Basis of Communication | 3 |
| CS\&D 240 | Language Development in Children <br> and Adolescents | 3 |
| CS\&D 303 | Speech Acoustics and Perception | 3 |
| CS\&D 315 | Phonetics and Phonological <br> Development | 3 |
| CS\&D 318 | Voice, Craniofacial and Fluency <br> Disorders <br> CS\&D 320 | Introduction to Audiology |


| CS\&D 440 | Child Language Disorders, <br> Assessment and Intervention | 3 |
| :--- | :--- | :--- |

## COURSES IN RELATED AREAS

15 credits and one course from each of the following areas: Psychology

| Code | Title | Credits |
| :---: | :---: | :---: |
| PSYCH 202 | Introduction to Psychology | 3-4 |
| HDFS 363 | Development from Adolescence to Old Age | 3 |
| Statistics |  |  |
| Code | Title | Credits |
| STAT 301 | Introduction to Statistical Methods | 3 |
| STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I | 3 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences | 3 |
| PSYCH 210 | Basic Statistics for Psychology | 3 |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| Linguistics |  |  |
| Code | Title | Credits |
| LINGUIS 101 | Human Language | 3 |
| LINGUIS 103 | Language, History, and Society | 3 |
| LINGUIS/ | Introduction to Linguistics: | 3 |
| ANTHRO 301 | Descriptive and Theoretical |  |
| LINGUIS 303 | Language, History, and Society | 3 |
| ENGL 214 | The English Language | 3 |
| ENGL 314 | Structure of English | 3 |
| ENGL 318 | Second Language Acquisition | 3 |
| LINGUIS 237 | Language \& Immigration in Wisconsin | 3 |
| SPANISH 321 | The Structure of Modern Spanish | 3 |
| SPANISH 331 | Spanish Applied Linguistics | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |


| Ethnic Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ANTHRO 104 | Cultural Anthropology and Human Diversity | 3 |
| ASIAN AM 101 | Introduction to Asian American Studies | 3 |
| ASIAN AM/ <br> AFROAMER/ <br> AMER IND/CHICLA/ FOLKLORE 102 | Introduction to Comparative US Ethnic and American Indian Studies | 3 |
| CHICLA 201 | Introduction to Chicana/o and Latina/o Studies | 3 |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies | 3-4 |
| LIS 202 | Informational Divides and Differences in a Multicultural Society | 3 |


| ASIAN AM/SOC 220 | Ethnic Movements in the United <br> States | $3-4$ |
| :--- | :--- | ---: |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 275 | Science, Medicine, and Race: A <br> History | 3 |
| HISTORY 227 | Explorations in the History of Race <br> and Ethnicity | 3 |
| AMER IND/ | Indians of North America |  |
| ANTHRO 314 | Language, Race, and Identity <br> ENGL 319 | Immigration and Assimilation in <br> American History |
| Problems of American Racial and | 3 |  |
| SOC 134 403 | Ethnic Minorities | $3-4$ |
| SOC/ASIAN AM 220 | Ethnic Movements in the United <br> States | $3-4$ |


| Biological Sciences |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| BOTANY/BIOLOGY/ ZOOLOGY 151 | Introductory Biology | 5 |
| ANTHRO 105 | Principles of Biological Anthropology | 3 |
| ANTHRO/BOTANY/ ZOOLOGY 410 | Evolutionary Biology | 3 |
| BIOCHEM 104 | Molecular Mechanisms, Human Health \& You | 3 |
| BIOCORE 381 | Evolution, Ecology, and Genetics | 3 |
| KINES 235 | Human Physiology and Health | 4 |
| $\begin{aligned} & \text { BIOLOGY/BOTANY/ } \\ & \text { ZOOLOGY } 151 \end{aligned}$ | Introductory Biology | 5 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology | 3 |
| PHYSICS 103 | General Physics | 4 |
| PHYSICS 109 | Physics in the Arts | 3 |

## ELECTIVES

| Code | Title | Credits |
| :--- | :--- | ---: |
| CS\&D 110 | Introduction to Communicative <br> Disorders | 3 |
| CS\&D 371 | Pre-Clinical Observation of Children <br> and Adults | 3 |
| CS\&D 424 | Sign Language I | 2 |
| CS\&D 434 | Sign Language II | 2 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all CS\&D and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in CS\&D, taken on the UW-Madison campus
1 These courses are considered upper level in the major. CS\&D 303, CS\&D 315, CS\&D 318, CS\&D 320, CS\&D 424, CS\&D 425, CS\&D 440, CS\&D 503, CS\&D 699

## Distinction in the Major

Students majoring in communication sciences and disorders who are not Honors candidates may earn Distinction in the Major, provided that they
obtain consent of the department honors advisor, achieve a minimum GPA of 3.750 in CS\&D and major courses, and satisfy these requirements:

| Code | Title | Credits |
| :--- | :--- | :--- |
| Two courses, taken for Honors |  |  |
| CS\&D 303 | Speech Acoustics and Perception |  |
| CS\&D 320 | Introduction to Audiology |  |
| CS\&D 440 | Child Language Disorders, |  |
|  | Assessment and Intervention |  |

Undergraduate Honors Seminar

| CS\&D 481 | Undergraduate Junior Honors |
| :---: | :---: |

## HONORS IN THE MAJOR

Students may declare Honors in the Communication Sciences and Disorders Major in consultation with the undergraduate advisor in that department.

## HONORS IN THE COMMUNICATION SCIENCES AND DISORDERS MAJOR REQUIREMENTS

To earn Honors in the Major in Communications Sciences and Disorders, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.300 in all CS\&D and major courses
- Complete the following courses for Honors earning a grade of $B$ or better in each:

| Code | Title | Credits |
| :--- | :--- | ---: |
| CS\&D 481 | Undergraduate Junior Honors | 3 |
| CS\&D 681 | Senior Honors Thesis | 6 |
| \& CS\&D 682 | and Senior Honors Thesis | 6 |
| 2 of the following for Honors: |  |  |
| CS\&D 303 | Speech Acoustics and Perception |  |
| CS\&D 320 | Introduction to Audiology |  |
| CS\&D 440 | Child Language Disorders, |  |
|  | Assessment and Intervention |  |

Total Credits

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
| UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |  |
| Abroad/Study Away programs. |  |

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Acquire a foundational understanding of basic anatomy and physiology of speech, language, and hearing.
2. Understand integrative neuroscience foundations of speech, language, and hearing.
3. Obtain basic knowledge in statistical sciences, linguistics, biological/ physical sciences, social sciences, and humanities as related to Communication Sciences \& Disorders.
4. Develop an understanding of speech, language, and hearing disorders and the relationship to foundational aspects of speech, language and hearing science.
5. Be prepared for graduate school and/or a career in Communication Sciences \& Disorders and related areas.

## ADVISING AND CAREERS

CS\&D advising services are focused on students who need to declare the major or who have already declared CS\&D and need advising in the major.

A CS\&D advisor can help with:

- Curricular planning and course access
- DARS interpretation
- Declaration of the major for L\&S students
- Documentation of study abroad plans
- Identification, interpretation and application of most academic policies
- Major and degree requirements
- Exploration of interests in independent study and research
- Understanding the differences between paths to the major

Students seeking to pursue graduate study in speech-language pathology or audiology are urged to take CS\&D 371 Pre-Clinical Observation of Children and Adults ( 3 cr ) -to earn ASHA observation hours which are required for graduate school admission. Enrollment in CS\&D 371 is by permission and is restricted to students who have earned a B or better in CS\&D 201 Speech Science, CS\&D 202 Normal Aspects of Hearing, and CS\&D 240 Language Development in Children and Adolescents.

Director of Undergraduate Studies
Ruth Litovsky, Ph.D.
undergrad@csd.wisc.edu
Please visit our website (https://csd.wisc.edu/undergraduate.htm) for details on weekly advising sessions.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Information about faculty and staff can be found on the department's website (https://csd.wisc.edu/peopleofCSD.htm).

## COMMUNICATION SCIENCES AND DISORDERS, B.S.

The major in communication sciences and disorders provides students with opportunities for study in the areas of speech-language pathology, audiology, and the normal aspects of speech, hearing, and language. Most students pursue this major because they hope to work as a licensed and certified clinical speech-language pathologist or audiologist, assisting clients with communication impairments arising from acquired neurological conditions, developmental conditions, genetic conditions, or unknown causes. Professional clinical practice follows completion of a master's degree in speech-language pathology, or a doctor of audiology degree. Some students pursue the undergraduate major as a foundation for a research career in speech, language or hearing sciences. Others pursue the major as a preliminary step toward advanced training in other professional fields (e.g., medicine, nursing, special education), or as a liberal arts degree that could lead to a variety of different career paths (speech-language pathology assistant, educational assistant, line therapist).

The major in communication sciences and disorders can be completed through the College of Letters \& Science, or through the School of Education. Students select one program to follow, and should be aware that the two programs differ somewhat in their requirements. Moreover, each program (L\&S and Education) has its own general liberal studies requirements. Students should plan to complete many of these general requirements as well as some courses in communication sciences and disorders during their first and second years on this campus.

The department is accredited in speech-language pathology and in audiology by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA). Therefore, academic courses and clinical practica in the Department of Communication Sciences and Disorders may be applied toward clinical certification by ASHA (speech language pathology or audiology), and toward state licensure.

## HOW TO GET IN

Students are urged to consult with an undergraduate academic advisor as soon as they have decided to major in this field. Course sequencing in the major is not flexible. Certain courses are prerequisites to others.

## DECLARING THE MAJOR

To declare a major in CS\&D, send an email to undergrad@csd.wisc.edu:

- State that you would like to declare a major in CS\&D
- Include your full name and student ID number


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree
requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, <br> COMP SCI, STAT |
| :--- | :--- |
|  | Limit one each: COMP SCI, STAT |
| Foreign <br> Language | Complete the third unit of a foreign language <br> Note: A unit is one year of high school work or one <br> semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in <br> literature <br> - Social Sciences, 12 credits |
| - Natural Sciences, 12 credits: must include 6 credits |  |
| in biological science; and must include 6 credits in |  |
| physical science |  |


| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| :--- | :--- |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR CS\&D COURSES
10 courses and 30 credits from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| CS\&D 201 | Speech Science | 3 |
| CS\&D 202 | Normal Aspects of Hearing | 3 |
| CS\&D 210 | Neural Basis of Communication | 3 |
| CS\&D 240 | Language Development in Children <br> and Adolescents | 3 |


| CS\&D 303 | Speech Acoustics and Perception | 3 |
| :--- | :--- | :---: |
| CS\&D 315 | Phonetics and Phonological <br> Development | 3 |
| CS\&D 318 | Voice, Craniofacial and Fluency <br> Disorders | 3 |
| CS\&D 320 | Introduction to Audiology | 3 |
| CS\&D 425 | Auditory Rehabilitation | 3 |
| CS\&D 440 | Child Language Disorders,  <br>  Assessment and Intervention | 3 |

Total Credits

## COURSES IN RELATED AREAS

15 credits and one course from each of the following areas:
Psychology

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 202 | Introduction to Psychology | $3-4$ |
| HDFS 363 | Development from Adolescence to | 3 |


| Statistics |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| STAT 301 | Introduction to Statistical Methods | 3 |
| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I | 3 |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences | 3 |
| PSYCH 210 | Basic Statistics for Psychology | 3 |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |

## Linguistics

Code

| LINGUIS 101 | Human Language | 3 |
| :--- | :--- | :--- |
| LINGUIS 103 | Language, History, and Society | 3 |
| LINGUIS/ | Introduction to Linguistics: | 3 |
| ANTHRO 301 | Descriptive and Theoretical |  |
| LINGUIS 303 | Language, History, and Society | 3 |
| ENGL 214 | The English Language | 3 |
| ENGL 314 | Structure of English | 3 |
| ENGL 318 | Second Language Acquisition | 3 |
| LINGUIS 237 | Language \& Immigration in | 3 |
| SPANISH 321 | Wisconsin | 3 |
| SPANISH 331 | The Structure of Modern Spanish | 3 |
| SPANISH 327 | Spanish Applied Linguistics | 3 |

## Ethnic Studies

Code
Title
Credits
ANTHRO 104 Cultural Anthropology and Human 3
Diversity
ASIAN AM 101 Introduction to Asian American 3
Studies
ASIAN AM/ Introduction to Comparative US 3
AFROAMER/ Ethnic and American Indian Studies

FOLKLORE 102

| CHICLA 201 | Introduction to Chicana/o and Latina/o Studies | 3 |
| :---: | :---: | :---: |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies | 3-4 |
| LIS 202 | Informational Divides and Differences in a Multicultural Society | 3 |
| ASIAN AM/SOC 220 | Ethnic Movements in the United States | 3-4 |
| AFROAMER/ HIST SCI/ MED HIST 275 | Science, Medicine, and Race: A History | 3 |
| HISTORY 227 | Explorations in the History of Race and Ethnicity | 3 |
| AMER IND/ <br> ANTHRO 314 | Indians of North America | 3 |
| ENGL 319 | Language, Race, and Identity | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| SOC 134 | Problems of American Racial and Ethnic Minorities | 3-4 |
| SOC/ASIAN AM 220 | Ethnic Movements in the United States | 3-4 |


| Biological Sciences |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| BOTANY/BIOLOGY/ ZOOLOGY 151 | Introductory Biology | 5 |
| ANTHRO 105 | Principles of Biological Anthropology | 3 |
| ANTHRO/BOTANY/ <br> ZOOLOGY 410 | Evolutionary Biology | 3 |
| BIOCHEM 104 | Molecular Mechanisms, Human Health \& You | 3 |
| BIOCORE 381 | Evolution, Ecology, and Genetics | 3 |
| KINES 235 | Human Physiology and Health | 4 |
| biology/Botany/ ZOOLOGY 151 | Introductory Biology | 5 |
| ZOOLOGY/ <br> BIOLOGY 101 | Animal Biology | 3 |
| PHYSICS 103 | General Physics | 4 |
| PHYSICS 109 | Physics in the Arts | 3 |

## ELECTIVES

| Code | Title | Credits |
| :--- | :--- | ---: |
| CS\&D 110 | Introduction to Communicative <br> Disorders | 3 |
| CS\&D 371 | Pre-Clinical Observation of Children <br> and Adults | 3 |
| CS\&D 424 | Sign Language I | 2 |
| CS\&D 434 | Sign Language II | 2 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all CS\&D and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

```
15 credits in CS\&D, taken on the UW-Madison campus
1 These courses are considered upper level in the major. CS\&D 303, CS\&D 315, CS\&D 318, CS\&D 320, CS\&D 424, CS\&D 425, CS\&D 440, CS\&D 503, CS\&D 699
```


## Distinction in the Major

Students majoring in communication sciences and disorders who are not Honors candidates may earn Distinction in the Major, provided that they obtain consent of the department honors advisor, achieve a minimum GPA of 3.750 in CS\&D and major courses, and satisfy these requirements:

## Code Title Credits

## Two courses, taken for Honors

| CS\&D 303 | Speech Acoustics and Perception |
| :--- | :--- |
| CS\&D 320 | Introduction to Audiology |
| CS\&D 440 | Child Language Disorders, |
|  | Assessment and Intervention |

Undergraduate Honors Seminar
CS\&D $481 \quad$ Undergraduate Junior Honors

## HONORS IN THE MAJOR

Students may declare Honors in the Communication Sciences and Disorders Major in consultation with the undergraduate advisor in that department.

## HONORS IN THE COMMUNICATION SCIENCES AND DISORDERS MAJOR REQUIREMENTS

To earn Honors in the Major in Communications Sciences and Disorders, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.300 in all CS\&D and major courses
- Complete the following courses for Honors earning a grade of B or better in each:

| Code | Title | Credits |
| :--- | :--- | ---: |
| CS\&D 481 | Undergraduate Junior Honors | 3 |
| CS\&D 681 | Senior Honors Thesis | 6 |
| \& CS\&D 682 | and Senior Honors Thesis | 6 |
| 2 of the following for Honors: |  |  |
| CS\&D 303 | Speech Acoustics and Perception |  |
| CS\&D 320 | Introduction to Audiology |  |
| CS\&D 440 | Child Language Disorders, <br>  <br>  <br> Assessment and Intervention |  |
| Total Credits |  | 15 |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| grade point average specified by the school, college, or |  |
| academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Acquire a foundational understanding of basic anatomy and physiology of speech, language, and hearing.
2. Understand integrative neuroscience foundations of speech, language, and hearing.
3. Obtain basic knowledge in statistical sciences, linguistics, biological/ physical sciences, social sciences, and humanities as related to Communication Sciences \& Disorders.
4. Develop an understanding of speech, language, and hearing disorders and the relationship to foundational aspects of speech, language and hearing science.
5. Be prepared for graduate school and/or a career in Communication Sciences \& Disorders and related areas.

## ADVISING AND CAREERS

CS\&D advising services are focused on students who need to declare the major or who have already declared CS\&D and need advising in the major.

A CS\&D advisor can help with:

- Curricular planning and course access
- DARS interpretation
- Declaration of the major for L\&S students
- Documentation of study abroad plans
- Identification, interpretation and application of most academic policies
- Major and degree requirements
- Exploration of interests in independent study and research
- Understanding the differences between paths to the major

Students seeking to pursue graduate study in speech-language pathology or audiology are urged to take CS\&D 371 Pre-Clinical Observation of Children and Adults (3 cr) -to earn ASHA observation hours which are required for graduate school admission. Enrollment in CS\&D 371 is by permission and is restricted to students who have earned a B or better in CS\&D 201 Speech Science, CS\&D 202 Normal Aspects of Hearing, and CS\&D 240 Language Development in Children and Adolescents.

Director of Undergraduate Studies

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## L\&S CAREER RESOURCES

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- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Information about faculty and staff can be found on the department's website (https://csd.wisc.edu/peopleofCSD.htm).

> COMPARATIVE LITERATURE AND FOLKLORE STUDIES

## OVERVIEW

The Department of Comparative Literature and Folklore Studies offers a major in comparative literature and a certificate in folklore.

Comparative literature is the study of literatures in their original languages from a transnational, cross-cultural perspective.

Comparative literature students and majors study texts from a range of historical periods, geographical and cultural areas, and literary and artistic movements. They learn to critically pose and respond to fundamental questions about the place of literature in society and in cultural and historical traditions.

Majors are introduced to specific modes of literary analysis as well as to general concepts of "literariness." They explore the interaction of literature with other arts and disciplines as well as with the political, social, and intellectual contexts of literature. In this way, students acquire important intellectual skills in critical comparative reading, thinking, and writing.

The small size of most comparative literature classes allows ample opportunity for the discussion and exchange that are essential to
the development of such skills. Comparative literature classes also offer challenging research and writing projects that can be carried out individually and in small groups.

A major in comparative literature is valuable preparation for a career in a wide range of fields that demand careful analysis, clear writing, the presentation of logical arguments, and the critical assessment of the written and oral opinions of others-law, business, communications, politics and diplomacy, journalism, technical writing, or publishing. It is ideal for students interested in teaching at the secondary level or in pursuing graduate degrees.

The program welcomes students with a diverse range of backgrounds and interests, and with literary reading competence in a language in addition to English. Literary fluency in a language other than English is the basis for work in the comparative literature major.

To declare the major in comparative literature, students must have sophomore standing, have taken at least one 200-level course in the department, have a minimum 3.0 GPA, and have established the foundations of literary fluency in a language other than English.

Prospective majors should meet with the undergraduate advisor to discuss the requirements in advance of declaring the major. Declared majors are strongly encouraged to meet with the undergraduate advisor in planning their courses each semester. Juniors should arrange a meeting early in the spring semester to assess whether they will have met all requirements for graduation.

Folklore is a multidisciplinary field of study concerned with the documentation and analysis of verbal, customary, musical, material, and performance traditions, primarily as they are practiced within cultures, but also as they are revived, modified, even invented by artists, educators, entrepreneurs, activists, communities, and states. The program offers courses on folklore forms, practitioners, performances, theory, methods, and public presentation, with an emphasis on cross-cultural and interdisciplinary approaches. Students interested in folklore as an area of concentration typically major in an arts, humanities, or social science discipline. No formal undergraduate major is offered in folklore, but by planning a course of study with the undergraduate advisor, a student may design an individual major with a folklore concentration. Undergraduate students may also earn a certificate in folklore.

## ADDITIONAL PROGRAM INFORMATION

Courses in Comparative Literature (COMP LIT) fall into four general classes:

Introductory courses (201-299) are based entirely on English-language texts or English translations of foreign language texts. These courses are open to first-year students and restricted to undergraduates.

General courses (300-400) are open to undergraduates. The course texts are in English, but majors and other students who are able to do so are expected to work with one foreign literature in the original language.

More specialized courses (400-699) are open to both undergraduate and (with the exception of the proseminar, COMP LIT 690 ) graduate students. Texts used in these courses typically require the knowledge of at least one foreign language.

Graduate courses (700-999) involve increasing use of foreign literatures both in the classroom and in individual work.

## DEGREES/MAJORS/CERTIFICATES

- Comparative Literature and Folklore Studies, B.A. (p. 595)
- Comparative Literature and Folklore Studies, B.S. (p. 600)
- Folklore, Certificate (p. 605)


## PEOPLE

## FACULTY

Professors Dharwadker, Gilmore (also Landscape Architecture), Layoun, Livorni (also French and Italian), Rosenblum (also Center for Jewish Studies)

Associate Professors Livanos, Statkiewicz
Assistant Professors Fielder, Grunewald (also Legal Studies), Neyrat, Wells

Academic Staff Beatriz Botero

## AFFILIATES

Professors Adler (German, Nordic, and Slavic), Casid (Art History), Garlough (Gender and Women's Studies), Goodkin (French and Italian), Guyer (English), Longinovic (German, Nordic, and Slavic), Kapust (Political Science), Santos (University of Coimbra, Portugal)

Academic Staff: Scott Mellor (German, Nordic, and Slavic), Ruth Olson (Center for the Study of Upper Midwestern Cultures)

## HONORARY AFFILIATES

Professors Brenner (Center for Jewish Studies), Bühnemann (Asian Languages and Cultures), Gross (German, Nordic, and Slavic), Klug (Law)

## COMPARATIVE LITERATURE AND FOLKLORE STUDIES, B.A.

Admissions to the Comparative Literature and Folklore Studies B.A. have been suspended as of summer 2018. If you have any questions, please contact the department (complit@lss.wisc.edu).

## OVERVIEW

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## HOW TO GET IN

Admissions to the Comparative Literature and Folklore Studies B.A. have been suspended as of summer 2018. If you have any questions, please contact the department (complit@lss.wisc.edu).

To declare the major in comparative literature, students must have sophomore standing, have taken at least one 200-level course in the department, have a minimum 3.000 GPA, and have established the foundations of literary fluency in a language other than English.

Prospective majors should meet with the undergraduate advisor to discuss the requirements in advance of declaring the major. Declared majors are strongly encouraged to meet with the undergraduate advisor in planning their courses each semester. Juniors should arrange a meeting early in the spring semester to assess whether they will have met all requirements for graduation.

Students interested in comparative literature and folklore studies should contact the department via email at diane.bollant@wisc.edu (complit@lss.wisc.edu) or by calling 608-262-3059 to schedule an appointment with the undergraduate advisor. Students can also go to the department office, 2402 Sterling Hall at 475 North Charter Street to get general information about the major.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

## General

Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :--- | :--- |
| Language | Complete the third unit of a foreign language and the |
|  | second unit of an additional foreign language |

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major requires a total of 30 credits in Comparative Literature (COMP LIT), plus 9 credits in literature in a single foreign language for a total of 39 credits.

Code Title Credits
Comparative Literature Courses
Two courses (6 credits total) from the following 200-level courses:

| COMP LIT 201 | Introduction to Pre-Modern <br> Literatures/Impact on the Modern <br> World |
| :--- | :--- |
| COMP LIT 202 | Introduction to Modern and <br> Contemporary Literature |
| COMP LIT 203 | Introduction to Cross-Cultural <br> Literary Forms |
| COMP LIT 205 | Intro to Comparative Study of Race <br> \& Ethnicity, In \& Beyond the U.S. |

Two courses (6 credits) from the following literary criticism and theory courses:

| COMP LIT 310 | Introduction to Literary Criticism |
| :--- | :--- |
| COMP LIT 371 | Literary Criticism |
| COMP LIT 475 | Poetics and Literary Theory |

Must also include (3 credits) proseminar:
COMP LIT 690 Proseminar

## Foreign Language

9 credits in literature or culture courses in a single foreign language, with a final grade of $B$ or better in each course. Independent study or literature in translation courses will not count toword this requirement. ${ }^{1}$
Select additional credits at the intermediate or advanced levels (300 level and above) to reach 39 credit minimum for the major:

| COMP LIT 350 | Problems in Comparative Literatures and Cultures |
| :---: | :---: |
| COMP LIT 351 | Lyric |
| COMP LIT 358 | Problems in Transnational Genre and Mode |
| COMP LIT 368 | Literature and Ideas |
| COMP LIT 370 | Comparative Problems in Periods and Movements |
| COMP LIT 375 | Literature and Related Disciplines |
| COMP LIT 379 | Literature and Ethnic Experience |
| COMP LIT 466 | Literature, Media, the Arts |
| COMP LIT 500 | The Comparative In and Beyond Comparative Literature |
| COMP LIT 681 | Senior Honors Thesis |
| COMP LIT 682 | Senior Honors Thesis |
| COMP LIT 691 | Senior Thesis |
| COMP LIT 692 | Senior Thesis |
| COMP LIT 698 | Directed Study |


| COMP LIT 699 | Directed Study |  | GERMAN 632 | A Theme in German Literature | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Foreign language courses with Literature breadth: ${ }^{1}$ |  |  | GREEK 401 | Greek Drama | 3 |
| Code | Title | Credits | GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| GREEK 306 | Intermediate Greek | 3 | GREEK 511 | Hesiod | 3 |
| AFRICAN/ LCA LANG 445 | Readings in Advanced Arabic Texts | 3 | GREEK 512 | Greek Lyric Poets | 3 |
|  |  |  | GREEK 520 | Greek Comedy | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 | GREEK 521 | Greek Tragedy | 3 |
| E ASIAN 321 | First Year Classical Chinese | 4 | GREEK 532 | Thucydides | 3 |
| E ASIAN 322 | First Year Classical Chinese | 4 | GREEK 541 | Plato | 3 |
| E ASIAN 323 | First Year Classical Japanese | 3 | GREEK 551 | Attic Orators | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 | GREEK 560 | Hellenistic Greek | 3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 | GREEK 564 | Plutarch | 3 |
| E ASIAN 353 | Survey of Japanese Literature | 3 | JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 | MOD 301 |  |  |
| E ASIAN 402 | Eighth Semester Chinese | 3 | HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 | HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 | HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 | HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 | HEBR-BIB/ JEWISH 514 | Biblical Texts, Poetry | 3 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 | ITALIAN 321 | Studies in Italian Literature and | 3 |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 | ITALIAN 322 | Culture I <br> Studies in Italian Literature and Culture II | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 | ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 | ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 | ITALIAN/ MEDIEVAL 671 | Il Duecento | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |  |  | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 | LATIN 301 | Republic | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 | LATIN 302 | Latin Literature of the Roman Empire | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 | LATIN 515 | Vergil Latin Poetry | 3 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 | LATIN 520 | Roman Drama Roman Elegy | 3 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 | LATIN 522 | Roman Lyric Poetry Roman Satire | 3 3 |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 | LATIN 524 | Roman Novel | 3 |
|  |  |  | LATIN 539 | Latin Historical Writers | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 | LATIN 549 | Latin Philosophical Writers | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 | LATIN 559 | Latin Oratory | 3 |
| GERMAN 305 | Literatur des 20 . und 21. Jahrhunderts | 3-4 | LATIN/ MEDIEVAL 563 | Mediaeval Latin | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 | LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 | LCA LANG 617 | Thai Poetry | 3 |
| GERMAN 377 | Study Abroad in Dutch Literature | 2-5 | LCA LANG 618 | Thai Prose Literature: The Short | 3 |
| GERMAN 625 | Letterkunde der Lage Landen | 3-4 |  | Story |  |


| PORTUG 221 | Introduction to Luso-Brazilian Literatures | 4 |
| :---: | :---: | :---: |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 421 | Gogol | 3-4 |
| SLAVIC 422 | Dostoevsky | 3-4 |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |

SPANISH/ US Latino Literature 3
CHICLA 467

The Senior Thesis (COMP LIT 691 Senior Thesis-COMP LIT 692 Senior Thesis, for a total of 6 credits) is strongly recommended (though not required) for non-honors majors.

Introduction to Literary Criticism (COMP LIT 310 Introduction to Literary Criticism) is strongly recommended as a bridge between the 200-level courses and the 300- and 400-level courses.

Work in the major must show a degree of continuity. The exact configuration of courses in the major will be determined individually for each student in consultation with the undergraduate advisor.

Majors are strongly encouraged to maintain a GPA of 3.250 for coursework in the major.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all COMP LIT courses and courses counting toward the major
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits, in COMP LIT, taken on campus
1 COMP LIT 300 through COMP LIT 699, that carry the intermediate or advanced designation, are considered upper level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Comparative Literature and Folklore Studies Major in consultation with the undergraduate advisor in the department.

## HONORS IN THE COMPARATIVE LITERATURE AND FOLKLORE STUDIES MAJOR REQUIREMENTS

To earn Honors in the Comparative Literature and Folklore Studies Major, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all COMP LIT courses, and all courses accepted in the major
- Complete 39 total credits in COMP LIT, to include:
- 9 credits of COMP LIT, taken for Honors, at the 300 level or above
- A two-semester Senior Honors Thesis in COMP LIT 681 Senior Honors Thesis and COMP LIT 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Work | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Literary fluency in a language other than English.
2. Comparative understanding of a selected range of literary and cultural texts.
3. Critical intellectual familiarity with concepts and theories of the literary and of the comparative.
4. Ability to engage in the comparative analysis of literary and cultural texts.
5. Critical reading, thinking, writing, and speaking skills to express and communicate the above.

## ADVISING AND CAREERS

Students are encouraged to begin working on their career exploration and preparation soon after arriving on campus. We partner with the SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to their success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

## FACULTY

Professors Dharwadker, Gilmore (also Landscape Architecture), Layoun, Livorni (also French and Italian), Rosenblum (also Center for Jewish Studies)

Associate Professors Livanos, Statkiewicz
Assistant Professors Fielder, Grunewald (also Legal Studies), Neyrat, Wells

## Academic Staff Beatriz Botero

## AFFILIATES

Professors Adler (German, Nordic, and Slavic), Casid (Art History), Garlough (Gender and Women's Studies), Goodkin (French and Italian), Guyer (English), Longinovic (German, Nordic, and Slavic), Kapust (Political Science), Santos (University of Coimbra, Portugal)

Academic Staff: Scott Mellor (German, Nordic, and Slavic), Ruth Olson (Center for the Study of Upper Midwestern Cultures)

## HONORARY AFFILIATES

Professors Brenner (Center for Jewish Studies), Bühnemann (Asian Languages and Cultures), Gross (German, Nordic, and Slavic), Klug (Law)

## COMPARATIVE LITERATURE AND FOLKLORE STUDIES, B.S.

Admissions to the Comparative Literature and Folklore Studies B.S. have been suspended as of summer 2018. If you have any questions, please contact the department (complit@lss.wisc.edu).

## OVERVIEW

The Department of Comparative Literature and Folklore Studies offers a major in comparative literature and a certificate in folklore.

Comparative literature is the study of literatures in their original languages from a transnational, cross-cultural perspective.

Comparative literature students and majors study texts from a range of historical periods, geographical and cultural areas, and literary and artistic movements. They learn to critically pose and respond to fundamental questions about the place of literature in society and in cultural and historical traditions.

Majors are introduced to specific modes of literary analysis as well as to general concepts of "literariness." They explore the interaction of literature with other arts and disciplines as well as with the political, social, and intellectual contexts of literature. In this way, students acquire important intellectual skills in critical comparative reading, thinking, and writing.

The small size of most comparative literature classes allows ample opportunity for the discussion and exchange that are essential to the development of such skills. Comparative literature classes also
offer challenging research and writing projects that can be carried out individually and in small groups.

A major in comparative literature is valuable preparation for a career in a wide range of fields that demand careful analysis, clear writing, the presentation of logical arguments, and the critical assessment of the written and oral opinions of others-law, business, communications, politics and diplomacy, journalism, technical writing, or publishing. It is ideal for students interested in teaching at the secondary level or in pursuing graduate degrees.

The program welcomes students with a diverse range of backgrounds and interests, and with literary reading competence in a language in addition to English. Literary fluency in a language other than English is the basis for work in the comparative literature major.

To declare the major in comparative literature, students must have sophomore standing, have taken at least one 200-level course in the department, have a minimum 3.0 GPA, and have established the foundations of literary fluency in a language other than English.

Prospective majors should meet with the undergraduate advisor to discuss the requirements in advance of declaring the major. Declared majors are strongly encouraged to meet with the undergraduate advisor in planning their courses each semester. Juniors should arrange a meeting early in the spring semester to assess whether they will have met all requirements for graduation.

Folklore is a multidisciplinary field of study concerned with the documentation and analysis of verbal, customary, musical, material, and performance traditions, primarily as they are practiced within cultures, but also as they are revived, modified, even invented by artists, educators, entrepreneurs, activists, communities, and states. The program offers courses on folklore forms, practitioners, performances, theory, methods, and public presentation, with an emphasis on cross-cultural and interdisciplinary approaches. Students interested in folklore as an area of concentration typically major in an arts, humanities, or social science discipline. No formal undergraduate major is offered in folklore, but by planning a course of study with the undergraduate advisor, a student may design an individual major with a folklore concentration. Undergraduate students may also earn a certificate in folklore.

## ADDITIONAL PROGRAM INFORMATION

Courses in Comparative Literature (COMP LIT) fall into four general classes:

Introductory courses (201-299) are based entirely on English-language texts or English translations of foreign language texts. These courses are open to first-year students and restricted to undergraduates.

General courses (300-400) are open to undergraduates. The course texts are in English, but majors and other students who are able to do so are expected to work with one foreign literature in the original language.

More specialized courses (400-699) are open to both undergraduate and (with the exception of the proseminar, COMP LIT 690) graduate students. Texts used in these courses typically require the knowledge of at least one foreign language.

Graduate courses (700-999) involve increasing use of foreign literatures both in the classroom and in individual work.

## HOW TO GET IN

Admissions to the Comparative Literature and Folklore Studies B.S. have been suspended as of summer 2018. If you have any questions, please contact the department (complit@lss.wisc.edu).

To declare the major in comparative literature, students must have sophomore standing, have taken at least one 200-level course in the department, have a minimum 3.000 GPA, and have established the foundations of literary fluency in a language other than English.

Prospective majors should meet with the undergraduate advisor to discuss the requirements in advance of declaring the major. Declared majors are strongly encouraged to meet with the undergraduate advisor in planning their courses each semester. Juniors should arrange a meeting early in the spring semester to assess whether they will have met all requirements for graduation.

Students interested in comparative literature and folklore studies should contact the department via email at diane.bollant@wisc.edu (complit@lss.wisc.edu) or by calling 608-262-3059 to schedule an appointment with the undergraduate advisor. Students can also go to the department office, 2402 Sterling Hall at 475 North Charter Street to get general information about the major.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

 Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major requires a total of 30 credits in Comparative Literature (COMP LIT), plus 9 credits in literature in a single foreign language for a total of 39 credits.

Code Title Credits
Comparative Literature Courses
Two courses (6 credits total) from the following 200-level courses:

| COMP LIT 201 | Introduction to Pre-Modern <br> Literatures/Impact on the Modern <br> World |
| :--- | :--- |
| COMP LIT 202 | Introduction to Modern and <br> Contemporary Literature |
| COMP LIT 203 | Introduction to Cross-Cultural <br> Literary Forms |
| COMP LIT 205 | Intro to Comparative Study of Race <br> \& Ethnicity, In \& Beyond the U.S. |

Two courses ( 6 credits) from the following literary criticism and theory courses:

| COMP LIT 310 | Introduction to Literary Criticism |
| :--- | :--- |
| COMP LIT 371 | Literary Criticism |
| COMP LIT 475 | Poetics and Literary Theory |

Must also include (3 credits) proseminar:

$$
\text { COMP LIT } 690 \quad \text { Proseminar }
$$

## Foreign Language

9 credits in literature or culture courses in a single foreign language, with a final grade of $B$ or better in each course. Independent study or literature in translation courses will not count toword this requirement. ${ }^{1}$
Select additional credits at the intermediate or advanced levels (300 level and above) to reach 39 credit minimum for the major.

| COMP LIT 350 | Problems in Comparative Literatures and Cultures |
| :---: | :---: |
| COMP LIT 351 | Lyric |
| COMP LIT 358 | Problems in Transnational Genre and Mode |
| COMP LIT 368 | Literature and Ideas |
| COMP LIT 370 | Comparative Problems in Periods and Movements |
| COMP LIT 375 | Literature and Related Disciplines |
| COMP LIT 379 | Literature and Ethnic Experience |
| COMP LIT 466 | Literature, Media, the Arts |
| COMP LIT 500 | The Comparative In and Beyond Comparative Literature |
| COMP LIT 681 | Senior Honors Thesis |
| COMP LIT 682 | Senior Honors Thesis |
| COMP LIT 691 | Senior Thesis |
| COMP LIT 692 | Senior Thesis |
| COMP LIT 698 | Directed Study |
| COMP LIT 699 | Directed Study |


| Code | Title | Credits |
| :---: | :---: | :---: |
| GREEK 306 | Intermediate Greek | 3 |
| AFRICAN/ LCA LANG 445 | Readings in Advanced Arabic Texts | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 321 | First Year Classical Chinese | 4 |
| E ASIAN 322 | First Year Classical Chinese | 4 |
| E ASIAN 323 | First Year Classical Japanese | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 353 | Survey of Japanese Literature | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 |
| E ASIAN 402 | Eighth Semester Chinese | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 |
| GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 325 | Topics in Dutch Literature | 3 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 |
| GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| GERMAN 632 | A Theme in German Literature | 3 |
| GREEK 401 | Greek Drama | 3 |


| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| :---: | :---: | :---: |
| GREEK 511 | Hesiod | 3 |
| GREEK 512 | Greek Lyric Poets | 3 |
| GREEK 520 | Greek Comedy | 3 |
| GREEK 521 | Greek Tragedy | 3 |
| GREEK 532 | Thucydides | 3 |
| GREEK 541 | Plato | 3 |
| GREEK 551 | Attic Orators | 3 |
| GREEK 560 | Hellenistic Greek | 3 |
| GREEK 564 | Plutarch | 3 |
| JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry | 3 |
| HEBR-BIB/ JEWISH 514 | Biblical Texts, Poetry | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 671 | II Duecento | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 |
| LATIN 515 | Vergil | 3 |
| LATIN 519 | Latin Poetry | 3 |
| LATIN 520 | Roman Drama | 3 |
| LATIN 521 | Roman Elegy | 3 |
| LATIN 522 | Roman Lyric Poetry | 3 |
| LATIN 523 | Roman Satire | 3 |
| LATIN 524 | Roman Novel | 3 |
| LATIN 539 | Latin Historical Writers | 3 |
| LATIN 549 | Latin Philosophical Writers | 3 |
| LATIN 559 | Latin Oratory | 3 |
| LATIN/ <br> MEDIEVAL 563 | Mediaeval Latin | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| PORTUG 221 | Introduction to Luso-Brazilian Literatures | 4 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |


| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| :---: | :---: | :---: |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 421 | Gogol | 3-4 |
| SLAVIC 422 | Dostoevsky | 3-4 |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH/ <br> CHICLA 467 | US Latino Literature | 3 |

The Senior Thesis (COMP LIT 691 Senior Thesis-COMP LIT 692 Senior Thesis, for a total of 6 credits) is strongly recommended (though not required) for non-honors majors.

Introduction to Literary Criticism (COMP LIT 310 Introduction to Literary Criticism) is strongly recommended as a bridge between the 200-level courses and the 300 - and 400 -level courses.

Work in the major must show a degree of continuity. The exact configuration of courses in the major will be determined individually for each student in consultation with the undergraduate advisor.

Majors are strongly encouraged to maintain a GPA of 3.250 for coursework in the major.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all COMP LIT courses and courses counting toward the major
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits, in COMP LIT, taken on campus
1 COMP LIT 300 through COMP LIT 699, that carry the intermediate or advanced designation, are considered upper level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Comparative Literature and Folklore Studies Major in consultation with the undergraduate advisor in the department.

## HONORS IN THE COMPARATIVE LITERATURE AND FOLKLORE STUDIES MAJOR REQUIREMENTS

To earn Honors in the Comparative Literature and Folklore Studies Major, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all COMP LIT courses, and all courses accepted in the major
- Complete 39 total credits in COMP LIT, to include:
- 9 credits of COMP LIT, taken for Honors, at the 300 level or above
- A two-semester Senior Honors Thesis in COMP LIT 681 Senior Honors Thesis and COMP LIT 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Literary fluency in a language other than English.
2. Comparative understanding of a selected range of literary and cultural texts.
3. Critical intellectual familiarity with concepts and theories of the literary and of the comparative.
4. Ability to engage in the comparative analysis of literary and cultural texts.
5. Critical reading, thinking, writing, and speaking skills to express and communicate the above.

## ADVISING AND CAREERS

Students are encouraged to begin working on their career exploration and preparation soon after arriving on campus. We partner with the SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to their success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

Professors Dharwadker, Gilmore (also Landscape Architecture), Layoun, Livorni (also French and Italian), Rosenblum (also Center for Jewish Studies)

Associate Professors Livanos, Statkiewicz
Assistant Professors Fielder, Grunewald (also Legal Studies), Neyrat, Wells

Academic Staff Beatriz Botero

## AFFILIATES

Professors Adler (German, Nordic, and Slavic), Casid (Art History), Garlough (Gender and Women's Studies), Goodkin (French and Italian), Guyer (English), Longinovic (German, Nordic, and Slavic), Kapust (Political Science), Santos (University of Coimbra, Portugal)

Academic Staff: Scott Mellor (German, Nordic, and Slavic), Ruth Olson (Center for the Study of Upper Midwestern Cultures)

## HONORARY AFFILIATES

Professors Brenner (Center for Jewish Studies), Bühnemann (Asian Languages and Cultures), Gross (German, Nordic, and Slavic), Klug (Law)

## FOLKLORE, CERTIFICATE

Admissions to the Folklore Certificate have been suspended as of summer 2018. If you have any questions, please contact the department (complit@lss.wisc.edu).

Students currently enrolled in the program will be supported and will be able to complete the program; however, no new students will be allowed to enroll in the program until further notice.

The certificate in folklore is available to students working for a baccalaureate degree in any UW-Madison school or college, and to Special students. The purpose of the certificate is to acquaint students with the nature of folklore, its study, its public presentation, and its relations to a range of human experiences, intellectual currents, and professional endeavors.

## HOW TO GET IN

Admissions to the Folklore Certificate have been suspended as of summer 2018. If you have any questions, please contact the department (complit@lss.wisc.edu).

Students interested in pursuing a certificate in folklore studies should contact the undergraduate advisor (Dr. Beatriz Botero (http:// clfs.wisc.edu/people/faculty)) at their earliest convenience.

## REQUIREMENTS

## REQUIREMENTS FOR THE FOLKLORE CERTIFICATE

At least three courses must be at the 300 level or above. Directed Study (FOLKLORE 399 Directed Study in Folklore for Undergraduates) may be used to satisfy one cluster requirement, but only with the approval of the certificate advisor and the director of the certificate program. Certificate seekers are urged to consult the undergraduate advisor at the earliest possible opportunity.

Select 15 credits, including at least one course from each of the following four clusters:

## INTRODUCTIONS TO THE FIELD:

| Code | Title | Credits |
| :--- | :--- | ---: |
| FOLKLORE 100 | Introduction to Folklore | 3 |
| FOLKLORE 230 | Introduction to American Folklore | 3 |

## GENRES OF FOLKLORE:

| Code | Title | Credits |
| :--- | :--- | ---: |
| FOLKLORE/ | Introduction to Music Cultures of |  |
| MUSIC 103 | the World | 2 |
| FOLKLORE/ <br> ANTHRO/INTL ST/ <br> LINGUIS 211 | Global Language Issues | 4 |
| FOLKLORE 220 | The Folk Tale | 3 |
| FOLKLORE/ | Shamanism | 3 |
| RELIG ST 352 | Myth | 3 |
| FOLKLORE/ | Foodways | 3 |
| RELIG ST 359 | The Supernatural in the Modern | 3 |
| FOLKLORE 439 | World | 3 |
| FOLKLORE 451 | Folk Epics | 3 |
| FOLKLORE 460 | The Folklore of Festivals and | 3 |
| FOLKLORE/ | Celebrations | 3 |
| ANTHRO/MUSIC/ |  | 3 |
| THEATRE 539 | Comparative World Dress | 3 |

## FOLKLORE AND CULTURAL AREAS:

| Code | Title | Credits |
| :--- | :--- | ---: |
| FOLKLORE/ | Introduction to Comparative US |  |
| AFROAMER/ | Ethnic and American Indian Studies | 3 |
| AMER IND/ <br> ASIAN AM/ <br> CHICLA 102 |  |  |
| FOLKLORE/ | The African Storyteller | 3 |
| AFRICAN 210 | The Hero and Trickster in African | 3 |
| FOLKLORE/ | Oral Traditions |  |
| AFRICAN 270 | Introduction to Turkish Folk |  |
| FOLKLORE/LCA 279 | Literature | 3 |
| FOLKLORE 320 | Folklore of Wisconsin | 3 |


| FOLKLORE/ LITTRANS/ MEDIEVAL/ RELIG ST 342 | In Translation: Mythology of Scandinavia | 3-4 |
| :---: | :---: | :---: |
| FOLKLORE/ <br> LITTRANS/ <br> MEDIEVAL 345 | In Translation: The Scandinavian Tale and Ballad | 3-4 |
| FOLKLORE/ <br> LITTRANS/ MEDIEVAL 346 | In Translation: The Icelandic Sagas | 3-4 |
| FOLKLORE/ <br> LITTRANS 347 | In Translation: Kalevala and Finnish Folk-Lore | 3-4 |
| FOLKLORE/LCA 374 | Indian Folklore | 3 |
| FOLKLORE/ MUSIC 401 | Musical Cultures of the World | 3 |
| FOLKLORE/ MUSIC 402 | Musical Cultures of the World | 3 |
| FOLKLORE/ MUSIC 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| FOLKLORE/ AMER IND/ ANTHRO 431 | American Indian Folklore | 3 |
| FOLKLORE/ <br> AMER IND/ANTHRO/ GEN\&WS 437 | American Indian Women | 3 |
| FOLKLORE/ SCAND ST 440 | Scandinavian American Folklore | 3 |
| FOLKLORE/ SCAND ST 443 | Sami Culture, Yesterday and Today | 4 |
| FOLKLORE/ SLAVIC 444 | Slavic and East European Folklore | 3 |
| FOLKLORE/ MEDIEVAL/ SCAND ST 446 | Celtic-Scandinavian Cultural Interrelations | 3 |
| FOLKLORE 517 | The Irish Tradition | 3 |
| FOLKLORE 518 | The Scottish Tradition | 3 |
| FOLKLORE/ MUSIC 535 | American Folk and Vernacular Music | 3 |
| FOLKLORE 540 | Local Culture and Identity in the Upper Midwest | 3 |
| FOLKLORE 630 | Seminar on American Folklore | 3 |
| FOLKLORE/DS 640 | Topics in Ethnographic Textiles | 3 |

ISSUES, THEORIES, METHODS:

| Code | Title | Credits |
| :--- | :--- | ---: |
| FOLKLORE/ | Anthropological Approaches to | 3 |
| ANTHRO 344 | Folklore | 3 |
| FOLKLORE/ | Gender and Expressive Culture |  |
| GEN\&WS 428 | Women and Politics in Popular | 3 |
| FOLKLORE/ | Culture and Folklore |  |
| GEN\&WS 467 | Oral Traditions and the Written <br> FOLKLORE/ | Word |
| AFRICAN 471 Field Methods and the Public <br> FOLKLORE/L I S 490  <br> FOLKLORE 491 Practicum in Public Folklore |  |  |
| FOLKLORE 510 | Folklore Theory | 3 |


| FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| :---: | :---: | :---: |
| FOLKLORE/ MUSIC 515 | Proseminar in Ethnomusicology | 3 |
| FOLKLORE/ <br> ANTHRO 520 | Ethnic Representations in Wisconsin | 4 |
| FOLKLORE/ COM ARTS 522 | Digitally Documenting Everyday Communication | 3 |
| FOLKLORE 530 | Topics in Folklore | 1-3 |
| FOLKLORE 560 | Folklore in a Digital Age | 3 |
| FOLKLORE/ <br> ANTHRO 639 | Field School: Ethnography of Wisconsin Festivals | 6-8 |

## RESIDENCE AND QUALITY OF WORK

8 certificate credits taken in residence
2.000 GPA in all courses eligible for the certificate

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. Identify and describe the range and variety of topics folklorists investigate and the professional contexts in which folklorists work.
2. Examine a specific genre of folklore, and differentiate the modes of study folklorists have developed for understanding that genre.
3. Demonstrate familiarity with folklore within one cultural area.
4. Define the theories and methods folklorists address or employ in their work.

## PEOPLE

## FACULTY

Professors Dharwadker, Gilmore (also Landscape Architecture), Layoun, Livorni (also French and Italian), Rosenblum (also Center for Jewish Studies)

Associate Professors Livanos, Statkiewicz
Assistant Professors Fielder, Grunewald (also Legal Studies), Neyrat, Wells

Academic Staff Beatriz Botero

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## HONORARY AFFILIATES

Professors Brenner (Center for Jewish Studies), Bühnemann (Asian Languages and Cultures), Gross (German, Nordic, and Slavic), Klug (Law)

## COMPUTER SCIENCES

Our graduates discover that computer science (CS) opens up a world of possibilities.

Computer scientists enjoy exceptional career opportunities, in settings ranging from large, established companies to adventurous new startups. They are also well qualified to pursue graduate study in a number of fields.

Our students are creative, analytical problem-solvers. This is a rich, collaborative and varied field that you will find challenging, no matter where your individual interests lie.

And there is more to CS than programming. While software engineering is an important skill, computer scientists also work with robots and other physical devices, design hardware that runs faster and more efficiently, and apply machine learning techniques to gain insight from large data sets-to name just a few examples.

Because CS has become highly interconnected with medicine, business and many other fields, it is a great fit with other interests you may have. You will enjoy a strong career outlook while having an impact on society.

## DEGREES/MAJORS/CERTIFICATES

- Computer Sciences, B.A. (p. 607)
- Computer Sciences, B.S. (p. 612)
- Computer Sciences, Certificate (p. 617)


## PEOPLE

Professors A. Arpaci-Dusseau, R. Arpaci-Dusseau, Bach, Barford, Banerjee, Cai, Doan, Dyer, Ferris, Gleicher, Hill, Jha, Livny, Miller, Patel, Reps, Ron, Shavlik, Sohi, van Melkebeek, Wood, Wright, Zhu

Associate Professors Akella, Chawla, Liblit, Mutlu, Sankaralingam, Swift
Assistant Professors Albarghouthi, D'Antoni, Gupta, Koutris, Sifakis
Faculty Associates Dahl, Deppeler, Hasti, Legault, Lewis-Williams, Skrentny, Williams

## COMPUTER SCIENCES, B.A.

Our graduates discover that computer science (CS) opens up a world of possibilities.

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## HOW TO GET IN

## DECLARATION REQUIREMENTS

To declare the computer sciences major, students must complete one COMP SCI course at UW-Madison and achieve a grade of $C$ or better in that course. The course must be worth 2 or more credits.

Information on declaring the major is available on the Department of Computer Sciences advising pages (https://www.cs.wisc.edu/advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)


# - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work) 

## REQUIREMENTS FOR THE MAJOR

| REQUIRED COURSEWORK |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| No course may be used to satisfy more than one requirement in the computer sciences major. |  |  |
| Courses taken on a pass/fail basis will not count toward any major requirements. |  |  |
| BASIC COMPUTER SCIENCES |  |  |
| Code | Title | Credits |
| Complete all of th | llowing courses: | 14 |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { MATH } 240 \end{aligned}$ | Introduction to Discrete Mathematics |  |
| COMP SCI/ <br> ECE 252 | Introduction to Computer Engineering |  |
| COMP SCI 300 | Programming II |  |
| COMP SCI/ <br> ECE 354 | Machine Organization and Programming |  |
| COMP SCI 400 | Programming III |  |

## BASIC CALCULUS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following options: |  | 9-14 |
| MATH 221 \& MATH 222 | Calculus and Analytic Geometry 1 and Calculus and Analytic Geometry 2 |  |
| MATH 171 <br> \& MATH 217 <br> \& MATH 222 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II and Calculus and Analytic Geometry 2 |  |
| MATH 275 \& MATH 276 | Topics in Calculus I and Topics in Calculus II |  |

## ADDITIONAL MATHEMATICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select two from the following: | $6-10$ |  |
| MATH 340 | Elementary Matrix and Linear <br>  <br> Algebra (recommended) |  |
| STAT 324 | Introductory Applied Statistics for <br>  <br> COMP SCI 412 | Ingineers (recommended) <br> 2 |

COMP SCI/ECE/ Introduction to Cryptography MATH 435
COMP SCI/ Numerical Linear Algebra
MATH 513
COMP SCI/ Numerical Analysis

MATH 514

| COMP SCI/I SY E/ |
| :--- | :--- |
| MATH/STAT 525 | Linear Programming Methods

MATH 375 may not be combined with MATH 234 Calculus--Functions of Several Variables, MATH 320 Linear Algebra and Differential Equations, or MATH 340 Elementary Matrix and Linear Algebra. The math department may have additional restrictions on giving credit to certain pairs of math courses.

## ADVANCED COMPUTER SCIENCES

## Code

Title
Credits
Some of the advanced COMP SCI courses listed below have prerequisites not specifically required for the major. It is recommended that students plan ahead to ensure prerequisites are completed in advance of their selected coursework.

| THEORY <br> Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following courses: |  | 3 |
| COMP SCI 577 | Introduction to Algorithms (recommended) |  |
| COMP SCI 520 | Introduction to Theory of Computing |  |
| SOFTWARE/HARDWARE |  |  |
| Code | Title | Credits |
| Select two of the following courses: |  | 6-8 |
| COMP SCI 407 | Foundations of Mobile Systems and Applications |  |
| COMP SCI/ <br> ECE 506 | Software Engineering |  |
| COMP SCI 536 | Introduction to Programming Languages and Compilers ${ }^{1}$ |  |
| COMP SCI 537 | Introduction to Operating Systems |  |
| COMP SCI 538 | Introduction to the Theory and Design of Programming Languages 1 |  |
| COMP SCI/ <br> ECE 552 | Introduction to Computer Architecture |  |
| COMP SCI 564 | Database Management Systems: Design and Implementation |  |
| COMP SCI 640 | Introduction to Computer Networks |  |
| COMP SCI 642 | Introduction to Information Security |  |
| 1 COMP SCI 536 Introduction to Programming Languages and Compilers may not be combined with COMP SCI 538 Introduction to the Theory and Design of Programming Languages. |  |  |
| APPLICATIONS |  |  |
| Select one of the following courses: |  |  |
| COMP SCI 412 | Introduction to Numerical Methods 1 |  |
| COMP SCI/I SYE/ <br> MATH 425 | Introduction to Combinatorial Optimization |  |
| COMP SCI/ <br> MATH 513 | Numerical Linear Algebra |  |
| COMP SCI/ <br> MATH 514 | Numerical Analysis |  |
| COMP SCI/E C E/ <br> ISYE 524 | Introduction to Optimization |  |
| COMP SCI/I SYE/ <br> MATH/STAT 525 | Linear Programming Methods |  |
| COMP SCI 534 | Computational Photography |  |
| COMP SCI 540 | Introduction to Artificial Intelligence |  |
| COMP SCI 545 | Natural Language and Computing |  |
| COMP SCI 547 | Computer Systems Modeling Fundamentals |  |
| COMP SCI 559 | Computer Graphics |  |
| COMP SCI 570 | Introduction to Human-Computer Interaction |  |

1 COMP SCI 412 Introduction to Numerical Methods is used to satisfy
the "Additional Mathematics" requirement, it cannot satisfy the "Applications" requirement.

## COMPUTER SCIENCES ELECTIVES

Code Title Credits

Select two of the following courses:
COMP SCI 407 Foundations of Mobile Systems and Applications
COMP SCI 412 Introduction to Numerical Methods
COMP SCI/I SY E/ Introduction to Combinatorial MATH 425 Optimization
COMP SCI/E C E/ Introduction to Cryptography MATH 435
COMP SCI/ Introduction to Computational STAT 471 Statistics
COMP SCI/MATH/ Introduction to Combinatorics
STAT 475
COMP SCI/ Software Engineering
ECE 506
COMP SCI/ Numerical Linear Algebra
MATH 513
COMP SCI/ Numerical Analysis
MATH 514
COMP SCI 520 Introduction to Theory of
Computing
COMP SCI/E C E/ Introduction to Optimization
I SYE 524
COMP SCI/I SY E/ Linear Programming Methods
MATH/STAT 525
COMP SCI/ Advanced Linear Programming
ISYE 526
COMP SCI/E C E/ Matrix Methods in Machine
ME 532 Learning
COMP SCI/ Image Processing
ECE 533
COMP SCI 534 Computational Photography
COMP SCI 536 Introduction to Programming Languages and Compilers
COMP SCI 537 Introduction to Operating Systems
COMP SCI 538 Introduction to the Theory and Design of Programming Languages
COMP SCI/E C E/ Introduction to Artificial Neural
M E $539 \quad$ Network and Fuzzy Systems
COMP SCI 540 Introduction to Artificial Intelligence
COMP SCI 545 Natural Language and Computing
COMP SCI 547 Computer Systems Modeling
Fundamentals
COMP SCI/ Introduction to Computer
ECE 552 Architecture
COMP SCI/I SY E/ Introduction to Computational
ME 558 Geometry
COMP SCI 559 Computer Graphics
COMP SCI 564 Database Management Systems:
Design and Implementation

| COMP SCI/ | Medical Image Analysis |
| :--- | :--- |
| B M I 567 |  |
| COMP SCI 570 | Introduction to Human-Computer <br> Interaction |
| COMP SCI/ <br> B M I 576 | Introduction to Bioinformatics |
| COMP SCI 577 | Introduction to Algorithms |
| COMP SCI/ <br> DS 579 | Virtual Reality |
| COMP SCI/ <br> I SY E 635 | Tools and Environments for <br> Optimization |
| COMP SCI 640 | Introduction to Computer Networks |
| COMP SCI 642 | Introduction to Information Security |
| COMP SCI 679 | Computer Game Technology |
| COMP SCI 639 | Undergraduate Elective Topics in <br> Computing |

## RESIDENCE AND QUALITY OF WORK: <br> 2.000 GPA in all COMP SCI courses and courses counting toward the major

2.000 GPA on 15 upper-level credits, taken in residence ${ }^{1}$

15 credits in COMP SCI, taken on campus
1 COMP SCI courses numbered 400 and higher count as upper level.

## DISTINCTION IN THE MAJOR:

## Code

Title
Credits
Distinction in the major is awarded automatically upon graduation to computer sciences majors who meet the qualifications below.

## QUALIFICATIONS FOR DISTINCTION IN THE COMPUTER SCIENCES MAJOR

Code Title Credits
3.750 GPA in all COMP SCI courses and courses counting
toward the major

## OR

3.500 GPA in all COMP SCI courses and courses counting
toward the major, plus completion of one of the following:
-Completion of COMP SCI 691 \& COMP SCI 692 for at least 6 credits, or
-One COMP SCI course, at the 500 level or above, and counted towards the major, must be taken for honors credit and completed with a grade of " B " or better

## HONORS IN THE MAJOR

Students may declare Honors in the Computer Sciences Major in consultation with the Computer Sciences undergraduate coordinator(s).

## HONORS IN THE MAJOR IN COMPUTER SCIENCES: REQUIREMENTS

To earn Honors in the Major in Computer Sciences, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all COMP SCI courses, and all courses accepted in the major
- Complete the following coursework, earning a B or better in each individual course:
- One COMP SCI course, at the 500 level or above, taken for Honors credit, which counts toward the computer sciences major
- A two-semester Senior Honors Thesis in COMP SCI 681 Senior Honors Thesis and COMP SCI 682 Senior Honors Thesis, for a total of 6 credits. ${ }^{1}$

1 The thesis proposal must be approved by both the thesis/project advisor and the department undergraduate coordinator before enrollment in COMP SCI 681. A final thesis or project must be filed with the Department of Computer Sciences before a final grade for COMP SCI 682 can be awarded.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college |
| :--- | :--- |
| or department advisor for information on specific credit |  |
| requirements. |  |

## LEARNING OUTCOMES

1. Recognize and apply the core principles of Computing (abstractions and algorithms) to solve real-world problems.
2. Describe and apply the theoretical foundations of Computer Science (e.g., complexity analysis) in practical settings.
3. Demonstrate knowledge of key elements of computer systems, e.g., hardware, operating systems, networks.
4. Use fundamental and detailed knowledge, skills, and tools (e.g., specific algorithms, techniques methods, etc.) of computer science and develop the ability to acquire new knowledge, skills, and tools.
5. Design, implement, and evaluate software in multiple programming paradigms and languages.
6. Develop a substantial piece of software, and recognize the challenges of designing and developing software.
7. Exhibit technical (designing, implementing, and testing) and teamwork (communication, collaboration, and professional practice) skills in order to develop solutions as a computer science practitioner.
8. Can solve problems by applying a broad toolbox of knowledge and techniques.

## ADVISING AND CAREERS

## ADVISING

The undergraduate coordinators in the Department of Computer Sciences are ready to help students with questions about the major, L\&S degree requirements and policy, and course selection. Information on academic advising for students interested or declared in the computer sciences major is posted to the Computer Sciences advising page (https:// www.cs.wisc.edu/advisors).

## CAREERS

Demand for those with a computer sciences education is exceptionally strong. According to figures from the U.S. Bureau of Labor Statistics, the vast majority of growth in STEM (science, technology, engineering, and math) occupations through 2020 will occur within computing fields.

Computer sciences majors are encouraged to begin working on their career exploration and preparation soon after arriving on campus to explore different career paths, participate in co-ops or summer internships, prepare for the job search and/or graduate school applications, and network with professionals in the field.

Department of Computer Sciences: the department hosts one major career fair (https://www.cs.wisc.edu/connect/job-fair) per year, in the fall, as well as other opportunities to connect with employers, such as technical talks and information sessions.

SucessWorks at the College of Letters \& Science: SuccessWorks offers two major career fairs per year, assists with resume writing and interviewing skills, and offers individual career advising appointments for L\&S students.

Engineering Career Services (ECS): ECS (https://ecs.engr.wisc.edu/ public) offers two major career fairs per year, assists with resume writing and interviewing skills, and hosts workshops on the job search.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information,
see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors A. Arpaci-Dusseau, R. Arpaci-Dusseau, Bach, Barford, Banerjee, Cai, Doan, Dyer, Ferris, Gleicher, Hill, Jha, Livny, Miller, Patel, Reps, Ron, Shavlik, Sohi, van Melkebeek, Wood, Wright, Zhu

Associate Professors Akella, Chawla, Liblit, Mutlu, Sankaralingam, Swift
Assistant Professors Albarghouthi, D'Antoni, Gupta, Koutris, Sifakis
Faculty Associates Dahl, Deppeler, Hasti, Legault, Lewis-Williams, Skrentny, Williams

## RESOURCES AND SCHOLARSHIPS

Visit Scholarships@UW-Madison (https://scholarships.wisc.edu/ Scholarships) to find UW-Madison scholarships and apply online.

Visit the scholarships page (https://www.cs.wisc.edu/academics/ scholarships) on the Department of Computer Sciences website for a compendium of opportunities available to students studying computer sciences.

## COMPUTER SCIENCES, B.S.

Our graduates discover that computer science (CS) opens up a world of possibilities.

Computer scientists enjoy exceptional career opportunities, in settings ranging from large, established companies to adventurous new startups. They are also well qualified to pursue graduate study in a number of fields.

Our students are creative, analytical problem-solvers. This is a rich, collaborative and varied field that you will find challenging, no matter where your individual interests lie.

And there is more to CS than programming. While software engineering is an important skill, computer scientists also work with robots and other physical devices, design hardware that runs faster and more efficiently, and apply machine learning techniques to gain insight from large data sets-to name just a few examples.

Because CS has become highly interconnected with medicine, business and many other fields, it is a great fit with other interests you may have. You will enjoy a strong career outlook while having an impact on society.

## HOW TO GET IN

## DECLARATION REQUIREMENTS

To declare the computer sciences major, students must complete one COMP SCI course at UW-Madison and achieve a grade of $C$ or better in that course. The course must be worth 2 or more credits.

Information on declaring the major is available on the Department of Computer Sciences advising pages (https://www.cs.wisc.edu/advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits and Science Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

## REQUIRED COURSEWORK

Code Title Credits

No course may be used to satisfy more than one
requirement in the computer sciences major.
Courses taken on a pass/fail basis will not count toward any major requirements.

## BASIC COMPUTER SCIENCES

| Code | Title | Credits |
| :--- | :--- | ---: |
| Complete all of the following courses: | 14 |  |
| COMP SCI/ | Introduction to Discrete |  |
| MATH 240 | Mathematics |  |
| COMP SCI/ | Introduction to Computer |  |
| E C E 252 | Engineering |  |
| COMP SCI 300 | Programming II |  |
| COMP SCI/ | Machine Organization and |  |
| E C E 354 | Programming |  |
| COMP SCI 400 | Programming III |  |

BASIC CALCULUS

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Select one of the following options: | $9-14$ |


| MATH 221 | Calculus and Analytic Geometry 1 |
| :--- | :--- |
| \& MATH 222 | and Calculus and Analytic Geometry <br> 2 |
| MATH 171 | Calculus with Algebra and |
| \& MATH 217 | Trigonometry I <br> \& MATH 222 |
|  | and Calculus with Algebra and <br> Trigonometry II <br> and Calculus and Analytic Geometry <br> 2 |
| MATH 275 | Topics in Calculus I |
| \& MATH 276 | and Topics in Calculus II |

## ADDITIONAL MATHEMATICS

| Code | Title |  |
| :---: | :---: | :---: |
| Select two from the following: |  | 6-10 |
| MATH 340 | Elementary Matrix and Linear Algebra (recommended) ${ }^{1}$ |  |
| STAT 324 | Introductory Applied Statistics for Engineers (recommended) |  |
| COMP SCI 412 | Introduction to Numerical Methods 2 |  |
| COMP SCI/E C E/ <br> MATH 435 | Introduction to Cryptography |  |
| COMP SCI/ MATH 513 | Numerical Linear Algebra |  |
| COMP SCI/ <br> MATH 514 | Numerical Analysis |  |
| COMP SCI/I SY E/ MATH/STAT 525 | Linear Programming Methods |  |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { ISY E } 526 \end{aligned}$ | Advanced Linear Programming |  |
| MATH 234 | Calculus--Functions of Several Variables ${ }^{1}$ |  |
| MATH 319 | Techniques in Ordinary Differential Equations |  |
| MATH 320 | Linear Algebra and Differential Equations ${ }^{1}$ |  |
| MATH 321 | Applied Mathematical Analysis |  |
| MATH 322 | Applied Mathematical Analysis |  |
| MATH 331 | An Introduction to Probability and Markov Chain Models |  |
| MATH 341 | Linear Algebra |  |
| MATH 375 | Topics in Multi-Variable Calculus and Linear Algebra ${ }^{1}$ |  |
| MATH 376 | Topics in Multi-Variable Calculus and Differential Equations |  |
| MATH/STAT 431 | Introduction to the Theory of Probability |  |
| MATH 443 | Applied Linear Algebra |  |
| MATH 461 | College Geometry I |  |
| MATH/COMP SCI/ STAT 475 | Introduction to Combinatorics |  |
| MATH 521 | Analysis I |  |
| MATH 541 | Modern Algebra |  |
| MATH 542 | Modern Algebra |  |
| MATH 567 | Elementary Number Theory |  |


| MATH/ | Mathematical Logic |
| :--- | :--- |
| PHILOS 571 |  |
| STAT/MATH 309 | Introduction to Probability and <br> Mathematical Statistics I |
| STAT/MATH 310 | Introduction to Probability and <br> Mathematical Statistics II |
| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I |
| STAT 312 | Introduction to Theory and Methods <br> of Mathematical Statistics II |
| E C E 331 | Introduction to Random Signal <br> Analysis and Statistics |

MATH 375 may not be combined with MATH 234 Calculus--Functions of Several Variables, MATH 320 Linear Algebra and Differential Equations, or MATH 340 Elementary Matrix and Linear Algebra. The math department may have additional restrictions on giving credit to certain pairs of math courses.

## ADVANCED COMPUTER SCIENCES

## Code

Title
Credits
Some of the advanced COMP SCI courses listed below have prerequisites not specifically required for the major. It is recommended that students plan ahead to ensure prerequisites are completed in advance of their selected coursework.

## THEORY

| CodeTitle | Credits |
| :--- | ---: |
| Select one of the following courses: | 3 |

Select one of the following courses: 3

COMP SCI $577 \quad$| Introduction to Algorithms |
| :--- |
| (recommended) |

COMP SCI 520 Introduction to Theory of Computing

## SOFTWARE/HARDWARE

Code Title Credits

Select two of the following courses: 6-8

| COMP SCI 407 | Foundations of Mobile Systems and <br> Applications |
| :--- | :--- |
| COMP SCI/ Software Engineering <br> E C E 506  | Introduction to Programming <br> Languages and Compilers 1 |
| COMP SCI 536 537 53 | Introduction to Operating Systems |
| COMP SCI 538 | Introduction to the Theory and <br> Design of Programming Languages <br> 1 |

COMP SCI/ Introduction to Computer
ECE 552 Architecture
COMP SCI 564 Database Management Systems:
Design and Implementation
COMP SCI 640 Introduction to Computer Networks
COMP SCI 642 Introduction to Information Security

1 COMP SCI 536 Introduction to Programming Languages and Compilers may not be combined with COMP SCI 538 Introduction to the Theory and Design of Programming Languages.

APPLICATIONS
Code Title

Credits
Select one of the following courses:

| COMP SCI 412 | Introduction to Numerical Methods 1 |
| :---: | :---: |
| COMP SCI/I SY E/ MATH 425 | Introduction to Combinatorial Optimization |
| COMP SCI/ <br> MATH 513 | Numerical Linear Algebra |
| COMP SCI/ <br> MATH 514 | Numerical Analysis |
| COMP SCI/E C E/ I SY E 524 | Introduction to Optimization |
| COMP SCI/I SY E/ MATH/STAT 525 | Linear Programming Methods |
| COMP SCI 534 | Computational Photography |
| COMP SCI 540 | Introduction to Artificial Intelligence |
| COMP SCI 545 | Natural Language and Computing |
| COMP SCI 547 | Computer Systems Modeling Fundamentals |
| COMP SCI 559 | Computer Graphics |
| COMP SCI 570 | Introduction to Human-Computer Interaction |

1 COMP SCI 412 Introduction to Numerical Methods is used to satisfy the "Additional Mathematics" requirement, it cannot satisfy the "Applications" requirement.

| COMPUTER SCIENCES ELECTIVES |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select two of the following courses: |  | 6-8 |
| COMP SCI 407 | Foundations of Mobile Systems and Applications |  |
| COMP SCI 412 | Introduction to Numerical Methods |  |
| COMP SCI/I SY E/ MATH 425 | Introduction to Combinatorial Optimization |  |
| COMP SCI/E C E/ MATH 435 | Introduction to Cryptography |  |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { STAT } 471 \end{aligned}$ | Introduction to Computational Statistics |  |

COMP SCI/MATH/ Introduction to Combinatorics
STAT 475
COMP SCI/ Software Engineering
ECE 506
COMP SCI/ Numerical Linear Algebra
MATH 513
COMP SCI/
MATH 514
COMP SCI 520 Introduction to Theory of Computing
COMP SCI/E C E/ Introduction to Optimization
I SY E 524

| COMP SCI/I SY E/ MATH/STAT 525 | Linear Programming Methods |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { I SY E } 526 \end{aligned}$ | Advanced Linear Programming |  |
| COMP SCI/E C E/ ME 532 | Matrix Methods in Machine Learning |  |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { E C E } 533 \end{aligned}$ | Image Processing |  |
| COMP SCI 534 | Computational Photography |  |
| COMP SCI 536 | Introduction to Programming Languages and Compilers |  |
| COMP SCI 537 | Introduction to Operating Systems |  |
| COMP SCI 538 | Introduction to the Theory and Design of Programming Languages |  |
| COMP SCI/E C E/ <br> M E 539 | Introduction to Artificial Neural Network and Fuzzy Systems |  |
| COMP SCI 540 | Introduction to Artificial Intelligence |  |
| COMP SCI 545 | Natural Language and Computing |  |
| COMP SCI 547 | Computer Systems Modeling Fundamentals |  |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { E C E } 552 \end{aligned}$ | Introduction to Computer Architecture |  |
| COMP SCI/I SY E/ <br> M E 558 | Introduction to Computational Geometry |  |
| COMP SCI 559 | Computer Graphics |  |
| COMP SCI 564 | Database Management Systems: Design and Implementation |  |
| COMP SCI/ <br> B M I 567 | Medical Image Analysis |  |
| COMP SCI 570 | Introduction to Human-Computer Interaction |  |
| COMP SCI/ <br> B M I 576 | Introduction to Bioinformatics |  |
| COMP SCI 577 | Introduction to Algorithms |  |
| COMP SCI/ DS 579 | Virtual Reality |  |
| COMP SCI/ <br> I SY E 635 | Tools and Environments for Optimization |  |
| COMP SCI 640 | Introduction to Computer Networks |  |
| COMP SCI 642 | Introduction to Information Security |  |
| COMP SCI 679 | Computer Game Technology |  |
| COMP SCI 639 | Undergraduate Elective Topics in Computing | 3-4 |

## RESIDENCE AND QUALITY OF WORK:

2.000 GPA in all COMP SCI courses and courses counting toward the major
2.000 GPA on 15 upper-level credits, taken in residence ${ }^{1}$

15 credits in COMP SCI, taken on campus
1 COMP SCI courses numbered 400 and higher count as upper level.

## DISTINCTION IN THE MAJOR:

Code<br>Title

Credits
Distinction in the major is awarded automatically upon graduation to computer sciences majors who meet the qualifications below.

## QUALIFICATIONS FOR DISTINCTION IN THE COMPUTER SCIENCES MAJOR

Code Title Credits

3.750 GPA in all COMP SCI courses and courses counting toward the major

OR
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Students may declare Honors in the Computer Sciences Major in consultation with the Computer Sciences undergraduate coordinator(s).

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To earn Honors in the Major in Computer Sciences, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
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- Complete the following coursework, earning a B or better in each individual course:
- One COMP SCI course, at the 500 level or above, taken for Honors credit, which counts toward the computer sciences major
- A two-semester Senior Honors Thesis in COMP SCI 681 Senior Honors Thesis and COMP SCI 682 Senior Honors Thesis, for a total of 6 credits. ${ }^{1}$

1 The thesis proposal must be approved by both the thesis/project advisor and the department undergraduate coordinator before enrollment in COMP SCI 681. A final thesis or project must be filed with the Department of Computer Sciences before a final grade for COMP SCI 682 can be awarded.

## LEARNING OUTCOMES

1. Recognize and apply the core principles of Computing (abstractions and algorithms) to solve real-world problems.
2. Describe and apply the theoretical foundations of Computer Science (e.g., complexity analysis) in practical settings.
3. Demonstrate knowledge of key elements of computer systems, e.g., hardware, operating systems, networks.
4. Use fundamental and detailed knowledge, skills, and tools (e.g., specific algorithms, techniques methods, etc.) of computer science and develop the ability to acquire new knowledge, skills, and tools.
5. Design, implement, and evaluate software in multiple programming paradigms and languages.
6. Develop a substantial piece of software, and recognize the challenges of designing and developing software.
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## ADVISING AND CAREERS

## ADVISING

The undergraduate coordinators in the Department of Computer Sciences are ready to help students with questions about the major, L\&S degree requirements and policy, and course selection. Information on academic advising for students interested or declared in the computer sciences major is posted to the Computer Sciences advising page (https:// www.cs.wisc.edu/advisors).

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Computer sciences majors are encouraged to begin working on their career exploration and preparation soon after arriving on campus to explore different career paths, participate in co-ops or summer internships, prepare for the job search and/or graduate school applications, and network with professionals in the field.

Department of Computer Sciences: the department hosts one major career fair (https://www.cs.wisc.edu/connect/job-fair) per year, in the fall, as well as other opportunities to connect with employers, such as technical talks and information sessions.

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- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors A. Arpaci-Dusseau, R. Arpaci-Dusseau, Bach, Barford, Banerjee, Cai, Doan, Dyer, Ferris, Gleicher, Hill, Jha, Livny, Miller, Patel, Reps, Ron, Shavlik, Sohi, van Melkebeek, Wood, Wright, Zhu

Associate Professors Akella, Chawla, Liblit, Mutlu, Sankaralingam, Swift
Assistant Professors Albarghouthi, D'Antoni, Gupta, Koutris, Sifakis
Faculty Associates Dahl, Deppeler, Hasti, Legault, Lewis-Williams, Skrentny, Williams

## RESOURCES AND SCHOLARSHIPS

Visit Scholarships@UW-Madison (https://scholarships.wisc.edu/ Scholarships) to find UW-Madison scholarships and apply online.

Visit the scholarships page (https://www.cs.wisc.edu/academics/ scholarships) on the Department of Computer Sciences website for a compendium of opportunities available to students studying computer sciences.

## COMPUTER SCIENCES, CERTIFICATE

Regardless of your major, you can enhance your career with a background in computer sciences. The computer sciences certificate is designed to deepen and validate your computing savvy for your future career prospects and/or graduate school. Compared to a major in computer sciences, the certificate requires fewer courses and offers more flexibility in course selection.

## HOW TO GET IN

All undergraduate, degree-seeking students are eligible to declare the computer sciences certificate, except for students majoring in computer sciences, and electrical or computer engineering.

Information on declaring the certificate is available on the Department of Computer Sciences advising pages (http://www.cs.wisc.edu/advising).

## REQUIREMENTS

## REQUIREMENTS FOR THE CERTIFICATE REQUIRED COURSEWORK

Code<br>Title

Credits
Five courses, at least 12 credits, in computer sciences, including: ${ }^{1}$

COMP SCI 300 Programming II (Comp Sci 367 may also be used if completed prior to Summer 2018.)
At least two COMP SCI courses at the 400 level or higher, selected from the course list below.
Two additional COMP SCI courses, at any level, selected from the course list below.

1 Courses taken on a pass/fail basis may not be used toward the certificate.

## COURSE LIST

| Code | Title | Credits |
| :---: | :---: | :---: |
| COMP SCI/ | Introduction to Discrete | 3 |
| MATH 240 | Mathematics |  |
| COMP SCI/ECE 252 | Introduction to Computer Engineering | 2 |
| COMP SCI 270 | Fundamentals of Human-Computer Interaction | 3 |
| COMP SCI 310 | Problem Solving Using Computers | 3 |
| COMP SCI/E C E 352 | Digital System Fundamentals | 3 |
| COMP SCI/E C E 354 | Machine Organization and Programming | 3 |
| COMP SCI 369 | Web Programming | 3 |
| COMP SCI 400 | Programming III | 3 |
| COMP SCI 407 | Foundations of Mobile Systems and Applications | 3 |
| COMP SCI 412 | Introduction to Numerical Methods | 3 |
| COMP SCI/I SY E/ <br> MATH 425 | Introduction to Combinatorial Optimization | 3 |
| COMP SCI/E C E/ <br> MATH 435 | Introduction to Cryptography | 3 |
| COMP SCI/STAT 471 | Introduction to Computational Statistics | 3 |
| COMP SCI/MATH/ STAT 475 | Introduction to Combinatorics | 3 |
| COMP SCI/E C E 506 | Software Engineering | 3 |
| COMP SCI/ <br> MATH 513 | Numerical Linear Algebra | 3 |
| COMP SCI/ <br> MATH 514 | Numerical Analysis | 3 |
| COMP SCI 520 | Introduction to Theory of Computing | 3 |
| COMP SCI/E C E/ <br> I SYE 524 | Introduction to Optimization | 3 |
| COMP SCI/I SY E/ <br> MATH/STAT 525 | Linear Programming Methods | 3 |


| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { I SY E } 526 \end{aligned}$ | Advanced Linear Programming | 3-4 |
| :---: | :---: | :---: |
| COMP SCI/E C E/ <br> ME 532 | Matrix Methods in Machine Learning | 3 |
| COMP SCI/E C E 533 | Image Processing | 3 |
| COMP SCI 534 | Computational Photography | 3 |
| COMP SCI 536 | Introduction to Programming <br> Languages and Compilers | 3 |
| COMP SCI 537 | Introduction to Operating Systems | 4 |
| COMP SCI 538 | Introduction to the Theory and Design of Programming Languages | 3 |
| COMP SCI/E C E/ <br> ME 539 | Introduction to Artificial Neural Network and Fuzzy Systems | 3 |
| COMP SCI 540 | Introduction to Artificial Intelligence | 3 |
| COMP SCI 545 | Natural Language and Computing | 3 |
| COMP SCI 547 | Computer Systems Modeling Fundamentals | 3 |
| COMP SCI/E C E 552 | Introduction to Computer Architecture | 3 |
| COMP SCI/I SYE/ <br> ME 558 | Introduction to Computational Geometry | 3 |
| COMP SCI 559 | Computer Graphics | 3 |
| COMP SCI 564 | Database Management Systems: Design and Implementation | 4 |
| COMP SCI/B M I 567 | Medical Image Analysis | 3 |
| COMP SCI 570 | Introduction to Human-Computer Interaction | 4 |
| COMP SCI/B M I 576 | Introduction to Bioinformatics | 3 |
| COMP SCI 577 | Introduction to Algorithms | 4 |
| COMP SCI/DS 579 | Virtual Reality | 3 |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { I SYE } 635 \end{aligned}$ | Tools and Environments for Optimization | 3 |
| COMP SCI 640 | Introduction to Computer Networks | 3 |
| COMP SCI 642 | Introduction to Information Security | 3 |
| COMP SCI 679 | Computer Game Technology | 3 |
| COMP SCI 639 | Undergraduate Elective Topics in Computing | 3-4 |

## RESIDENCE AND QUALITY OF WORK Code Title <br> Credits

A 2.000 GPA must be earned on all courses meeting certificate requirements.
Students may complete no more than two courses toward the certificate post-baccalaureate as a University Special student. Courses taken post-baccalaureate as a University Special student must be completed within three regular academic semesters from the time of degree award (excluding summer) in order to be used toward the certificate.
For students who complete the certificate while enrolled in an undergraduate degree-seeking program, at least 7 credits must be completed in residence.
For students who complete the certificate postbaccalaureate as a University Special student, at least 12 credits must be completed in residence.



techniques.

## ADVISING AND CAREERS

## ADVISING

The undergraduate coordinators in the Department of Computer Sciences are ready to help students with questions about the major, $\mathrm{L} \& S$ degree requirements and policy, and course selection. Information on academic advising for students interested or declared in the Computer Students major is posted to the Computer Sciences advising page (https:// www.cs.wisc.edu/advisors).

## PEOPLE

Professors A. Arpaci-Dusseau, R. Arpaci-Dusseau, Bach, Barford, Banerjee, Cai, Doan, Dyer, Ferris, Gleicher, Hill, Jha, Livny, Miller, Patel, Reps, Ron, Shavlik, Sohi, van Melkebeek, Wood, Wright, Zhu

Associate Professors Akella, Chawla, Liblit, Mutlu, Sankaralingam, Swift
Assistant Professors Albarghouthi, D'Antoni, Gupta, Koutris, Sifakis
Faculty Associates Dahl, Deppeler, Hasti, Legault, Lewis-Williams, Skrentny, Williams

## ECONOMICS

A major in economics gives students a greater understanding of how people, businesses, and governments respond to their economic environments. Many of the issues that fill the newspapers-jobs, wages, taxes, the cost of living, inequality, pollution, poverty, and economic growth-are, in fundamental ways, economic issues. The daily decisions of businesses and consumers are largely economic. Economists seek to understand the decisions of businesses, consumers, and current economic issues by developing a systematic and thorough understanding of precisely how the economic system operates, including the mechanisms by which resources are allocated, prices determined, income redistributed, and economic growth promoted.

The analytical method of economics recognizes that various choices are open to a society in solving its economic problems. Students are often attracted to economics as a discipline precisely because they want to understand the decisions of people and businesses and to better understand and evaluate economic policy. To begin to approach these issues as an economist requires an understanding of economic theory, empirical methodology, and an understanding of the institutional details and advanced practice gained from intensive study of specific subfields of economics. Consequently, the undergraduate economics major is organized around a progression of courses that first provides a broad introduction to economics, then develops the theoretical tools that provide the foundation of modern economic thought, and finishes with advanced courses designed to provide greater in-depth knowledge of specific fields (such as labor markets, industrial organization, international economics, public finance, banking and finance, macroeconomics, microeconomics, and econometrics).

An economics major is valuable in the job market because the major is designed to train people to think analytically and clearly about a wide variety of issues. This skill is valued by many employers. An economics major is also good preparation for graduate work in a number of areas: business, law, public policy, economics, public administration, industrial relations, international relations, urban and regional planning, and environmental studies.

## DEGREES/MAJORS/CERTIFICATES

- Economics, B.A. (p. 619)
- Economics, B.S. (p. 625)


## PEOPLE

Professors Corbae, Deneckere, Engel, B. Hansen, Hendricks, Kennan, Lentz, Porter, Rostek, Sandholm, Scholz, Seshadri, L. Smith, Sorensen, Taber, Walker, West, Williams, Wiswall, Wolfe, Wright

Associate Professos Fu, Quint, Weretka
Assistant Professors Aizawa, Atalay, Bilir, Freyberger, Gregory, Magnolfi, Mommaerts, Penta, Shi, Soelvsten, Sullivan

Affiliated Faculty Chinn, Montgomery, Schechter, Wallace

## ECONOMICS, B.A.

A major in economics gives students a greater understanding of how people, businesses, and governments respond to their economic environments. Many of the issues that fill the newspapers-jobs, wages, taxes, the cost of living, inequality, pollution, poverty, and economic growth-are, in fundamental ways, economic issues. The daily decisions of businesses and consumers are largely economic. Economists seek to understand the decisions of businesses, consumers, and current economic issues by developing a systematic and thorough understanding of precisely how the economic system operates, including the mechanisms by which resources are allocated, prices determined, income redistributed, and economic growth promoted.

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## HOW TO GET IN

## ADMISSION TO THE MAJOR

1. Completion of two (2) Econ courses on the University of WisconsinMadison campus with a 2.000 GPA.
2. A 2.000 GPA in all Econ courses and other major coursework taken at UW-Madison
3. Completion of one (1) calculus course

- For Option B, Mathematical Emphasis, MATH 221 Calculus and Analytic Geometry 1 or higher is required


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90 th credit |

Minimum
GPAs
2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The department offers two major options. Students must declare one (and not more than one) of these options and complete all requirements including Residence and Quality of Work standards. Options are:

Option A: Economics provides a well-rounded major in economics that is valuable for employment following graduation, or subsequent graduate work in business, law, public policy, and related disciplines.

Option B: Economics-Mathematical Emphasis provides students with the mathematical and statistical background needed for in-depth study of the analytical aspects of economics. Its requirements are designed to prepare students for graduate study in economics and related fields, or for careers as professional economists in business or government.

## MATH AND STATISTICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics (complete one): |  | 3-5 |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 211 | Calculus |  |
| MATH 213 | Calculus and Introduction to Differential Equations |  |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| MATH 234 | Calculus--Functions of Several Variables |  |
| MATH 275 | Topics in Calculus I |  |
| MATH 276 | Topics in Calculus II |  |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and <br> Trigonometry I <br> and Calculus with Algebra and Trigonometry II (Or Two courses from:) |  |
| Statistics (complete one): |  | 3 |
| ECON 310 | Statistics: Measurement in Economics (Recommended) |  |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |


| ECON 400 | Introduction to Applied <br> Econometrics |
| :--- | :--- |
| ECON 410 | Introductory Econometrics |
| MATH/STAT 309 | Introduction to Probability and <br> Mathematical Statistics I |
| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I |
| STAT 324 | Introductory Applied Statistics for <br> Engineers |
| Total Credits |  |

## ECONOMICS

30 credits to include:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Microeconomics \& Macroeconomics (Select one): |  | 4-8 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment |  |
| Intermediate Theory (Select one): |  | 6-8 |
| ECON 301 <br> \& ECON 302 | Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory |  |
| ECON 311 <br> \& ECON 312 | Intermediate Microeconomic Theory <br> - Advanced Treatment and Intermediate Macroeconomic <br> Theory - Advanced Treatment <br> (Honors Econ) |  |
| Two Advanced ECON courses: ${ }^{1}$ |  | 6-8 |
| ECON 400 | Introduction to Applied Econometrics |  |
| ECON 410 | Introductory Econometrics |  |
| ECON 435 | The Financial System |  |
| ECON 441 | Analytical Public Finance |  |
| ECON 442 | Macroeconomic Policy |  |
| ECON 448 | Human Resources and Economic Growth |  |
| ECON 450 | Wages and the Labor Market |  |
| ECON 451 | The Economic Approach to Human Behavior |  |
| ECON 455 | Behavioral Economics |  |
| ECON 458 | Industrial Structure and Competitive Strategy |  |
| ECON 460 | Economic Forecasting |  |
| ECON 464 | International Trade and Finance |  |
| ECON 467 | International Industrial Organizations |  |
| ECON 468 | Industrial Organization and Imperfect Competition |  |
| ECON 475 | Economics of Growth |  |
| ECON 503 | Markets with Frictions |  |
| ECON 508 | Wealth and Income |  |
| ECON 521 | Game Theory and Economic Analysis |  |
| ECON 522 | Law and Economics |  |


| ECON 525 | Economics of Education: Theory and Measurement |  |
| :---: | :---: | :---: |
| ECON/POP HLTH/ PUB AFFR 548 | The Economics of Health Care |  |
| ECON 580 | Honors Tutorial in Research Project Design |  |
| ECON 623 | Population Economics |  |
| ECON 666 | Issues in International Finance |  |
| ECON 690 | Topics in Economics |  |
| Electives |  | 6-14 |
| Select any Advance these applied econo | level course not used above or one of omics courses: |  |
| ECON/ <br> FINANCE 300 | Introduction to Finance |  |
| ECON/ <br> HIST SCI 305 | Development of Economic Thought |  |
| ECON/A A E/ REAL EST/ URB R PL 306 | The Real Estate Process |  |
| ECON/ <br> FINANCE 320 | Investment Theory |  |
| ECON 321 | Sports Economics |  |
| ECON 330 | Money and Banking |  |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics |  |
| ECON 364 | Survey of International Economics |  |
| ECON 370 | Economics of Poverty and Inequality |  |
| ECON 390 | Contemporary Economic Issues |  |
| ECON/REAL EST/ URB R PL 420 | Urban and Regional Economics |  |
| ECON/AAE 421 | Economic Decision Analysis |  |
| ECON 440 | Urban and Regional Economics |  |
| ECON/ENVIR ST/ POLI SCI/ URB R PL 449 | Government and Natural Resources |  |
| ECON/A A E/ <br> INTL BUS 462 | Latin American Economic Development |  |
| ECON/ <br> HISTORY 465 | The American Economy to 1865 |  |
| ECON/ <br> HISTORY 466 | The American Economy Since 1865 |  |
| ECON/A A E 473 | Economic Growth and Development in Southeast Asia |  |
| ECON/A A E 474 | Economic Problems of Developing Areas |  |
| ECON/A A E 477 | Agricultural and Economic Development in Africa |  |
| ECON/ <br> PHILOS 524 | Philosophy and Economics |  |
| ECON/A A E/ <br> F\&W ECOL 531 | Natural Resource Economics |  |
| ECON/A A E 567 | Public Finance in Less Developed Countries |  |
| ECON/REAL EST/ URB R PL 641 | Housing Economics and Policy |  |

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ECON/SOC 663
ECON/A A E/
ENVIR ST/
URB R PL 671
```

Total Credits
1 At least two advanced ECON courses must be taken in residence at UW-Madison, and not via transfer or a UW-Madison Study Abroad program.

## STUDENTS MAY ADD THE FOLLOWING NAMED OPTION:

- Economics: Mathematical Emphasis (p. 623)


## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all major and ECON courses
- 2.000 GPA on 15 upper-level major courses taken in residence ${ }^{2}$
- 15 credits in ECON, taken on the UW-Madison campus

2 Intermediate and Advanced level ECON courses are Upper Level in the major.

## HONORS IN THE ECONOMICS MAJOR

Students may declare Honors in the Economics Major in consultation with the Economics undergraduate advisor(s).

## HONORS IN THE ECONOMICS MAJOR: REQUIREMENTS

To earn Honors in the Major in Economics, students must satisfy both the requirements for the Economics-Mathematical Emphasis Option (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all ECON courses
- Complete the following courses, taken for Honors, with grades of B or better in each:

| Code | Title |
| :--- | :--- |
| ECON 311 | Intermediate Microeconomic Theory |
| \& ECON 312 | - Advanced Treatment <br> and Intermediate Macroeconomic <br> Theory - Advanced Treatment |
| ECON 580 | Honors Tutorial in Research Project <br> Design |
| Select one of the following capstone experiences: |  |
| ECON 581 | Honors Thesis |
| ECON 681 | Senior Honors Thesis <br> and Senior Honors Thesis (Take for <br> a total of 6 credits) |

## UNIVERSITY DEGREE REQUIREMENTS

[^24]| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Work | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Understand the fundamental concepts of economics and how those concepts apply to real world issues.
2. Construct and evaluate economic models, their assumptions, and conclusions.
3. Acquire a diverse set of skills and strategies in mathematical reasoning/statistical and computational techniques/deductive logic/ problem solving.
4. Use mathematics/computational/statistical techniques to analyze real world situations and policies.
5. Use economic analysis to critically evaluate public policy proposals.

## ADVISING AND CAREERS

## ACADEMIC ADVISING

Academic advising (https://econ.wisc.edu/undergraduate/academicadvising), along with general information about the undergraduate major and coursework, is available in Room 7238 of the Social Science Building. Find us on the campus map (http://www.map.wisc.edu/? initObj=bdg_SocSc\&z=41.33\&x=-0.158401\&y=-0.09157).
Email: econadvise@ssc.wisc.edu
Phone: 608-262-6925

## ECONOMICS CAREER DEVELOPMENT OFFICE

The Economics Career Development Office (https://econ.wisc.edu/ careers) (ECDO) provides career development services and resources to undergraduate students who are either declared economics majors or are considering majoring in economics and would like career information. To set up an appointment or to ask a career/internship question please email econcareers@ssc.wisc.edu

## PREPARATION FOR PH.D. PROGRAMS IN ECONOMICS

Students interested in pursuing graduate study should pursue Option B (mathematical emphasis) and augment the standard curriculum with higher-level mathematics and statistics courses. These may include:

| Code | Title | Credits |
| :--- | :--- | :--- |
| MATH/STAT 309 | Introduction to Probability and <br> Mathematical Statistics I |  |
| MATH/STAT 310 | Introduction to Probability and <br> Mathematical Statistics II |  |
| MATH 421 | The Theory of Single Variable <br> Calculus |  |
| MATH/STAT 431 | Introduction to the Theory of <br>  <br> MATH 521 | Probability |
| MATH 522 | Analysis I |  |
| MATH/I SY E/ | Introduction to Stochastic |  |
| OTM/STAT 632 | Processes |  |

It is important to consult early in the second year with the undergraduate advisor and/or the faculty member that directs the undergraduate program to design a plan of coursework.

## DIRECTED STUDY

Directed Study (ECON 698, ECON 699) enables advanced students to pursue economic topics not covered in the regular course offerings. A student interested in Directed Study should prepare a research proposal and/or reading list; specific course requirements are arranged with an instructor who agrees to supervise the directed study project. Enrollment requires the consent of the instructor; a GPA of 3.00 or above in ECON; completion of the Intermediate economic theory courses (ECON 301 \& ECON 302); at least one Advanced ECON course; and completion of the department's Directed Study form, available in 7238 Social Science.

## INTERNSHIPS

Students can earn 1 credit for approved internships appropriate to the study of economics under course ECON 228. Students must enroll for ECON 228 in the same semester/session in which the internship is granted. Students should work a minimum of 100 hours per term. Prerequisites are declaration in the major economics major; a major GPA of 2.200 or higher; completion of at least four ECON courses at UW-Madison; completion of at least one Intermediate Theory course (ECON 301 \& ECON 302); a completed application; and departmental approval.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information,
see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Corbae, Deneckere, Engel, B. Hansen, Hendricks, Kennan, Lentz, Porter, Rostek, Sandholm, Scholz, Seshadri, L. Smith, Sorensen, Taber, Walker, West, Williams, Wiswall, Wolfe, Wright

Associate Professos Fu, Quint, Weretka
Assistant Professors Aizawa, Atalay, Bilir, Freyberger, Gregory, Magnolfi, Mommaerts, Penta, Shi, Soelvsten, Sullivan

Affiliated Faculty Chinn, Montgomery, Schechter, Wallace

## ECONOMICS: MATHEMATICAL EMPHASIS

## REQUIREMENTS

## MATHEMATICS \& STATISTICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics |  | 15-16 |
| Option 1-four courses: |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| MATH 234 | Calculus--Functions of Several Variables |  |
| MATH 320 | Linear Algebra and Differential Equations |  |
| or MATH 340 | Elementary Matrix and Linear Algebra |  |
| Option 2-Honors sequence (3 courses): |  |  |
| MATH 275 | Topics in Calculus I |  |
| MATH 276 | Topics in Calculus II |  |
| MATH 375 | Topics in Multi-Variable Calculus and Linear Algebra |  |
| Statistics (1 course) |  | 3 |
| ECON 310 | Statistics: Measurement in Economics (Recommended) |  |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |
| ECON 410 | Introductory Econometrics |  |
| STAT/MATH 309 | Introduction to Probability and Mathematical Statistics I |  |
| STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I |  |
| STAT 324 | Introductory Applied Statistics for Engineers |  |
| Total Credits |  | 18-19 |

## ECONOMICS

30 credits to include:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Microeconomics \& Macroeconomics (Select one): |  | 4-8 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment |  |
| Intermediate Theory (Select one): |  | 6-8 |
| ECON 301 <br> \& ECON 302 | Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory |  |
| ECON 311 <br> \& ECON 312 | Intermediate Microeconomic Theory <br> - Advanced Treatment and Intermediate Macroeconomic <br> Theory - Advanced Treatment <br> (Honors Econ) |  |
| Introductory Econometrics |  |  |
| ECON 410 | Introductory Econometrics | 4 |
| Three Advanced ECON courses: ${ }^{1}$ |  | 6-8 |
| ECON 435 | The Financial System |  |
| ECON 441 | Analytical Public Finance |  |
| ECON 442 | Macroeconomic Policy |  |
| ECON 448 | Human Resources and Economic Growth |  |
| ECON 450 | Wages and the Labor Market |  |
| ECON 451 | The Economic Approach to Human Behavior |  |
| ECON 455 | Behavioral Economics |  |
| ECON 458 | Industrial Structure and Competitive Strategy |  |
| ECON 460 | Economic Forecasting |  |
| ECON 464 | International Trade and Finance |  |
| ECON 467 | International Industrial Organizations |  |
| ECON 468 | Industrial Organization and Imperfect Competition |  |
| ECON 475 | Economics of Growth |  |
| ECON 503 | Markets with Frictions |  |
| ECON 508 | Wealth and Income |  |
| ECON 521 | Game Theory and Economic Analysis |  |
| ECON 522 | Law and Economics |  |
| ECON 525 | Economics of Education: Theory and Measurement |  |
| ECON/POP HLTH/ PUB AFFR 548 | The Economics of Health Care |  |
| ECON 580 | Honors Tutorial in Research Project Design |  |
| ECON 623 | Population Economics |  |
| ECON 666 | Issues in International Finance |  |
| ECON 690 | Topics in Economics |  |

Additional credits to achieve 30 in the major.

Select any Advanced course (above) or one of these
Applied Economics courses:
ECON/ Introduction to Finance
FINANCE 300
ECON/ Development of Economic Thought
HIST SCI 305
ECON/A A E/ The Real Estate Process
REALEST/
URB R PL 306
ECON/ Investment Theory
FINANCE 320
ECON 321 Sports Economics
ECON $330 \quad$ Money and Banking
ECON/A A E/ Environmental Economics
ENVIR ST 343
ECON $364 \quad$ Survey of International Economics

ECON 370 Economics of Poverty and Inequality

ECON $390 \quad$ Contemporary Economic Issues
ECON/REAL EST/ Urban and Regional Economics
URB R PL 420
ECON/A A E 421 Economic Decision Analysis
ECON $440 \quad$ Urban and Regional Economics
ECON/ENVIR ST/ Government and Natural Resources
POLI SCI/
URB R PL 449
ECON/A A E/ Latin American Economic
INTL BUS 462 Development
ECON/ The American Economy to 1865
HISTORY 465
ECON/ The American Economy Since 1865
HISTORY 466
ECON/A A E 473 Economic Growth and Development in Southeast Asia

ECON/A A E 474 Economic Problems of Developing Areas
ECON/A A E 477 Agricultural and Economic Development in Africa
ECON/ Philosophy and Economics
PHILOS 524
ECON/A A E/ Natural Resource Economics
F\&W ECOL 531
ECON/A A E 567 Public Finance in Less Developed Countries

ECON/REAL EST/ Housing Economics and Policy
URB R PL 641
ECON/SOC 663 Population and Society
ECON/A A E/ Energy Economics
ENVIR ST/
URB R PL 671

## Total Credits

1 Two Advanced ECON courses must be taken at UW-Madison (in residence and not via study abroad)

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major and ECON courses
2.000 GPA on 15 upper-level major courses taken in residence ${ }^{2}$

15 credits in ECON, taken on the UW-Madison campus
2
Intermediate- and advanced-level ECON courses are upper level in the major.

## ECONOMICS, B.S.

A major in economics gives students a greater understanding of how people, businesses, and governments respond to their economic environments. Many of the issues that fill the newspapers-jobs, wages, taxes, the cost of living, inequality, pollution, poverty, and economic growth-are, in fundamental ways, economic issues. The daily decisions of businesses and consumers are largely economic. Economists seek to understand the decisions of businesses, consumers, and current economic issues by developing a systematic and thorough understanding of precisely how the economic system operates, including the mechanisms by which resources are allocated, prices determined, income redistributed, and economic growth promoted.

The analytical method of economics recognizes that various choices are open to a society in solving its economic problems. Students are often attracted to economics as a discipline precisely because they want to understand the decisions of people and businesses and to better understand and evaluate economic policy. To begin to approach these issues as an economist requires an understanding of economic theory, empirical methodology, and an understanding of the institutional details and advanced practice gained from intensive study of specific subfields of economics. Consequently, the undergraduate economics major is organized around a progression of courses that first provides a broad introduction to economics, then develops the theoretical tools that provide the foundation of modern economic thought, and finishes with advanced courses designed to provide greater in-depth knowledge of specific fields (such as labor markets, industrial organization, international economics, public finance, banking and finance, macroeconomics, microeconomics, and econometrics).

An economics major is valuable in the job market because the major is designed to train people to think analytically and clearly about a wide variety of issues. This skill is valued by many employers. An economics major is also good preparation for graduate work in a number of areas: business, law, public policy, economics, public administration, industrial relations, international relations, urban and regional planning, and environmental studies.

## HOW TO GET IN

## ADMISSION TO THE MAJOR

1. Completion of two (2) Econ courses on the University of WisconsinMadison campus with a 2.000 GPA.
2. A 2.000 GPA in all Econ courses and other major coursework taken at UW-Madison
3. Completion of one (1) calculus course

- For Option B, Mathematical Emphasis, MATH 221 Calculus and Analytic Geometry 1 or higher is required


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT

## Foreign

 LanguageL\&S Breadth Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts and Science Coursework

108 credits

| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| :--- | :--- |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The department offers two major options. Students must declare one (and not more than one) of these options and complete all requirements including Residence and Quality of Work standards. Options are:

Option A: Economics provides a well-rounded major in economics that is valuable for employment following graduation, or subsequent graduate work in business, law, public policy, and related disciplines.

Option B: Economics-Mathematical Emphasis provides students with the mathematical and statistical background needed for in-depth study of the analytical aspects of economics. Its requirements are designed to prepare students for graduate study in economics and related fields, or for careers as professional economists in business or government.

## MATH AND STATISTICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Mathematics (complete one): | $3-5$ |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 211 | Calculus |  |
| MATH 213 | Calculus and Introduction to |  |
|  | Differential Equations |  |


| MATH 171 | Calculus with Algebra and <br> \& MATH 217 <br> Trigonometry I <br> and Calculus with Algebra and <br> Trigonometry II (Or Two courses <br> from:) |
| :--- | :--- |
| Statistics (complete one): |  |
| ECON 310 | Statistics: Measurement in <br> Economics (Recommended) |
| STAT 302 | Accelerated Introduction to <br> Statistical Methods |
| ECON 400 | Introduction to Applied <br> Econometrics |
| ECON 410 | Introductory Econometrics |
| MATH/STAT 309 | Introduction to Probability and <br> Mathematical Statistics I |
| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I |
| STAT 324 | Introductory Applied Statistics for <br> Engineers |

Total Credits

## ECONOMICS

30 credits to include:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Microeconomics \& Macroeconomics (Select one): |  | 4-8 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment |  |
| Intermediate Theory (Select one): |  | 6-8 |
| ECON 301 <br> \& ECON 302 | Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory |  |
| ECON 311 <br> \& ECON 312 | Intermediate Microeconomic Theory <br> - Advanced Treatment and Intermediate Macroeconomic Theory - Advanced Treatment (Honors Econ) |  |
| Two Advanced ECON courses: ${ }^{1}$ |  | 6-8 |
| ECON 400 | Introduction to Applied Econometrics |  |
| ECON 410 | Introductory Econometrics |  |
| ECON 435 | The Financial System |  |
| ECON 441 | Analytical Public Finance |  |
| ECON 442 | Macroeconomic Policy |  |
| ECON 448 | Human Resources and Economic Growth |  |
| ECON 450 | Wages and the Labor Market |  |
| ECON 451 | The Economic Approach to Human Behavior |  |
| ECON 455 | Behavioral Economics |  |
| ECON 458 | Industrial Structure and Competitive Strategy |  |
| ECON 460 | Economic Forecasting |  |
| ECON 464 | International Trade and Finance |  |


| ECON 467 | International Industrial Organizations |  |
| :---: | :---: | :---: |
| ECON 468 | Industrial Organization and Imperfect Competition |  |
| ECON 475 | Economics of Growth |  |
| ECON 503 | Markets with Frictions |  |
| ECON 508 | Wealth and Income |  |
| ECON 521 | Game Theory and Economic Analysis |  |
| ECON 522 | Law and Economics |  |
| ECON 525 | Economics of Education: Theory and Measurement |  |
| ECON/POP HLTH/ PUB AFFR 548 | The Economics of Health Care |  |
| ECON 580 | Honors Tutorial in Research Project Design |  |
| ECON 623 | Population Economics |  |
| ECON 666 | Issues in International Finance |  |
| ECON 690 | Topics in Economics |  |
| Electives |  | 6-14 |
| Select any Advanced these applied econo | d level course not used above or one of mics courses: |  |
| ECON/ <br> FINANCE 300 | Introduction to Finance |  |
| ECON/ <br> HIST SCI 305 | Development of Economic Thought |  |
| ECON/A A E/ <br> REAL EST/ <br> URB R PL 306 | The Real Estate Process |  |
| ECON/ <br> FINANCE 320 | Investment Theory |  |
| ECON 321 | Sports Economics |  |
| ECON 330 | Money and Banking |  |
| ECON/A A E/ ENVIR ST 343 | Environmental Economics |  |
| ECON 364 | Survey of International Economics |  |
| ECON 370 | Economics of Poverty and Inequality |  |
| ECON 390 | Contemporary Economic Issues |  |
| ECON/REAL EST/ URB R PL 420 | Urban and Regional Economics |  |
| ECON/A A E 421 | Economic Decision Analysis |  |
| ECON 440 | Urban and Regional Economics |  |
| ECON/ENVIR ST/ POLI SCI/ URB R PL 449 | Government and Natural Resources |  |
| ECON/A A E/ INTL BUS 462 | Latin American Economic Development |  |
| ECON/ <br> HISTORY 465 | The American Economy to 1865 |  |
| ECON/ <br> HISTORY 466 | The American Economy Since 1865 |  |
| ECON/A A E 473 | Economic Growth and Development in Southeast Asia |  |

ECON/A A E 474 Economic Problems of Developing Areas

| ECON/A A E 477 | Agricultural and Economic <br> Development in Africa |
| :--- | :--- |
| ECON/ <br> PHILOS 524 | Philosophy and Economics |
| ECON/A A E/ | Natural Resource Economics |
| F\&W ECOL 531 |  |$\quad$| ECON/A A E 567 | Public Finance in Less Developed |
| :--- | :--- |
| Countries |  |

## STUDENTS MAY ADD THE FOLLOWING NAMED OPTION:

- Economics: Mathematical Emphasis (p. 623)


## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all major and ECON courses
- 2.000 GPA on 15 upper-level major courses taken in residence ${ }^{2}$
- 15 credits in ECON, taken on the UW-Madison campus

2
2 Intermediate and Advanced level ECON courses are Upper Level in the major.

## HONORS IN THE ECONOMICS MAJOR

Students may declare Honors in the Economics Major in consultation with the Economics undergraduate advisor(s).

## HONORS IN THE ECONOMICS MAJOR: REQUIREMENTS

To earn Honors in the Major in Economics, students must satisfy both the requirements for the Economics-Mathematical Emphasis Option (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all ECON courses
- Complete the following courses, taken for Honors, with grades of B or better in each:

| Code | Title | Credits |
| :--- | :--- | :--- |
| ECON 311 | Intermediate Microeconomic Theory |  |
| \& ECON 312 | - Advanced Treatment <br> and Intermediate Macroeconomic <br> Theory - Advanced Treatment |  |
| ECON 580 | Honors Tutorial in Research Project <br> Design |  |
|  |  |  |

Select one of the following capstone experiences:
ECON $581 \quad$ Honors Thesis

ECON 681 Senior Honors Thesis
\& ECON 682 and Senior Honors Thesis (Take for a total of 6 credits)

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Understand the fundamental concepts of economics and how those concepts apply to real world issues.
2. Construct and evaluate economic models, their assumptions, and conclusions.
3. Acquire a diverse set of skills and strategies in mathematical reasoning/statistical and computational techniques/deductive logic/ problem solving.
4. Use mathematics/computational/statistical techniques to analyze real world situations and policies.
5. Use economic analysis to critically evaluate public policy proposals

## ADVISING AND CAREERS

## ACADEMIC ADVISING

Academic advising (https://econ.wisc.edu/undergraduate/academicadvising), along with general information about the undergraduate major and coursework, is available in Room 7238 of the Social Science Building. Find us on the campus map (http://www.map.wisc.edu/? initObj=bdg_SocSc\&z=41.33\&x=-0.158401\&y=-0.09157).
Email: econadvise@ssc.wisc.edu
Phone: 608-262-6925

## ECONOMICS CAREER DEVELOPMENT OFFICE

The Economics Career Development Office (https://econ.wisc.edu/ careers) (ECDO) provides career development services and resources to undergraduate students who are either declared economics majors or are considering majoring in economics and would like career information. To set up an appointment or to ask a career/internship question please email econcareers@ssc.wisc.edu

## PREPARATION FOR PH.D. PROGRAMS IN ECONOMICS

Students interested in pursuing graduate study should pursue Option $B$ (mathematical emphasis) and augment the standard curriculum with higher-level mathematics and statistics courses. These may include:

| Code | Title | Credits |
| :--- | :--- | :--- |
| MATH/STAT 309 | Introduction to Probability and <br> Mathematical Statistics I |  |
| MATH/STAT 310 | Introduction to Probability and <br> Mathematical Statistics II |  |
| MATH 421 | The Theory of Single Variable <br> Calculus |  |
| MATH/STAT 431 | Introduction to the Theory of <br> Probability |  |
| MATH 521 | Analysis I |  |
| MATH 522 | Analysis II |  |
| MATH/I SY E/ | Introduction to Stochastic |  |
| OTM/STAT 632 | Processes |  |

It is important to consult early in the second year with the undergraduate advisor and/or the faculty member that directs the undergraduate program to design a plan of coursework.

## DIRECTED STUDY

Directed Study (ECON 698, ECON 699) enables advanced students to pursue economic topics not covered in the regular course offerings. A student interested in Directed Study should prepare a research proposal and/or reading list; specific course requirements are arranged with an instructor who agrees to supervise the directed study project. Enrollment requires the consent of the instructor; a GPA of 3.00 or above in ECON; completion of the Intermediate economic theory courses (ECON 301 \& ECON 302); at least one Advanced ECON course; and completion of the department's Directed Study form, available in 7238 Social Science.

## INTERNSHIPS

Students can earn 1 credit for approved internships appropriate to the study of economics under course ECON 228. Students must enroll for ECON 228 in the same semester/session in which the internship is granted. Students should work a minimum of 100 hours per term. Prerequisites are declaration in the major economics major; a major GPA of 2.200 or higher; completion of at least four ECON courses at UW-Madison; completion of at least one Intermediate Theory course (ECON 301 \& ECON 302); a completed application; and departmental approval.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well
as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Corbae, Deneckere, Engel, B. Hansen, Hendricks, Kennan, Lentz, Porter, Rostek, Sandholm, Scholz, Seshadri, L. Smith, Sorensen, Taber, Walker, West, Williams, Wiswall, Wolfe, Wright

Associate Professos Fu, Quint, Weretka
Assistant Professors Aizawa, Atalay, Bilir, Freyberger, Gregory, Magnolfi, Mommaerts, Penta, Shi, Soelvsten, Sullivan

Affiliated Faculty Chinn, Montgomery, Schechter, Wallace

| ECONOMICS: MATHEMATICAL |  |  |
| :---: | :---: | :---: |
| REQUIREMENTS |  |  |
| MATHEMATICS \& STATISTICS |  |  |
| Code | Title | Credits |
| Mathematics |  | 15-16 |
| Option 1-four courses: |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| MATH 234 | Calculus--Functions of Several Variables |  |
| MATH 320 | Linear Algebra and Differential Equations |  |
| or MATH 340 | Elementary Matrix and Linear Algebra |  |
| Option 2-Honors sequence (3 courses): |  |  |
| MATH 275 | Topics in Calculus I |  |
| MATH 276 | Topics in Calculus II |  |
| MATH 375 | Topics in Multi-Variable Calculus and Linear Algebra |  |
| Statistics (1 course) |  | 3 |
| ECON 310 | Statistics: Measurement in Economics (Recommended) |  |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |
| ECON 410 | Introductory Econometrics |  |
| STAT/MATH 309 | Introduction to Probability and Mathematical Statistics I |  |


| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I |
| :--- | :--- |
| STAT 324 | Introductory Applied Statistics for <br> Engineers |

## Total Credits

## ECONOMICS

30 credits to include:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Microeconomics \& Macroeconomics (Select one): |  | 4-8 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment |  |
| Intermediate Theory (Select one): |  | 6-8 |
| $\begin{aligned} & \text { ECON } 301 \\ & \& \text { ECON } 302 \end{aligned}$ | Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory |  |
| ECON 311 <br> \& ECON 312 | Intermediate Microeconomic Theory <br> - Advanced Treatment and Intermediate Macroeconomic <br> Theory - Advanced Treatment <br> (Honors Econ) |  |


| Introductory Econometrics |  |
| :--- | ---: |
| ECON $410 \quad$ Introductory Econometrics | 4 |
| Three Advanced ECON courses: ${ }^{1}$ | $6-8$ |


| ECON 435 | The Financial System |
| :--- | :--- |
| ECON 441 | Analytical Public Finance |
| ECON 442 | Macroeconomic Policy |
| ECON 448 | Human Resources and Economic <br> Growth |


| ECON 450 | Wages and the Labor Market |
| :--- | :--- |
| ECON 451 | The Economic Approach to Human <br> Behavior |
| ECON 455 | Behavioral Economics <br> ECON 458 <br> Industrial Structure and Competitive <br> Strategy |
| ECON 460 | Economic Forecasting |
| ECON 464 467 | International Trade and Finance <br> International Industrial <br> Organizations |

ECON 468 Industrial Organization and Imperfect Competition
ECON 475 Economics of Growth
ECON 503 Markets with Frictions
ECON 508 Wealth and Income
ECON 521 Game Theory and Economic Analysis
ECON 522 Law and Economics
ECON 525 Economics of Education: Theory and Measurement
ECON/POP HLTH/ The Economics of Health Care PUB AFFR 548
ECON $580 \quad$ Honors Tutorial in Research Project Design

| ECON 623 | Population Economics |
| :---: | :---: |
| ECON 666 | Issues in International Finance |
| ECON 690 | Topics in Economics |
| Additional credits to | achieve 30 in the major: |
| Select any Advance Applied Economics | d course (above) or one of these courses: |
| ECON/ <br> FINANCE 300 | Introduction to Finance |
| ECON/ <br> HIST SCI 305 | Development of Economic Thought |
| ECON/A A E/ <br> REAL EST/ <br> URB R PL 306 | The Real Estate Process |
| ECON/ <br> FINANCE 320 | Investment Theory |
| ECON 321 | Sports Economics |
| ECON 330 | Money and Banking |
| ECON/A A E/ ENVIR ST 343 | Environmental Economics |
| ECON 364 | Survey of International Economics |
| ECON 370 | Economics of Poverty and Inequality |
| ECON 390 | Contemporary Economic Issues |
| ECON/REAL EST/ URB R PL 420 | Urban and Regional Economics |
| ECON/A A E 421 | Economic Decision Analysis |
| ECON 440 | Urban and Regional Economics |
| ECON/ENVIR ST/ <br> POLI SCI/ <br> URB R PL 449 | Government and Natural Resources |
| ECON/A A E/ INTL BUS 462 | Latin American Economic Development |
| ECON/ <br> HISTORY 465 | The American Economy to 1865 |
| ECON/ <br> HISTORY 466 | The American Economy Since 1865 |
| ECON/A A E 473 | Economic Growth and Development in Southeast Asia |
| ECON/A A E 474 | Economic Problems of Developing Areas |
| ECON/A A E 477 | Agricultural and Economic Development in Africa |
| $\begin{aligned} & \text { ECON/ } \\ & \text { PHILOS } 524 \end{aligned}$ | Philosophy and Economics |
| ECON/A A E/ <br> F\&W ECOL 531 | Natural Resource Economics |
| ECON/A A E 567 | Public Finance in Less Developed Countries |
| ECON/REAL EST/ URB R PL 641 | Housing Economics and Policy |
| ECON/SOC 663 | Population and Society |
| ECON/A A E/ <br> ENVIR ST/ <br> URB R PL 671 | Energy Economics |
| Total Credits |  |

1 Two Advanced ECON courses must be taken at UW-Madison (in residence and not via study abroad)

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major and ECON courses
2.000 GPA on 15 upper-level major courses taken in residence ${ }^{2}$

15 credits in ECON, taken on the UW-Madison campus
2
Intermediate- and advanced-level ECON courses are upper level in the major.

## ENGLISH

The English major teaches students to appreciate and use the English language and literature effectively for critical thinking, effective communication, citizenship, and career success. English majors build strong writing skills and engage in high-level critical and analytical thinking. They encounter enriching, enduring, experimental, and complex works of literature. And they grapple with perspectives far distant from their own, examining their deepest values. Instructors introduce students to a wide range of genres and cultural perspectives, and pay close attention to all aspects of student thinking and writing, from logic and evidence to originality and style. Fostering communication skills, stimulating creativity, developing cultural sensitivity, and sharpening analytical abilities, the English major prepares students for a broad range of careers.

English majors choose one of three tracks: the general major (which emphasizes literary and cultural studies), creative writing, or language and linguistics. All majors take a core curriculum that introduces them to a range of approaches to literature and language, including courses in literary and cultural history. Students who opt for the general major build on core courses with intermediate and advanced classes that focus on texts from across a range of periods and places, investigating literature and culture using multiple methods and approaches. Students pursuing the emphasis on creative writing take the core curriculum with a sequence of creative writing workshops. Students wishing to emphasize language and linguistics choose options in grammar, the history of the English language, phonology, and language acquisition.

## TEACHING MAJOR

Those who wish to prepare for teaching careers at the secondary level should complete the undergraduate English major and then apply for a teaching certificate or graduate education program. For further information, students should make an appointment with the undergraduate advisor in English or the graduate advisor in curriculum and instruction.

## DEGREES/MAJORS/CERTIFICATES

- English, B.A. (p. 631)
- English, B.S. (p. 637)
- Health and the Humanities, Certificate (p. 643)
- Teaching English to Speakers of Other Languages, Certificate (p. 645)


## PEOPLE

## FACULTY

Professors Auerbach, Barry, Begam, Bernard-Donals, Bow, Britland, Castronovo, Dharwadker, Foys, Friedman, Guyer, Hill, Johnson, Keller, Kelley, Kercheval, Mitchell, Olaniyan, Ortiz-Robles, Purnell, Raimy, Sherrard-Johnson, Steele, Wanner, M. Young, R. Young, Yu, Zimmerman

Associate Professors Allewaert, Bearden, Cooper, Olson, Samuels, Trotter, Valenza, Vieira

Assistant Professors Calhoun, Cho, Druschke, Evans, Fawaz, Vareschi, Zweck

## RESOURCES AND SCHOLARSHIPS

## WRITING CENTER

The Writing Center (http://www.wisc.edu/writing), located in 6171 Helen C. White Hall, offers free individualized help with writing. Students are welcome to come to the center for help with writing assignments in almost any course. In half-hour tutorials, instructors help students clarify and organize ideas and offer advice about revising a draft. The center also offers short-term classes on various facets of writing, including classes on writing about literature, writing research papers, writing book reviews, writing essay exams, and on many other topics. The Writing Center also has a computer lab.

To make an appointment, students should call 263-1992 or stop by when the center is open. During busy times of the semester, the center often is booked several days in advance, so students should plan ahead. For complete information about the center, including hours, schedules for writing assistance in the Multicultural Student Center and residence halls, extensive handouts about writing, and information about the Undergraduate Writing Fellows program, see the center website (http:// www.wisc.edu/writing).

## ENGLISH, B.A.

The English major teaches students to appreciate and use the English language and literature effectively for critical thinking, effective communication, citizenship, and career success. English majors build strong writing skills and engage in high-level critical and analytical thinking. They encounter enriching, enduring, experimental, and complex works of literature. And they grapple with perspectives far distant from their own, examining their deepest values. Instructors introduce students to a wide range of genres and cultural perspectives, and pay close attention to all aspects of student thinking and writing, from logic and evidence to originality and style. Fostering communication skills, stimulating creativity, developing cultural sensitivity, and sharpening analytical abilities, the English major prepares students for a broad range of careers.

English majors choose one of three tracks: the general major (which emphasizes literary and cultural studies), creative writing, or language and linguistics. All majors take a core curriculum that introduces them to a range of approaches to literature and language, including courses in literary and cultural history. Students who opt for the general major build on core courses with intermediate and advanced classes that
focus on texts from across a range of periods and places, investigating literature and culture using multiple methods and approaches. Students pursuing the emphasis on creative writing take the core curriculum with a sequence of creative writing workshops. Students wishing to emphasize language and linguistics choose options in grammar, the history of the English language, phonology, and language acquisition.

## TEACHING MAJOR

Those who wish to prepare for teaching careers at the secondary level should complete the undergraduate English major and then apply for a teaching certificate or graduate education program. For further information, students should make an appointment with the undergraduate advisor in English or the graduate advisor in curriculum and instruction.

## HOW TO GET IN

Information about the English major can be found on the department website (http://www.english.wisc.edu/undergraduate) and also in the department office, 7195 Helen C. White Hall. Students interested in declaring the major should schedule an appointment (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/sckuzMmh.html) with Dr. Karen Redfield, the undergraduate advisor. Students must complete 6 credits of introductory literature before they declare, but are welcome to meet with the advisor at any time. These 6 credits must carry the "L" breadth designation, regardless of the subject in which they are taken.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of <br> one 4- or 5-credit course with a laboratory component; <br> or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |

## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :--- | :--- |
| Language | - Complete the third unit of a foreign language and the |
|  | second unit of an additional foreign language |

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of | 60 intermediate or advanced credits |
| Intermediate/ |  |
| Advanced |  |
| work |  |
| Major |  |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)


## - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work)

## REQUIREMENTS FOR THE MAJOR

30 credits in intermediate- and advanced-level ENGL courses numbered 204 and higher. ${ }^{1}$

## ENGLISH (LITERATURE)

| Code | Title | Credits |
| :---: | :---: | :---: |
| Survey of Literature |  |  |
| ENGL 241 | Literature and Culture I: to the 18th Century | 3 |
| ENGL 242 | Literature and Culture II: from the 18th Century to the Present | 3 |
| American Literature (1 course) |  | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings |  |
| ENGL 243 | American Literary Cultures |  |
| ENGL/ <br> AMER IND 246 | Literature by American Indian Women |  |
| ENGL/ <br> GEN\&WS 248 | Women in Ethnic American Literature |  |
| ENGL/ <br> ASIAN AM 270 | A Survey of Asian American Literature |  |
| ENGL/ AMER IND 274 | Indigenous Literature of the Great Lakes |  |
| ENGL/ <br> AMER IND 275 | American Indian Oral Literatures |  |
| ENGL 355 | Colonial and Early Romantic American Literature |  |
| ENGL 356 | Nineteenth-Century American Fiction |  |
| ENGL 357 | Major American Poets |  |
| ENGL 358 | Literature of the American Renaissance |  |
| ENGL 361 | Modern and Contemporary American Literature |  |
| ENGL 362 | American Fiction since 1900 |  |
| ENGL 363 | The American Short Story |  |
| ENGL/ <br> CHICLA 368 | Chicana/o and Latina/o Literatures |  |
| ENGL 374 | African and African Diaspora Literature and Culture |  |
| ENGL 439 | Topic in Early American Literature and Culture |  |
| ENGL 455 | A Study of an Outstanding Figure or Figures in American Literature |  |
| ENGL 456 | Topic in Nineteenth-Century American Literature and Culture |  |
| ENGL 457 | Topic in American Literature and Culture since 1900 |  |
| ENGL 458 | Major American Writer or Writers |  |
| ENGL 459 | Three American Novelists |  |


| ENGL 461 | Topics in Ethnic and Multicultural Literature |  |
| :---: | :---: | :---: |
| ENGL/ASIAN AM/ GEN\&WS 463 | Race and Sexuality in American Literature |  |
| ENGL/ASIAN AM/ GEN\&WS 464 | Asian American Women Writers |  |
| ENGL/ <br> ASIAN AM 465 | Asian American Poetry |  |
| ENGL/ <br> AMER IND 467 | Contemporary American Indian Literature Since 1953 |  |
| ENGL 474 | Topic in Contemporary Literature |  |
| ENGL/ <br> GEN\&WS 545 | Feminist Theory and Women's Writing in English |  |
| ENGL/ <br> JEWISH 593 | Literature of Jewish Identity in America |  |
| ENGL/ <br> AFROAMER 672 | Selected Topics in Afro-American Literature |  |
| Pre-1800 course (two | course) | 6 |
| You may take one (only) | y) Shakespeare course: |  |
| ENGL 219 | Shakespearean Drama |  |
| ENGL 220 | Shakespearean Drama |  |
| ENGL 431 | Early Works of Shakespeare |  |
| ENGL 432 | Later Works of Shakespeare |  |
| ENGL/ <br> MEDIEVAL 520 | Old English |  |
| You must take at lea | ast one course that is not Shakespeare: |  |
| ENGL 331 | Seventeenth-Century Literature and Culture |  |
| ENGL 334 | Eighteenth Century Literature and Culture |  |
| ENGL 335 | Stage and Page in the Long Eighteenth Century |  |
| ENGL 336 | Eighteenth-Century Novel |  |
| ENGL/HISTORY/ RELIG ST 360 | The Anglo-Saxons |  |
| ENGL 422 | Outstanding Figure(s) in Literature before 1800 |  |
| ENGL/ <br> MEDIEVAL 423 | Topic in Medieval Literature and Culture |  |
| ENGL/ <br> MEDIEVAL 424 | Medieval Drama |  |
| ENGL/ <br> MEDIEVAL 425 | Medieval Romance |  |
| ENGL/ <br> MEDIEVAL 426 | Chaucers Courtly Poetry |  |
| ENGL/ <br> MEDIEVAL 427 | Chaucer's Canterbury Tales |  |
| ENGL 430 | Topic in Early Modern Literature and Culture |  |
| ENGL 433 | Spenser |  |
| ENGL/ <br> RELIG ST 434 | Milton |  |
| ENGL 438 | Topic in Eighteenth-Century Literature and Culture |  |
| ENGL/ <br> MEDIEVAL 521 | Advanced Old English Literature |  |


| ENGL 546 | Topic in Travel Writing before 1800 |  |
| :--- | :---: | :---: |
| ENGL 245 | Seminar in the Major | 3 |
| Language or Composition \& Rhetoric (1 course) | 3 |  |


| ENGL 204 | Studies in Writing, Rhetoric, and <br> Literacy |
| :--- | :--- |
| ENGL 214 | The English Language |
| ENGL 304 | Composition \& Rhetoric In and <br> Beyond the University |
| ENGL 400 | Advanced Composition |
| ENGL 403 | Seminar on Tutoring Writing Across <br> the Curriculum |
| ENGL 500 | Writing in Workplaces |
| ENGL 501 | Writing Internship |
| ENGL 505 | Topics in Composition and Rhetoric |

Electives
any course from ENGL 204-699 ${ }^{1}$
Total Credits
1 excluding ENGL 207 and ENGL 236.

## ENGLISH LANGUAGE AND LINGUISTICS

NOTE: This is a track and will not appear on the transcript.
An optional emphasis on English language and linguistics is available to the interested L\&S undergraduate who wishes to combine a background in literature with a concentration of courses in the history and structure of the English language. The major requirements are distributed as follows:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Survey of Literature |  | 3 |
| ENGL 241 | Literature and Culture I: to the 18th <br> Century | 3 |
| ENGL 242 | Literature and Culture II: from the <br> 18th Century to the Present |  |

American Literature (1 course) 3
ENGL/ Vladimir Nabokov: Russian and
LITTRANS 223 American Writings
ENGL 243 American Literary Cultures
ENGL/ Literature by American Indian
AMER IND 246 Women
ENGL/ Women in Ethnic American
GEN\&WS 248 Literature
ENGL/ A Survey of Asian American
ASIAN AM 270 Literature

| ENGL/ | Indigenous Literature of the Great |
| :--- | :--- |
| AMER IND 274 | Lakes |

ENGL/ American Indian Oral Literatures
AMER IND 275

| ENGL 355 | Colonial and Early Romantic <br> American Literature |
| :--- | :--- |
| ENGL 356 | Nineteenth-Century American <br> Fiction |
| ENGL 357 | Major American Poets |
| ENGL 358 | Literature of the American <br> Renaissance |


| ENGL 361 | Modern and Contemporary American Literature |  |
| :---: | :---: | :---: |
| ENGL 362 | American Fiction since 1900 |  |
| ENGL 363 | The American Short Story |  |
| ENGL/ <br> CHICLA 368 | Chicana/o and Latina/o Literatures |  |
| ENGL 374 | African and African Diaspora Literature and Culture |  |
| ENGL 439 | Topic in Early American Literature and Culture |  |
| ENGL 455 | A Study of an Outstanding Figure or Figures in American Literature |  |
| ENGL 456 | Topic in Nineteenth-Century American Literature and Culture |  |
| ENGL 457 | Topic in American Literature and Culture since 1900 |  |
| ENGL 458 | Major American Writer or Writers |  |
| ENGL 459 | Three American Novelists |  |
| ENGL 461 | Topics in Ethnic and Multicultural Literature |  |
| ENGL/ASIAN AM/ GEN\&WS 463 | Race and Sexuality in American Literature |  |
| ENGL/ASIAN AM/ GEN\&WS 464 | Asian American Women Writers |  |
| ENGL/ <br> ASIAN AM 465 | Asian American Poetry |  |
| ENGL/ AMER IND 467 | Contemporary American Indian Literature Since 1953 |  |
| ENGL 474 | Topic in Contemporary Literature |  |
| ENGL/ <br> GEN\&WS 545 | Feminist Theory and Women's Writing in English |  |
| ENGL/ JEWISH 593 | Literature of Jewish Identity in America |  |
| ENGL/ <br> AFROAMER 672 | Selected Topics in Afro-American Literature |  |
| ENGL 245 | Seminar in the Major | 3 |
| ENGL 214 | The English Language | 3 |
| ENGL 314 | Structure of English | 3 |
| ENGL 315 | English Phonology | 3 |
| ENGL 514 or ENGL 516 | English Syntax <br> English Grammar in Use | 3 |
| Electives |  | 6 |
| any course from ENGL 204-699 ${ }^{1}$ |  |  |

Total Credits30

## EMPHASIS ON CREATIVE WRITING NAMED OPTION

- English: Emphasis on Creative Writing (p. 636)


## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all ENGL courses and all major courses
2.000 GPA on at least 15 credits of upper-level work in the major, taken in residence ${ }^{2}$

15 credits in ENGL, taken on the UW-Madison campus

2 Intermediate- and advanced-level ENGL courses are upper level in the major.

## THESIS OF DISTINCTION

Students majoring in English who are not completing Honors in the Major may choose to complete a two semester senior thesis project. Thesis of Distinction is granted for an exceptionally well written thesis in ENGL 691 Senior Thesis-ENGL 692 Senior Thesis and requires the recommendation of both the sponsoring faculty member and the honors coordinator. For further information consult the department advisor or the honors coordinator.

## HONORS IN THE MAJOR

Students may declare Honors in the English Major in consultation with the English undergraduate advisor. To be eligible to declare Honors in the English Major, students must:

- Complete ENGL 241 Literature and Culture I: to the 18th Century, ENGL 242 Literature and Culture II: from the 18th Century to the Present, or ENGL 243 American Literary Cultures
- Complete one additional course in the major
- Have completed at least 6 credits in the Department of English
- Have established a 3.500 GPA for all ENGL courses


## HONORS IN THE ENGLISH MAJOR REQUIREMENTS

To earn Honors in the Major in English, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all ENGL 204 through ENGL 699 courses and courses counting in the major
- Complete 12 credits, taken for Honors, with a grade of $B$ or better to include:
- ENGL 245 Seminar in the Major or ENGL 381 Sophomore Honors: Research Methods in English
- ENGL 481 Junior Honors Seminar in the Major, and
- Either a two-semester Senior Honors Thesis in ENGL 681 Senior Honors Thesis in the Major and ENGL 682 Senior Honors Thesis in the Major for a total of 6 credits or ENGL 680 Honors Project


## HONORS IN THE ENGLISH MAJOR REQUIREMENTS, CREATIVE WRITING OPTION

To earn Honors in the Major in English-Creative Writing Option, students must satisfy the Option requirements (above) and the following additional requirements:

## - Earn a 3.300 overall university GPA

- Earn a 3.500 GPA for all ENGL courses and courses counting in the major
- Complete Sophomore Honors-Research Methods (for Honors) with a grade of B or better. ENGL 245 Seminar in the Major or ENGL 381 Sophomore Honors: Research Methods in English
- Complete ENGL 481 Junior Honors Seminar in the Major with a grade of $B$ or better, and
- One Advanced Level Creative Writing Workshop for Honors, with a grade of B or better. ENGL 407 Creative Writing: Nonfiction Workshop, ENGL 408 Creative Writing: Fiction Workshop, ENGL 409 Creative Writing: Poetry Workshop,ENGL 410 Creative Writing: Playwriting

Workshop, ENGL 411 Creative Writing: Special Topics Workshop, ENGL 508 Creative Writing: Advanced Fiction Workshop, ENGL 509 Creative Writing: Advanced Poetry Workshop

- Directed Creative Writing: ENGL 695


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (History of literature and language) To demonstrate knowledge of major forms, techniques, social conditions, values, and genres that have shaped the history of English literature and language.
2. (Critical thinking) To be able to discern and integrate divergent and contradictory perspectives, identify and question assumptions, and assess evidence and methods.
3. (Creativity) To generate original ideas and texts, experimenting and taking risks, solving problems, and answering questions in a range of genres and media.
4. (Critical writing) To write original, coherent, and compelling arguments that push beyond summary to analysis and independent and critical thinking in clear prose that meets expectations for grammatical correctness.
5. (Citizenship) To develop empathy by learning about the experiences of others, and to gain an understanding of how we participate in communities (including the classroom) and the public sphere.

## ADVISING AND CAREERS

## ADVISING

Karen Redfield, Undergraduate Advisor
advisor@english.wisc.edu
(608) 263-3760

7195E Helen C. White, 600 North Park Street
English Undergraduate Advising (https://english.wisc.edu/ undergraduate/academic-advising)

## CAREERS AND INTERNSHIP ADVISOR

Career \& Internship Coordinator
careers@english.wisc.edu (Career \& Internship Coordinator
careers@english.wisc.edu)
7195E Helen C. White, 600 North Park Street
English Career Advising (https://english.wisc.edu/undergraduatecareeradvising.htm)

The English department encourages our majors to begin working on their career exploration and preparation soon after declaring their major. Our career advisor also partners with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to their success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

## FACULTY

Professors Auerbach, Barry, Begam, Bernard-Donals, Bow, Britland, Castronovo, Dharwadker, Foys, Friedman, Guyer, Hill, Johnson, Keller, Kelley, Kercheval, Mitchell, Olaniyan, Ortiz-Robles, Purnell, Raimy, Sherrard-Johnson, Steele, Wanner, M. Young, R. Young, Yu, Zimmerman

Associate Professors Allewaert, Bearden, Cooper, Olson, Samuels, Trotter, Valenza, Vieira

Assistant Professors Calhoun, Cho, Druschke, Evans, Fawaz, Vareschi, Zweck

## RESOURCES AND SCHOLARSHIPS

## WRITING CENTER

The Writing Center (http://www.wisc.edu/writing), located in 6171 Helen C. White Hall, offers free individualized help with writing. Students are welcome to come to the center for help with writing assignments in
almost any course. In half-hour tutorials, instructors help students clarify and organize ideas and offer advice about revising a draft. The center also offers short-term classes on various facets of writing, including classes on writing about literature, writing research papers, writing book reviews, writing essay exams, and on many other topics. The Writing Center also has a computer lab.

To make an appointment, students should call 263-1992 or stop by when the center is open. During busy times of the semester, the center often is booked several days in advance, so students should plan ahead. For complete information about the center, including hours, schedules for writing assistance in the Multicultural Student Center and residence halls, extensive handouts about writing, and information about the Undergraduate Writing Fellows program, see the center website (http:// www.wisc.edu/writing).

## ENGLISH: EMPHASIS ON CREATIVE WRITING

## REQUIREMENTS

## ENGLISH, CREATIVE WRITING OPTION

NOTE: This is a formal Option and will appear on the transcript.
L\&S undergraduates with a particular interest in creative writing may combine a background in literature with a concentration of courses in fiction or poetry writing. The major requirements are distributed as follows:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Survey of Literature |  |  |
| ENGL 241 | Literature and Culture I: to the 18th Century | 3 |
| ENGL 242 | Literature and Culture II: from the 18th Century to the Present | 3 |
| American Literature (1 course) |  | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings |  |
| ENGL 243 | American Literary Cultures |  |
| ENGL/ <br> AMER IND 246 | Literature by American Indian Women |  |
| ENGL/ GEN\&WS 248 | Women in Ethnic American Literature |  |
| ENGL/ ASIAN AM 270 | A Survey of Asian American Literature |  |
| ENGL/ <br> AMER IND 274 | Indigenous Literature of the Great Lakes |  |
| ENGL/ <br> AMER IND 275 | American Indian Oral Literatures |  |
| ENGL 355 | Colonial and Early Romantic American Literature |  |
| ENGL 356 | Nineteenth-Century American Fiction |  |
| ENGL 357 | Major American Poets |  |
| ENGL 358 | Literature of the American Renaissance |  |


| ENGL 361 | Modern and Contemporary American Literature |  |
| :---: | :---: | :---: |
| ENGL 362 | American Fiction since 1900 |  |
| ENGL 363 | The American Short Story |  |
| ENGL/ CHICLA 368 | Chicana/o and Latina/o Literatures |  |
| ENGL 374 | African and African Diaspora Literature and Culture |  |
| ENGL 439 | Topic in Early American Literature and Culture |  |
| ENGL 455 | A Study of an Outstanding Figure or Figures in American Literature |  |
| ENGL 456 | Topic in Nineteenth-Century American Literature and Culture |  |
| ENGL 457 | Topic in American Literature and Culture since 1900 |  |
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| ENGL 459 | Three American Novelists |  |
| ENGL 461 | Topics in Ethnic and Multicultural Literature |  |
| ENGL/ASIAN AM/ GEN\&WS 463 | Race and Sexuality in American Literature |  |
| ENGL/ASIAN AM/ GEN\&WS 464 | Asian American Women Writers |  |
| ENGL/ ASIAN AM 465 | Asian American Poetry |  |
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| ENGL 474 | Topic in Contemporary Literature |  |
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| ENGL/ JEWISH 593 | Literature of Jewish Identity in America |  |
| ENGL/ <br> AFROAMER 672 | Selected Topics in Afro-American Literature |  |
| ENGL 245 | Seminar in the Major | 3 |
| Language or Compos | ition \& Rhetoric (1 course) | 3 |
| ENGL 204 | Studies in Writing, Rhetoric, and Literacy |  |
| ENGL 214 | The English Language |  |
| ENGL 304 | Composition \& Rhetoric In and Beyond the University |  |
| ENGL 400 | Advanced Composition |  |
| ENGL 403 | Seminar on Tutoring Writing Across the Curriculum |  |
| ENGL 500 | Writing in Workplaces |  |
| ENGL 501 | Writing Internship |  |
| ENGL 505 | Topics in Composition and Rhetoric |  |
| Creative Writing Workshops (3 courses) ${ }^{2}$ |  | 9 |
| ENGL 307 | Creative Writing: Fiction and Poetry Workshop |  |
| ENGL 407 | Creative Writing: Nonfiction Workshop |  |
| ENGL 408 | Creative Writing: Fiction Workshop |  |
| ENGL 409 | Creative Writing: Poetry Workshop |  |


| ENGL 410 | Creative Writing: Playwriting <br> Workshop |
| :---: | :--- |
| ENGL 411 | Creative Writing: Special Topics <br> Workshop |
| ENGL 508 | Creative Writing: Advanced Fiction <br> Workshop |
| ENGL 509 | Creative Writing: Advanced Poetry <br> Workshop |
| ENGL 695 | Directed Creative Writing |
| Electives |  |
| any course from ENGL 204-699 ${ }^{1}$ | 3 |

Total Credits
1 excluding ENGL 207 and ENGL 236.
2 Workshops numbered 400 and higher may be repeated for credit. Students are allowed to take only one creative writing workshop per semester. All three required workshops must be completed prior to beginning the Directed Creative Writing course (ENGL 695).

## ENGLISH, B.S.

The English major teaches students to appreciate and use the English language and literature effectively for critical thinking, effective communication, citizenship, and career success. English majors build strong writing skills and engage in high-level critical and analytical thinking. They encounter enriching, enduring, experimental, and complex works of literature. And they grapple with perspectives far distant from their own, examining their deepest values. Instructors introduce students to a wide range of genres and cultural perspectives, and pay close attention to all aspects of student thinking and writing, from logic and evidence to originality and style. Fostering communication skills, stimulating creativity, developing cultural sensitivity, and sharpening analytical abilities, the English major prepares students for a broad range of careers.

English majors choose one of three tracks: the general major (which emphasizes literary and cultural studies), creative writing, or language and linguistics. All majors take a core curriculum that introduces them to a range of approaches to literature and language, including courses in literary and cultural history. Students who opt for the general major build on core courses with intermediate and advanced classes that focus on texts from across a range of periods and places, investigating literature and culture using multiple methods and approaches. Students pursuing the emphasis on creative writing take the core curriculum with a sequence of creative writing workshops. Students wishing to emphasize language and linguistics choose options in grammar, the history of the English language, phonology, and language acquisition.

## TEACHING MAJOR

Those who wish to prepare for teaching careers at the secondary level should complete the undergraduate English major and then apply for a teaching certificate or graduate education program. For further information, students should make an appointment with the undergraduate advisor in English or the graduate advisor in curriculum and instruction.

## HOW TO GET IN

Information about the English major can be found on the department website (http://www.english.wisc.edu/undergraduate) and also in the department office, 7195 Helen C. White Hall. Students interested in declaring the major should schedule an appointment (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/sckuzMmh.html) with Dr. Karen Redfield, the undergraduate advisor. Students must complete 6 credits of introductory literature before they declare, but are welcome to meet with the advisor at any time. These 6 credits must carry the "L" breadth designation, regardless of the subject in which they are taken.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT

| Foreign Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| :---: | :---: |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ <br> Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

30 credits in intermediate- and advanced-level ENGL courses numbered 204 and higher. ${ }^{1}$

## ENGLISH (LITERATURE)

| Code | Title | Credits |
| :---: | :---: | :---: |
| Survey of Literature |  |  |
| ENGL 241 | Literature and Culture I: to the 18th Century | 3 |
| ENGL 242 | Literature and Culture II: from the 18th Century to the Present | 3 |
| American Literature (1 course) |  | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings |  |
| ENGL 243 | American Literary Cultures |  |
| ENGL/ <br> AMER IND 246 | Literature by American Indian Women |  |


| ENGL/ <br> GEN\&WS 248 | Women in Ethnic American Literature |  |
| :---: | :---: | :---: |
| ENGL/ <br> ASIAN AM 270 | A Survey of Asian American Literature |  |
| ENGL/ <br> AMER IND 274 | Indigenous Literature of the Great Lakes |  |
| ENGL/ <br> AMER IND 275 | American Indian Oral Literatures |  |
| ENGL 355 | Colonial and Early Romantic American Literature |  |
| ENGL 356 | Nineteenth-Century American Fiction |  |
| ENGL 357 | Major American Poets |  |
| ENGL 358 | Literature of the American Renaissance |  |
| ENGL 361 | Modern and Contemporary American Literature |  |
| ENGL 362 | American Fiction since 1900 |  |
| ENGL 363 | The American Short Story |  |
| ENGL/ <br> CHICLA 368 | Chicana/o and Latina/o Literatures |  |
| ENGL 374 | African and African Diaspora Literature and Culture |  |
| ENGL 439 | Topic in Early American Literature and Culture |  |
| ENGL 455 | A Study of an Outstanding Figure or Figures in American Literature |  |
| ENGL 456 | Topic in Nineteenth-Century American Literature and Culture |  |
| ENGL 457 | Topic in American Literature and Culture since 1900 |  |
| ENGL 458 | Major American Writer or Writers |  |
| ENGL 459 | Three American Novelists |  |
| ENGL 461 | Topics in Ethnic and Multicultural Literature |  |
| ENGL/ASIAN AM/ GEN\&WS 463 | Race and Sexuality in American Literature |  |
| ENGL/ASIAN AM/ GEN\&WS 464 | Asian American Women Writers |  |
| ENGL/ ASIAN AM 465 | Asian American Poetry |  |
| ENGL/ AMER IND 467 | Contemporary American Indian Literature Since 1953 |  |
| ENGL 474 | Topic in Contemporary Literature |  |
| ENGL/ <br> GEN\&WS 545 | Feminist Theory and Women's Writing in English |  |
| ENGL/ JEWISH 593 | Literature of Jewish Identity in America |  |
| ENGL/ <br> AFROAMER 672 | Selected Topics in Afro-American Literature |  |
| Pre-1800 course (two | course) | 6 |
| You may take one (only) | y) Shakespeare course: |  |
| ENGL 219 | Shakespearean Drama |  |
| ENGL 220 | Shakespearean Drama |  |
| ENGL 431 | Early Works of Shakespeare |  |
| ENGL 432 | Later Works of Shakespeare |  |


| ENGL/ <br> MEDIEVAL 520 | Old English |  | An optional emphasis on English language and linguistics is available to the interested L\&S undergraduate who wishes to combine a background |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| You must take at least one course that is not Shakespeare: |  |  | in literature with a concentration of courses in the history and structure of the English language. The major requirements are distributed as follows: |  |  |
| ENGL 331 | Seventeenth-Century Literature and Culture |  |  |  |  |
| ENGL 334 | Eighteenth Century Literature and Culture |  | Code <br> Survey of Literature | Title | Credits |
| ENGL 335 | Stage and Page in the Long Eighteenth Century |  | ENGL 241 | Literature and Culture I: to the 18th Century | 3 |
| ENGL 336 | Eighteenth-Century Novel |  | ENGL 242 | Literature and Culture II: from the | 3 |
| ENGL/HISTORY/ | The Anglo-Saxons |  |  | 18th Century to the Present |  |
| RELIG ST 360 |  |  | American Literature (1 course) |  | 3 |
| ENGL 422 | Outstanding Figure(s) in Literature before 1800 |  | ENGL/ <br> LITTRANS 223 | Vladimir Nabokov. Russian and American Writings |  |
| ENGL/ <br> MEDIEVAL 423 | Topic in Medieval Literature and Culture |  | ENGL 243 | American Literary Cultures |  |
| ENGL/ <br> MEDIEVAL 424 | Medieval Drama |  | ENGL/ <br> AMER IND 246 | Literature by American Indian Women |  |
| ENGL/ <br> MEDIEVAL 425 | Medieval Romance |  | ENGL/ GEN\&WS 248 | Women in Ethnic American Literature |  |
| ENGL/ <br> MEDIEVAL 426 | Chaucers Courtly Poetry |  | ENGL/ <br> ASIAN AM 270 | A Survey of Asian American Literature |  |
| ENGL/ <br> MEDIEVAL 427 | Chaucer's Canterbury Tales |  | ENGL/ <br> AMER IND 274 | Indigenous Literature of the Great Lakes |  |
| ENGL 430 | Topic in Early Modern Literature and Culture |  |  |  |  |
| ENGL 433 | Spenser |  | ENGL 355 | Colonial and Early Romantic American Literature |  |
| ENGL/ <br> RELIG ST 434 | Milton |  | ENGL 356 | Nineteenth-Century American Fiction |  |
| ENGL 438 | Topic in Eighteenth-Century Literature and Culture |  | ENGL 357 | Major American Poets |  |
| ENGL/ <br> MEDIEVAL 521 | Advanced Old English Literature |  | ENGL 358 | Literature of the American Renaissance |  |
| ENGL 546 | Topic in Travel Writing before 1800 |  | ENGL 361 | Modern and Contemporary American Literature |  |
| ENGL 245 | Seminar in the Major | 3 | ENGL 362 | American Fiction since 1900 |  |
| Language or Composition \& Rhetoric (1 course) |  | 3 | ENGL 363 | The American Short Story |  |
| ENGL 204 | Studies in Writing, Rhetoric, and Literacy |  | ENGL/ CHICLA 368 | Chicana/o and Latina/o Literatures |  |
| ENGL 214 | The English Language |  | ENGL 374 |  |  |
| ENGL 304 | Composition \& Rhetoric In and Beyond the University |  |  | Literature and Culture |  |
| ENGL 400 | Advanced Composition |  | ENGL 439 | Topic in Early American Literature and Culture |  |
| ENGL 403 | Seminar on Tutoring Writing Across the Curriculum |  | ENGL 455 | A Study of an Outstanding Figure or Figures in American Literature |  |
| ENGL 500 | Writing in Workplaces |  | ENGL 456 | Topic in Nineteenth-Century |  |
| ENGL 501 | Writing Internship |  |  | American Literature and Culture |  |
| ENGL 505 | Topics in Composition and Rhetoric |  | ENGL 457 | Topic in American Literature and Culture since 1900 |  |
| Electives |  | 9 |  |  |  |  |
| any course from ENGL 204-699 ${ }^{1}$ |  |  | ENGL 458 | Major American Writer or Writers |  |
| Total Credits |  | 30 | ENGL 459 | Three American Novelists |  |
| 1 excluding ENGL 207 and ENGL 236. |  |  | ENGL 461 | Topics in Ethnic and Multicultural Literature |  |
| ENGLISH LANG | AGE AND LINGUISTICS |  | ENGL/ASIAN AM GEN\&WS 463 | Race and Sexuality in American Literature |  |
| NOTE: This is a track | and will not appear on the transcript. |  | ENGL/ASIAN AN GEN\&WS 464 | Asian American Women Writers |  |


| ENGL/ <br> ASIAN AM 465 | Asian American Poetry |  |
| :---: | :---: | :---: |
| ENGL/ <br> AMER IND 467 | Contemporary American Indian Literature Since 1953 |  |
| ENGL 474 | Topic in Contemporary Literature |  |
| ENGL/ GEN\&WS 545 | Feminist Theory and Women's Writing in English |  |
| ENGL/ <br> JEWISH 593 | Literature of Jewish Identity in America |  |
| ENGL/ <br> AFROAMER 672 | Selected Topics in Afro-American Literature |  |
| ENGL 245 | Seminar in the Major | 3 |
| ENGL 214 | The English Language | 3 |
| ENGL 314 | Structure of English | 3 |
| ENGL 315 | English Phonology | 3 |
| ENGL 514 or ENGL 516 | English Syntax <br> English Grammar in Use | 3 |
| Electives |  | 6 |
| any course from ENGL 204-699 ${ }^{1}$ |  |  |
| Total Credits |  | 30 |

## EMPHASIS ON CREATIVE WRITING NAMED OPTION

- English: Emphasis on Creative Writing (p. 636)


## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all ENGL courses and all major courses
2.000 GPA on at least 15 credits of upper-level work in the major, taken in residence ${ }^{2}$

15 credits in ENGL, taken on the UW-Madison campus
2 Intermediate- and advanced-level ENGL courses are upper level in the major.

## THESIS OF DISTINCTION

Students majoring in English who are not completing Honors in the Major may choose to complete a two semester senior thesis project. Thesis of Distinction is granted for an exceptionally well written thesis in ENGL 691 Senior Thesis-ENGL 692 Senior Thesis and requires the recommendation of both the sponsoring faculty member and the honors coordinator. For further information consult the department advisor or the honors coordinator.

## HONORS IN THE MAJOR

Students may declare Honors in the English Major in consultation with the English undergraduate advisor. To be eligible to declare Honors in the English Major, students must:

- Complete ENGL 241 Literature and Culture I: to the 18th Century, ENGL 242 Literature and Culture II: from the 18th Century to the Present, or ENGL 243 American Literary Cultures
- Complete one additional course in the major
- Have completed at least 6 credits in the Department of English
- Have established a 3.500 GPA for all ENGL courses


## HONORS IN THE ENGLISH MAJOR REQUIREMENTS

To earn Honors in the Major in English, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all ENGL 204 through ENGL 699 courses and courses counting in the major
- Complete 12 credits, taken for Honors, with a grade of $B$ or better to include:
- ENGL 245 Seminar in the Major or ENGL 381 Sophomore Honors: Research Methods in English
- ENGL 481 Junior Honors Seminar in the Major, and
- Either a two-semester Senior Honors Thesis in ENGL 681 Senior Honors Thesis in the Major and ENGL 682 Senior Honors Thesis in the Major for a total of 6 credits or ENGL 680 Honors Project


## HONORS IN THE ENGLISH MAJOR REQUIREMENTS, CREATIVE WRITING OPTION

To earn Honors in the Major in English-Creative Writing Option, students must satisfy the Option requirements (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all ENGL courses and courses counting in the major
- Complete Sophomore Honors-Research Methods (for Honors) with a grade of B or better: ENGL 245 Seminar in the Major or ENGL 381 Sophomore Honors: Research Methods in English
- Complete ENGL 481 Junior Honors Seminar in the Major with a grade of $B$ or better, and
- One Advanced Level Creative Writing Workshop for Honors, with a grade of B or better. ENGL 407 Creative Writing: Nonfiction Workshop, ENGL 408 Creative Writing: Fiction Workshop, ENGL 409 Creative Writing: Poetry Workshop,ENGL 410 Creative Writing: Playwriting Workshop, ENGL 411 Creative Writing: Special Topics Workshop, ENGL 508 Creative Writing: Advanced Fiction Workshop, ENGL 509 Creative Writing: Advanced Poetry Workshop
- Directed Creative Writing: ENGL 695


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (History of literature and language) To demonstrate knowledge of major forms, techniques, social conditions, values, and genres that have shaped the history of English literature and language.
2. (Critical thinking) To be able to discern and integrate divergent and contradictory perspectives, identify and question assumptions, and assess evidence and methods.
3. (Creativity) To generate original ideas and texts, experimenting and taking risks, solving problems, and answering questions in a range of genres and media.
4. (Critical writing) To write original, coherent, and compelling arguments that push beyond summary to analysis and independent and critical thinking in clear prose that meets expectations for grammatical correctness.
5. (Citizenship) To develop empathy by learning about the experiences of others, and to gain an understanding of how we participate in communities (including the classroom) and the public sphere.

## ADVISING AND CAREERS

## ADVISING

Karen Redfield, Undergraduate Advisor
advisor@english.wisc.edu
(608) 263-3760

7195E Helen C. White, 600 North Park Street
English Undergraduate Advising (https://english.wisc.edu/ undergraduate/academic-advising)

## CAREERS AND INTERNSHIP ADVISOR

## Career \& Internship Coordinator

careers@english.wisc.edu (Career \& Internship Coordinator careers@english.wisc.edu)
7195E Helen C. White, 600 North Park Street
English Career Advising (https://english.wisc.edu/undergraduatecareeradvising.htm)

The English department encourages our majors to begin working on their career exploration and preparation soon after declaring their major. Our career advisor also partners with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to their success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school
applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

Professors Auerbach, Barry, Begam, Bernard-Donals, Bow, Britland, Castronovo, Dharwadker, Foys, Friedman, Guyer, Hill, Johnson, Keller, Kelley, Kercheval, Mitchell, Olaniyan, Ortiz-Robles, Purnell, Raimy, Sherrard-Johnson, Steele, Wanner, M. Young, R. Young, Yu, Zimmerman

Associate Professors Allewaert, Bearden, Cooper, Olson, Samuels, Trotter, Valenza, Vieira

Assistant Professors Calhoun, Cho, Druschke, Evans, Fawaz, Vareschi, Zweck

## RESOURCES AND SCHOLARSHIPS

## WRITING CENTER

The Writing Center (http://www.wisc.edu/writing), located in 6171 Helen C. White Hall, offers free individualized help with writing. Students are welcome to come to the center for help with writing assignments in almost any course. In half-hour tutorials, instructors help students clarify and organize ideas and offer advice about revising a draft. The center also offers short-term classes on various facets of writing, including classes on writing about literature, writing research papers, writing book reviews, writing essay exams, and on many other topics. The Writing Center also has a computer lab.

To make an appointment, students should call 263-1992 or stop by when the center is open. During busy times of the semester, the center often is booked several days in advance, so students should plan ahead. For complete information about the center, including hours, schedules for writing assistance in the Multicultural Student Center and residence halls, extensive handouts about writing, and information about the Undergraduate Writing Fellows program, see the center website (http:// www.wisc.edu/writing).

## ENGLISH: EMPHASIS ON CREATIVE WRITING

## REQUIREMENTS

## ENGLISH, CREATIVE WRITING OPTION

NOTE: This is a formal Option and will appear on the transcript.
L\&S undergraduates with a particular interest in creative writing may combine a background in literature with a concentration of courses in fiction or poetry writing. The major requirements are distributed as follows:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Survey of Literature |  |  |
| ENGL 241 | Literature and Culture I: to the 18th Century | 3 |
| ENGL 242 | Literature and Culture II: from the 18th Century to the Present | 3 |
| American Literature (1 course) |  | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings |  |
| ENGL 243 | American Literary Cultures |  |
| ENGL/ <br> AMER IND 246 | Literature by American Indian Women |  |
| ENGL/ <br> GEN\&WS 248 | Women in Ethnic American Literature |  |
| ENGL/ <br> ASIAN AM 270 | A Survey of Asian American Literature |  |
| ENGL/ <br> AMER IND 274 | Indigenous Literature of the Great Lakes |  |
| ENGL/ <br> AMER IND 275 | American Indian Oral Literatures |  |
| ENGL 355 | Colonial and Early Romantic American Literature |  |
| ENGL 356 | Nineteenth-Century American Fiction |  |
| ENGL 357 | Major American Poets |  |
| ENGL 358 | Literature of the American Renaissance |  |
| ENGL 361 | Modern and Contemporary American Literature |  |
| ENGL 362 | American Fiction since 1900 |  |
| ENGL 363 | The American Short Story |  |
| ENGL/ <br> CHICLA 368 | Chicana/o and Latina/o Literatures |  |
| ENGL 374 | African and African Diaspora Literature and Culture |  |
| ENGL 439 | Topic in Early American Literature and Culture |  |
| ENGL 455 | A Study of an Outstanding Figure or Figures in American Literature |  |
| ENGL 456 | Topic in Nineteenth-Century American Literature and Culture |  |


| ENGL 457 | Topic in American Literature and <br> Culture since 1900 |
| :--- | :--- |
| ENGL 458 | Major American Writer or Writers |
| ENGL 459 | Three American Novelists |

2 Workshops numbered 400 and higher may be repeated for credit. Students are allowed to take only one creative writing workshop per semester. All three required workshops must be completed prior to beginning the Directed Creative Writing course (ENGL 695).

## HEALTH AND THE HUMANITIES, CERTIFICATE

The humanities are about the human experience, and this certificate will give you exposure to a range of historical, cultural, and philosophical reasons why people make decisions about their health care. Everyone who comes in contact with the health care system, from health care providers to patients, needs to understand more than just the biological aspects of medicine in order to support health and wellness.

## LEARNING GOALS

After completing the certificate, you will be able to:

- Identify major developments in the history of medicine and the medical profession
- Describe how the meaning of "health" has varied over time and space
- Comprehend and evaluate complex arguments about politics, values, healthcare, and health in contemporary society
- Understand health and illness as grounded in personal experience, develop empathy for others' experiences, and use creative means to reflect on those experiences
- Display sensitivity for what health means among differently positioned people

To learn more about HatH-related resources, events, and opportunities on campus, visit our website. (https://english.wisc.edu/programs/health-and-humanities-certificate-overview)

## HOW TO GET IN

## AM I ELIGIBLE?

Undergraduate students from any school or college on the UW-Madison campus are eligible for the health and the humanities (HatH) certificate. The HatH certificate is currently a limited enrollment program. We encourage students to apply for the certificate as early as possible (after completing a core course). Students who are enrolled in the global health certificate are not eligible to apply for the HatH certificate.

## HOW CAN I DECLARE?

In order to declare the health and the humanities certificate, you must:

1. Be a current undergraduate in any school or college.
2. Attend a certificate information session (https://english.wisc.edu/ programs/health-and-humanities-certificate-overview/health-and-humanities-certificate-how-to-get-in).
3. Complete one of the core courses (http://guide.wisc.edu/ undergraduate/letters-science/english/health-humanities-certificate/ \#requirementstext) and earn at least a C.
4. Submit an application form and essay. Check our webpage (https:// english.wisc.edu/programs/health-and-humanities-certificateoverview) for details about the next application cycle.
5. If selected for the program, meet with the certificate advisor (https://english.wisc.edu/programs/health-and-humanities-
certificate-overview/advising) to declare the certificate and plan your coursework.

## REQUIREMENTS

Total Credits Required: 15

## CORE COURSE

Select one of the following core courses. You must complete a core course with a C or better before applying to the HatH certificate.

| Code | Title | Credits |
| :--- | :--- | ---: |
| HIST SCI/ | Biology and Society, 1950-Today | 3 |
| MED HIST 133 |  | 3 |
| HIST SCI/ | Bodies, Diseases, and Healers: <br> MED HIST 212 Introduction to the History of <br> Medicine | 3 |
| MED HIST/ | Introduction to Social Medicine | 3 |
| ANTHRO 231 | Literature and Medicine | 3 |
| ENGL 156 | Exploring Religion in Sickness and <br> RELIG ST 102 | Health |

## HEALTH AND ILLNESS IN SOCIAL CONTEXT

## Select two courses with a specific focus on health and illness in social context.

| Code | Title | Credits |
| :---: | :---: | :---: |
| AMER IND/C\&E SOC/ SOC 578 | Poverty and Place | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| COM ARTS 317 | Rhetoric and Health | 3 |
| ENGL/ASIAN AM/ GEN\&WS 463 | Race and Sexuality in American Literature | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS 370 | Topics in Gender and Disability | 3 |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change | 3 |
| GEN\&WS 533 | Special Topics in Women and Health | 3 |
| GEN\&WS/ HIST SCI 537 | Childbirth in the United States | 3 |
| JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| MED HIST/HIST SCI/ HISTORY 504 | Society and Health Care in American History | 3 |
| MED HIST/ PHILOS 505 | Justice and Health Care | 3 |
| MED HIST/HIST SCI/ HISTORY 507 | Health, Disease and Healing I | 3-4 |
| MED HIST/HIST SCI/ HISTORY 508 | Health, Disease and Healing II | 3-4 |
| MED HIST/ HIST SCI 509 | The Development of Public Health in America | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |



## CAPSTONE

You can fulfill the capstone requirement either by completing HIST SCI/ ENGL/MED HIST 525 Health and the Humanities, or by completing a health-focused service learning course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| HIST SCI/ENGL/ | Health and the Humanities | 3 |
| MED HIST 525 | Community Supports for People | 2 |
| NURSING 511 | with Dementia |  |
| DANCE 331 | Dynamics of Dance Therapy | 3 |
| RP \& SE 300 | Individuals with Disabilities | 3 |

## RESIDENCE AND QUALITY OF WORK

8 credits counting toward the certificate must be taken in residence.
2.000 cumulative GPA on all courses counting toward the certificate

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Identify major developments in the history of medicine and the medical profession.
2. Describe how the meaning of "health" has varied over time and space.
3. Comprehend and evaluate complex arguments about politics, values, healthcare, and health in contemporary society.
4. Understand health and illness as grounded in personal experience, develop empathy for others' experiences and use creative means to reflect on those experiences.
5. Develop sensitivity for what health means among differently positioned people (e.g., with respect to race, class, gender, culture, disability, age).

## ADVISING AND CAREERS

To learn more about the HatH advisor or schedule an appointment, visit advising and careers (https://english.wisc.edu/programs/health-and-humanities-certificate-overview/advising) on our website.

## PEOPLE

Certificate Director: Nicole Nelson, History
Certificate Co-Director. Judith Houck, Medical History and Bioethics
Certificate Steering Committee:

- Monique Allewaert, English
- Lisa Bratzke, School of Nursing
- Anthony Cerulli, Asian Languages and Cultures
- Jenell Johnson, Communication Arts
- Neil Kodesh, History
- Susan Lederer, Medical History and Bioethics
- Susan Nelson, Gender and Women's Studies
- Corrie Norman, Religious Studies
- Karen Redfield, English
- Dija Selimi, Center for Pre\#Health Advising
- Anne Vila, French and Italian
- Claire Wendland, Anthropology
- Sunny Yudkoff, Center for Jewish Studies

Advisor: hathadvisor@english.wisc.edu (hathadvisor@english.wisc.edu)

> TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES, CERTIFICATE

A certificate in teaching English to speakers of other languages (TESOL) is available to undergraduate students who wish to teach English as a foreign or second language, normally in positions abroad. Native English speakers must have the equivalent of four college-level semesters of one language including its spoken form. For nonnative English speakers, English is the foreign language. Nonnative English speakers must have a score of at least 50 on TSE or SPEAK and or 26 on the iBt speaking section and a TOEFL score of 100 on the iBt or 600 on the paper version. A score of 84 on the MELAB or 7 on the IELTS can be substituted for the TOEFL. Students must maintain a GPA of 3.000 based on all courses except for the TESOL Workshops which are graded pass/fail.

## HOW TO GET IN

Fill out the online application and submit to the ESL office. Students should apply as early as possible (after the sophomore year if they are undergraduates) to allow enough time to complete the requirements.

## Download the Undergraduate Application.

Academic requirements for the program are:
For Undergraduates: Enrollment in any one of the required certificate courses and a degree program at UW-Madison.

Native English speakers must show completion of four college-level semesters of one language (prior to or completed concurrently with certificate coursework).

Nonnative English speakers are required to show English language proficiency in the following ways:

- A minimum score of 50 on TSE or SPEAK or an iBy score of 26 on the speaking section of the TOEFL
- A minimum score of 100 on the TOEFL iBT or 600 on the paperbased version of the TOEFL or 7 on the IELTS (International English Language Testing System) can be substituted for the TOEFL.


## REQUIREMENTS

The required $\mathbf{2 1}$ credits of course work include:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Foundation Courses |  |  |
| ENGL 314 | Structure of English | 3 |
| ENGL 315 | English Phonology | 3 |
| ENGL 415 | Introduction to TESOL Methods | 3 |
| Second Language Acquisition and Teaching Courses |  |  |
| ENGL 318 | Second Language Acquisition | 3 |
| ENGL 515 | Techniques and Materials for TESOL | 3 |
| Students must take 3 credits of TESOL Workshops during the same semester. Each spring, three of the six 1-credit workshops are offered in alternate years: |  | 3 |
| ENGL 613 | TESOL: Pedagogical Grammar I |  |
| ENGL 614 | TESOL: Pedagogical Grammar II |  |
| ENGL 615 | TESOL: Teaching Listening and Speaking |  |
| ENGL 616 | TESOL: Teaching of Reading |  |
| ENGL 617 | TESOL: Teaching of Writing |  |
| ENGL 618 | TESOL: Teaching Pronunciation |  |

Social Perspectives on English Courses (choose one of the following four courses):

| ENGL 316 | English Language Variation in the |
| :--- | :--- |
|  | U.S. |
| ENGL 414 | Global Spread of English |
| ENGL 416 | English in Society |
| ENGL/ | Gender and Language |
| GEN\&WS 419 |  |

Total Credits

## Residence and Quality of Work:

Students must maintain a 3.000 cumulative GPA in all courses required for the certificate.

At least 11 credits for the certificate must be earned In residence.
Further information is available in the ESL Program Office (5134 Helen C. White Hall) and online.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. Demonstrate knowledge in the historical trends in the field, the theoretical underpinnings and the role of English in society and as an international language.
2. Become familiar with the sound and grammatical systems of English.
3. Understand an apply basic principles in the teaching of reading, writing, listening and speaking.
4. Understand the principles of second language acquisition.
5. Construct and execute well-crafted lesson plans.

## ADVISING AND CAREERS

Eric Raimy
7123 Helen C. White Hall
600 N. Park Street
Madison WI, 53706
raimy@wisc.edu

## PEOPLE

## FACULTY

Professors Purnell, Raimy, Wanner, R. Young
Assistant Professor Cho

## ENVIRONMENTAL STUDIES

## DEGREES/MAJORS/CERTIFICATES

- Environmental Studies Major (p. 646)


## ENVIRONMENTAL STUDIES MAJOR

## WHY CHOOSE AN ENVIRONMENTAL STUDIES MAJOR?

The Gaylord Nelson Institute for Environmental Studies is one of the world's leading institutions for environmental studies and is the administrative home for the major. The major offers a robust and interdisciplinary curriculum that spans all contemporary disciplines that touch upon the environment. The curriculum includes biological sciences, physical sciences, and social sciences, as well as humanities, history, health, and modern culture.

The environmental studies major, offered by the College of Letters \& Science and administered by the Nelson Institute for Environmental Studies, provides unique opportunities for undergraduate students to broaden their studies through interdisciplinary coursework related to the environment. The major must always be completed in tandem with a second major. This requirement is unique to the environmental studies major and allows undergraduates the opportunity to both broaden and deepen the focus of their other major with a perspective on the environment that spans a wide range of topics, and involves varying depths of application.

The major includes experiential learning opportunities via the capstone course and the field requirement, and encourages global interaction through study or internships abroad. With numerous travel abroad possibilities and ongoing access to a large selection of extracurricular events, graduates have countless combinations available to them. The outcome is a solid academic foundation in the study of the environment and access to a network of multidisciplinary problem-solving colleagues.

In today's world, the program prepares students to address modern challenges using interdisciplinary problem-solving approaches, applying
both an understanding of, and practical experience beyond, a single academic discipline. Employers purposefully seek individuals with interdisciplinary and international preparation, and environmental studies students are ready to meet that need.

Click here to see a complete list of faculty and staff affiliated with the Nelson Institute (http://nelson.wisc.edu/people).

The Nelson Institute also offers two undergraduate certificates:
Environmental Studies Certificate (p. 1291)
Sustainability Certificate (p. 1296)
Note: Students may not pair the environmental studies major with the environmental studies certificate or the sustainability certificate.

HOW TO GET IN

## HOW TO DECLARE

Students interested in declaring the environmental studies major should request a major declaration appointment. Information about declaring the major can be found at undergraduate advising (https://nelson.wisc.edu/ undergraduate/advising.php).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL/COLLEGE REQUIREMENTS

The Environmental Studies major is always paired with another major. Please refer to the School/College degree requirements of the other major to learn about degree requirements or consult an advisor.

## REQUIREMENTS FOR THE MAJOR

The environmental studies major provides students with an academically rigorous course sequence that encompasses introductory through advanced understandings of the interdisciplinary field of environmental studies. Environmental studies undergraduates are present in all eight undergraduate schools and colleges. Students must have a declared primary major, and are allowed to overlap a portion of course work from that major for the environmental studies major, making it possible to complete their degree within four years.

- 30 credits in the major as defined below.
- Declare and complete a primary major. Students must have a primary major declared before reaching senior standing ( 86 credits) or the environmental studies major may be canceled.
- At least 15 credits taken for the environmental studies major must be distinct, and not also meeting minimum requirements in another major.
- Students outside the College of Letters \& Science may have to meet additional overlap requirements.


## FOUNDATION (12-16 CREDITS)

One course from each of the following four areas. Courses used to meet a requirement within the foundation section cannot also be used in other areas of the curriculum.

Environmental Humanities (1 course)

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENVIR ST 113 | Environmental Studies: The Humanistic Perspective | 3 |
| ENVIR ST/HIST SCI/ HISTORY 125 | Green Screen: Environmental Perspectives through Film | 3 |
| ENVIR ST/ENGL 153 | Literature and the Environment | 3 |
| ENVIR ST/ <br> RELIG ST 270 | The Environment: Religion \& Ethics | 3-4 |
| HISTORY/ENVIR ST/ GEOG 460 | American Environmental History | 4 |
| ENVIR ST/ <br> HISTORY 465 | Global Environmental History | 3-4 |


| Environmental Social Science (1 course) |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ENVIR ST 112 | Environmental Studies: The Social Perspective | 3 |
| ENVIR ST/GEOG 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| ENVIR ST/A A E 244 | The Environment and the Global Economy | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| ENVIR ST/GEOG 339 | Environmental Conservation | 4 |


| Environmental Physical Science (1 course) |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| ATM OCN 100 | Weather and Climate | 3 |
| ATM OCN 101 | Weather and Climate | 4 |


| ENVIR ST/ <br> GEOSCI 106 | Environmental Geology | 3 | SOIL SCI/ <br> AGRONOMY/ | Grassland Ecology | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHYSICS 115 | Energy | 3 | BOTANY 370 |  |  |
| ENVIR ST/GEOG 120 | Introduction to the Earth System | 3 | ENVIR ST 375 | Field Ecology Workshop* | 3 |
| ENVIR ST/ILS 126 | Principles of Environmental Science | 4 | BOTANY 401 | Vascular Flora of Wisconsin | 4 |
|  |  |  | BOTANY/ANTHRO/ | Evolutionary Biology | 3 |
| ENVIR ST/GEOG 127 | Physical Systems of the Environment ${ }^{*}$ | 5 | ZOOLOGY 410 |  |  |
|  |  |  | BOTANY 422 | Plant Geography | 3 |
| SOIL SCI/ <br> ATM OCN 132 | Earth's Water. Natural Science and Human Use | 3 | ENVIR ST/C\&E SOC/ GEOG 434 | People, Wildlife and Landscapes | 3 |
| ENVIR ST/GEOG/ SOIL SCI 230 | Soil: Ecosystem and Resource | 3 | BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach | 2 |
| ENVIR ST 250 | Introduction to Sustainability Science | 3 | BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin * | 4 |
| SOIL SCI 301 | General Soil Science * | 4 | BOTANY/F\&W ECOL/ | General Ecology * | 4 |
| ENVIR ST/ATM OCN/ GEOG/GEOSCI 335 | Climatic Environments of the Past | 3 | ZOOLOGY 460 |  |  |
|  |  |  | AN SCI/F\&W ECOL/ | Ornithology | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 | ZOOLOGY 520 |  |  |
|  |  |  | AN SCI/F\&W ECOL/ ZOOLOGY 521 | Birds of Southern Wisconsin | 3 |
| * Counts as a designated field course to fulfill Field Experience. |  | Credits | ATM OCN/ AGRONOMY/ SOIL SCI 532 | Environmental Biophysics | 3 |
| Code | Title |  | GEOG 538 |  | 4 |
| GEOSCI 110 | Evolution and Extinction | 4 | GEOG 538 | Subsistence, and Development |  |
| BOTANY 240 | Plants and Humans | 3 | F\&W ECOL/ | Diseases of Wildlife | 3 |
| ENVIR ST/BOTANY/ <br> ZOOLOGY 260 | Introductory Ecology | 3 | $\text { SURG SCI } 548$ |  |  |
|  |  |  | F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL 401 | Physiological Animal Ecology | 3 | F\&W ECOL 551 | Forest Ecology Lab * | 1 |
| $\begin{aligned} & \text { F\&W ECOL/BOTANY/ } \\ & \text { ZOOLOGY } 460 \end{aligned}$ | General Ecology * | 4 | AGRONOMY/ ENTOM/F\&W ECOL/ | Ecotoxicology: Impacts on Populations, Communities and | 1 |
| F\&W ECOL 550 | Forest Ecology | 3 | M\&ENVTOX 634 | Ecosystems |  |
| * Counts as a designated field course to fulfill Field Experience. |  |  | ENVIR ST/BOTANY/ F\&W ECOL/ | Conservation Biology * | 3 |
| THEME (15 CREDITS) |  |  | ZOOLOGY 651 |  |  |
| Five courses and | d 15 credits from any of the areas below. |  | BOTANY/F\&W ECOL/ Historical Ecology ZOOLOGY 672 |  | 2 |

Courses may be concentrated in one area or distributed across multiple areas. Variable Topics courses (ENVIR ST 400, ENVIR ST 401, ENVIR ST 402, ENVIR ST 404) will count in the Theme requirements, depending on Topical content; due to variability, they are not listed individually under the section headings. Courses applied to the thematic areas cannot also be used in Foundation or Capstone.

| Biodiversity |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| ENVIR ST/ | Insects and Human Culture-a | 3 |
| ENTOM 201 | Survey Course in Entomology |  |
| ENTOM/ | Introduction to Entomology | 4 |
| ZOOLOGY 302 |  | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| ENVIR ST/ | Extinction of Species |  |
| F\&W ECOL/ |  | 3 |
| ZOOLOGY 360 |  |  |
| ENVIR ST/ | Wetlands Ecology * |  |
| LAND ARC 361 |  |  |


| ENVIR ST/ | Scientific Background to Global | 3 | SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHYSICS 472 | Environmental Problems |  | NUTR SCI/A A E/ | World Hunger and Malnutrition | 3 |
| ENVIR ST/ ATM OCN 520 | Bioclimatology | 3 | AGRONOMY/INTERAG 350 |  |  |
| ATM OCN 522 | Tropical Meteorology | 3 | Health |  |  |
| GEOG/GEOSCI 523 | Quaternary Vegetation Dynamics | 3 |  |  | Credits |
| GEOG/GEOSCI 527 | The Quaternary Period | 3 |  |  | 3 |
| ENVIR ST/ATM OCN/ GEOG 528 | Past Climates and Climatic Change | 3 | MED HIST 213 | Interdisciplinary Introduction |  |
| ENVIR ST/ <br> ATM OCN 535 | Atmospheric Dispersion and Air Pollution | 3 | A A E/AGRONOMY/ INTER-AG/ <br> NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| Code ${ }^{\text {Energy }}$ | Title | Credits | POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| E C E 356 | Electric Power Processing for | 3 | POP HLTH 375 | Introduction to Public Health | 1 |
|  | Alternative Energy Systems |  | CIV ENGR 422 | Elements of Public Health | 3 |
| ENVIR ST/BSE 367 | Renewable Energy Systems | 3 |  | Engineering |  |
| ENVIR ST/N E 373 | Nuclear Energy and the Environment | 3 | CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { GEOSCI } 411 \end{aligned}$ | Energy Resources | 3 | M E 466 | Air Pollution Effects, Measurements and Control | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 | ENVIR ST/ POP HLTH 471 | Introduction to Environmental Health | 3 |
| M E 461 | Thermal Systems Modeling | 3 | ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| M E 466 | Air Pollution Effects, Measurements and Control | 3 | ENVIR ST/HIST SCI/ MED HIST 513 | Environment and Health in Global Perspective | 3 |
| ENVIR ST/ <br> ATM OCN 535 | Atmospheric Dispersion and Air Pollution | 3 | GEN\&WS/ <br> INTL ST 535 | Women's Global Health and Human Rights | 3 |
| ENVIR ST/A A E/ <br> CIV ENGR/ <br> URB R PL 561 | Energy Markets | 3 | POP HLTH/HIST SCI/ <br> MED HIST 553 | International Health and Global Society | 3 |
| ENVIR ST/A A E/ ECON/URB R PL 671 | Energy Economics | 3 | ENVIR ST/ POP HLTH 560 | Health Impact Assessment of Global Environmental Change | 3 |
| Food and Agriculture |  | Credits | CIV ENGR/ M\&ENVTOX/ | Toxicants in the Environment: Sources, Distribution, Fate, \& Effects | 3 |
| Code | Title |  | SOIL SCI 631 |  |  |
| ENVIR ST/ <br> AGROECOL/ <br> AGRONOMY/ | Agroecology: An Introduction to the Ecology of Food and Agriculture | 3 | AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |
| C\&E SOC/ ENTOM 103 |  |  | AGRONOMY/ <br> ENTOM/F\&W ECOL/ | Ecotoxicology: Impacts on Individuals | 1 |
| FOOD SCI 120 | Science of Food | 3 | M\&ENVTOX 633 |  |  |
| NUTR SCI 132 | Nutrition Today | 3 | AGRONOMY/ | Ecotoxicology: Impacts on | Credits |
| SOC/C\&E SOC 222 | Food, Culture, and Society | 3 | ENTOM/F\&W ECOL/ M\&ENVTOX 634 | Populations, Communities and |  |
| C\&E SOC/ <br> HIST SCI 230 | Agriculture and Social Change in Western History | 3 | History and Culture |  |  |
| AGRONOMY 300 | Cropping Systems | 3 | Code | Title |  |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 | ANTHRO 477 | Anthropology, Environment, and Development | 3 |
| A A E/C\&E SOC/ SOC 340 | Issues in Food Systems | 3-4 | ENVIR ST/ENGL 153 ENVIR ST/ RELIG ST 270 | The Environment: Religion \& Ethics | 3-4 |
| CNSR SCI 360 | Sustainable and Socially Just Consumption | 3 | ENVIR ST/ <br> AMER IND 306 | Indigenous Peoples and the Environment | 3 |
| HORT 370 | World Vegetable Crops | 3 | ENVIR ST 307 | Literature of the Environment: | 3 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |  | Speaking for Nature |  |
| FOLKLORE 439 | Foodwa |  |  |  |  |


| ENVIR ST/ HISTORY 328 | Environmental History of Europe | 3 | ENVIR ST/GEOG 325 | Analysis of the Physical Environment ${ }^{*}$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F\&W ECOL/ | Human/Animal Relationships: | 3 | ENVIR ST/GEOG 337 | Nature, Power and Society | 3 |
| ZOOLOGY 335 | Biological and Philosophical Issues |  | BOTANY/GEOG 338 | Environmental Biogeography | 3 |
| ENVIR ST/GEOG 339 | Environmental Conservation | 4 | ENVIR ST/GEOG 339 | Environmental Conservation | 4 |
| ENVIR ST/ | History of Ecology | 3 | GEOG 344 | The American West | 3 |
| HIST SCI 353 |  |  | BSE/DS/ | Sustainable Residential | 3 |
| ENVIR ST/HIST SCI/ RELIG ST 356 | Islam, Science \& Technology, and the Environment | 3-4 | LAND ARC 356 | Construction |  |
| ENVIR ST/ | Thinking through History with | 3-4 | CNSR SCI 360 | Sustainable and Socially Just Consumption | 3 |
| HISTORY 369 | Animals |  | EN | Minerals as a Public Problem | 3 |
| ENVIR ST/HISTORY/ <br> LEGAL ST 430 | Law and Environment: Historical and Contemporary Perspectives | 3 | GEOSCI 410 |  | 3 |
| ENVIR ST/ <br> PHILOS 441 | Environmental Ethics | 3-4 | ECON/REAL EST/ URB R PL 420 | Urban and Regional Economics | 3 |
| ENVIR ST/ SPANISH 445 | Culture and the Environment in the Luso-Hispanic World | 3 | ENVIR ST/C\&E SOC/ GEOG 434 | People, Wildlife and Landscapes | 3 |
| ENVIR ST/ F\&W ECOL/ HISTORY 452 | World Forest History | 3 | ENVIR ST/ ECON/POLI SCI/ URB R PL 449 | Government and Natural Resources |  |
| ENVIR ST/GEOG/ HISTORY 460 | American Environmental History | 4 | F\&W ECOL/ <br> SOIL SCI 451 | Environmental Biogeochemistry | 3 |
| HISTORY/ CHICLA 461 | The American West to1850 | 3-4 | ENVIR ST/ <br> F\&W ECOL/ | World Forest History | 3 |
| HISTORY/ | The American West Since 1850 | 3-4 | HISTORY 452 |  |  |
| CHICLA 462 |  |  | ENVIR ST/GEOG/ | American Environmental History | 4 |
| ENVIR ST/ | Global Environmental History | 3-4 | HISTORY 460 |  |  |
| HISTORY 465 |  |  | LAND ARC/ | Evolution of American Planning | 3 |
| ENVIR ST/GEOG/ | The Making of the American | 4 | URB R PL 463 |  |  |
| HISTORY 469 | Landscape |  | GEOG/URB R PL 505 | Urban Spatial Patterns and Theories | 3 |
| HISTORY/ <br> AMER IND 490 | American Indian History | 3-4 | ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENGL/ENVIR ST 533 | Topic in Literature and the Environment | 3 | ENVIR ST/GEOG 537 | Culture and Environment | 4 |
| ENVIR ST/GEOG 537 | Culture and Environment | 4 | GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| ENVIR ST/GEOG 557 | Development and Environment in Southeast Asia | 3 | ENVIR ST/GEOG 557 | Development and Environment in Southeast Asia | 3 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 672 | Historical Ecology | 2 | ENVIR ST/ <br> SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| GEOG/ENVIR ST 337 | Nature, Power and Society | 3 | URB R PL 601 | Site Planning | 3 |
| LSC/AMER IND 444 | Native American Environmental Issues and the Media | 3 | ENVIR ST/BOTANY/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| Code | Title | Credits | LAND ARC 668 | Restoration Ecology * | 3 |
| ENVIR ST/GEOG/ SOIL SCI 230 | Soil: Ecosystem and Resource | 3 | LAND ARC 677 | Cultural Resource Preservation and Landscape History | 3 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 | ENVIR ST/ |  | 3 |
| A A E/ECON/ REALEST/ | The Real Estate Process | 3 | LAND ARC/ SOIL SCI 695 | Information Systems in Natural Resources |  |
| URB R PL 306 |  |  | GEOSCI/ <br> ENVIR ST 410 | Minerals as a Public Problem | 3 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 | LSC/AMER IND 444 | Native American Environmental Issues and the Media | 3 |
| ENVIR ST/ SOIL SCI 324 | Soils and Environmental Quality | 3 | LAND ARC/BSE/ DS 356 | Sustainable Residential Construction | 3 |

* Counts as a designated field course to fulfill Field Experience.

| Policy |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| A AE/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| POLI SCI 272 | Introduction to Public Policy | 3-4 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| ENVIR ST/ <br> MHR 310 | Challenges \& Solutions in Business Sustainability | 3 |
| ENVIR ST/GEOG 339 | Environmental Conservation | 4 |
| ENVIR ST/A A E/ <br> ECON 343 | Environmental Economics | 3-4 |
| ENVIR ST/ <br> AMER IND/ <br> GEOG 345 | Managing Nature in Native North America | 3 |
| ENVIR ST 349 | Climate Change Governance | 3 |
| BSE/DS/ <br> LAND ARC 356 | Sustainable Residential Construction | 3 |
| ENVIR ST/ <br> M\&ENVTOX/ <br> PL PATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| OTM 370 | Sustainable Approaches to System Improvement | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| ENVIR ST/HISTORY/ <br> LEGAL ST 430 | Law and Environment: Historical and Contemporary Perspectives | 3 |
| ENVIR ST/GEOG 439 | US Environmental Policy and Regulation | 3-4 |
| ENVIR ST/ ECON/POLI SCI/ URB R PL 449 | Government and Natural Resources | 3-4 |
| M E 466 | Air Pollution Effects, Measurements and Control | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| CIV ENGR 522 | Hazardous Waste Management | 3 |
| ENVIR ST/ <br> PHILOS 523 | Philosophical Problems of the Biological Sciences | 3 |
| ECON/A A E/ <br> F\&W ECOL 531 | Natural Resource Economics | 3 |
| ENVIR ST/GEOG 534 | Environmental Governance: Markets, States and Nature | 3 |
| ENVIR ST 539 | Air Resources Science and Policy | 3 |
| ENVIR ST/C\&E SOC/ <br> SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| ENVIR ST/GEOG 557 | Development and Environment in Southeast Asia | 3 |
| SOC/C\&E SOC 573 | Community Organization and Change | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: <br> Sources, Distribution, Fate, \& Effects | 3 |


| R M I 650 | Sustainability, Environmental and <br> Social Risk Management | 3 |
| :--- | :--- | :--- |
| SOC/ECON 663 | Population and Society | 3 |
| ENVIR ST/ | Green Politics: Global Experience, | 3 |
| URB R PL 668 | American Prospects |  |

## Water

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN/ | Survey of Oceanography | $3-4$ |
| GEOSCI 105 |  |  |
| ATM OCN/ | Earth's Water. Natural Science and | 3 |
| SOIL SCI 132 | Human Use |  |
| CIV ENGR 311 | Hydroscience | 3 |
| ENVIR ST/ | Limnology-Conservation of Aquatic | 2 |
| ZOOLOGY 315 | Resources |  |
| ZOOLOGY 316 | Laboratory for Limnology- | $2-3$ |

CIV ENGR 320 Environmental Engineering 3

CIV ENGR $322 \quad$| Environmental Engineering |  |
| :--- | :--- |
|  | Processes |

| SOIL SCI 322 | Physical Principles of Soil and <br> Water Management | 3 |
| :--- | :--- | ---: |
| ENVIR ST/ | Wetlands Ecology $^{*}$ | 3 |

LAND ARC $361 \quad$ Ecology of Fishes 3
ZOOLOGY 510 Ecology of Fishes Lab * 2

ZOOLOGY 511
G LE/GEOSCI 627 Hydrogeology 3-4
GLE/GEOSCI 629 Contaminant Hydrogeology 3

* Counts as a designated field course to fulfill Field Experience.


## FIELD EXPERIENCE

The field experience in the Environmental Studies major can be met in one of the following ways:

- A designated field course selected from the curriculum above, indicated by an asterisk (*)
- Participation in an environmental study abroad program where $50 \%$ or more of the contact hours are in an out-of-doors situation (see your advisor)
- Participation in an environmental internship or similar experience where $50 \%$ or more of the contact hours are in an out-of-doors situation (field form summary must be submitted)


## CAPSTONE REQUIREMENT (3 CREDITS)

## 3 credits from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENVIR ST/ | Assessment of Environmental | 3 |
| SOIL SCI 575 | Impact | 3 |
| ENVIR ST/ | Health Impact Assessment of <br> POP HLTH 560 | Global Environmental Change |
| ENVIR ST 600 | Environmental Studies Major <br> Capstone | 3 |


| ENVIR ST/A A E/ | Decision Methods for Natural | $3-4$ |
| :--- | :--- | :--- |
| F\&W ECOL 652 | Resource Managers |  |

In some cases, a 3-credit research project for a minimum that meets specific criteria of an environmental capstone course may be substituted for the Capstone requirement. If you and a faculty member believe that you have a suitable project, please contact undergrad@nelson.wisc.edu for more information.

## RESIDENCE \& QUALITY OF WORK IN THE MAJOR

2.000 GPA in all ENVIR ST courses and courses in the major
2.000 GPA on 15 upper-level major credits, taken in residence Intermediate- and advanced-level courses in the major are considered upper level

15 credits in the ENVIR ST or in the major, taken on campus (at UWMadison)

Courses in the environmental studies major cannot be taken on a pass/ fail basis.

## HONORS IN THE MAJOR

Honors in the Major is not available in Environmental Studies.

## LEARNING OUTCOMES

1. Explain the social and historical processes that impact our current environments. Interpret the meanings, values, and aesthetics that are created, shaped, and revealed as humans interact with and modify the environments they inhabit.
2. Explain ecological processes and fundamental principles of environmental sciences relating to humanity's key environmental challenges of the past, present, and future.
3. Apply perspectives and techniques drawn from a coordinate major to develop interdisciplinary responses to environmental questions.
4. Recognize through critical thinking a diversity of viewpoints, ethical commitments, and disciplinary approaches to environmental concerns across various scales from the local to the global.
5. Demonstrate excellent reading, writing, communication, and research skills, both individually and in interdisciplinary teams.

## ADVISING AND CAREERS

Environmental studies students are represented in majors all across campus and in most undergraduate schools and colleges. Environmental studies majors should utilize the career office for their home school as appropriate. All students, not just L\&S students, can also benefit from SuccessWorks at the College of Letters \& Science.

We encourage our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks to help you leverage the academic skills learned in your major and liberal arts degree, explore and try out different career paths, participate in internships, prepare for the job search and/or graduate school applications, and network with professionals in the field (alumni and employers).

Letters \& Science graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## FRENCH AND ITALIAN

The programs in French and Italian are multifaceted, with an array of courses in language, culture, film, literature, and professional communication. Students may begin the study of French or Italian in college or continue it at any level for which they are prepared. For French a placement test is highly recommended. Questions about placement should be addressed to an academic advisor or the SOAR (Student Orientation, Advising, and Registration) foreign language consultant.

## GRADUATE PROGRAMS

Students interested in graduate programs in French and Italian should inquire at the graduate coordinator's office (608 Van Hise, 262-6971) or via the department website (http://frit.wisc.edu/graduate).

Affiliated Graduate Programs. For information about the PFMP (Professional French Master's Program), see the PFMP website (http:// pfmp.wisc.edu) or call 262-6971. For information about the Ph.D. in Second Language Acquisition (SLA), see the Language Institute website (http://languageinstitute.wisc.edu)

## STUDY ABROAD

For information about study abroad programs, see International Academic Programs (http://www.wisc.edu/studyabroad) and programs in the student's school or college.

## DEGREES/MAJORS/CERTIFICATES

[^25]- French, B.S. (p. 659)
- French, Certificate (p. 664)
- Italian, B.A. (p. 666)
- Italian, B.S. (p. 670)
- Italian, Certificate (p. 674)


## PEOPLE

## FRENCH

Professors Bousquet, Debaisieux, Goodkin, Langer, Miernowski, Songolo, Tochon, Vatan, Vila

Associate Professors El Nossery, Willis Allen
Assistant Professors Armstrong, Dima, Gipson
Faculty Associates Deitz, Irving
Senior Lecturer Miernowska
ITALIAN
Professors Buccini, Livorni, Rumble
Associate Professors Menechella, Phillips-Court, Todorovic

## RESOURCES AND SCHOLARSHIPS

## FRENCH HOUSE

La Maison Française (http://uwfrenchhouse.org), a francophone (French-speaking) residence hall and cultural center, is managed by the Department of French and Italian. Residence is open to UW-Madison students with the equivalent of a fourth-semester level of French. At least two native French graduate students reside in the house, aiding in conversation and facilitating the use of French. Most residents are Americans: prospective teachers of French, French majors, and students in other disciplines who want to speak French on a daily basis. Applications should be made well in advance. More information is available at uwfrenchhouse.org.

The French House is open for lunch, Monday - Friday, for all UW-Madison students. Students wishing to receive a credit for FRENCH 301 or FRENCH 302 must attend 4 times per week on average.

The French House is open to the public for Wednesday dinner and Friday lunch during the academic year.

## PIAZZA ITALIA

The department sponsors Piazza Italia (https://www.housing.wisc.edu/ residencehalls-Ic-ilc-languagehouses.htm), the Italian floor in the Lakeshore residence halls. An Italian graduate student serves as the resident house fellow, facilitating conversation in Italian and assisting a faculty member in a special 1-credit course on Italian culture. Students studying Italian will find a collegial atmosphere at Piazza Italia, which features special Italian-oriented programming including films, lectures, games, current events material, and regular meals "all'italiana" with guests from the Italian program. Piazza Italia is part of the International Learning Community (ILC) (https://www.housing.wisc.edu/residence-halls/learning-communities/international), which is dedicated to enriching cross-cultural understanding through a variety of social and educational programs.

## CLUBS AND OTHER ACTIVITIES

## French

French conversation groups and The French Ambassadors (http:// frit.wisc.edu/undergraduate/french/ambassadors), a student organization, give students the opportunity to converse in French and participate in cultural events. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see department website (https://www.frit.wisc.edu) and the French House website (http://uwfrenchhouse.org) for event details).

## Italian

Caffè Culturale (https://www.facebook.com/events/1100461163336722), an Italian conversation group, gives students the opportunity to converse in Italian, while the Italian Club (https://www.facebook.com/ groups/28276254670) allows students to participate in cultural events on campus and in the community. Cineteca Italiana (https:// www.facebook.com/UWCineteca/?fref=ts) organizes weekly screenings of Italian films. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see department website (https://www.frit.wisc.edu) for event details).

## FRENCH, B.A.

The French program at UW-Madison offers students opportunities for cultural and literary learning about the French-speaking world through dynamic, in-class experiences and extracurricular components such as the French House, an immersion residence hall and cultural center, and the French Ambassador program, a student organization that engages students with French and Francophone cultural events in and around Madison.

Students intending to major in French or complete the certificate enter the program at the appropriate level depending on their language proficiency.

- The French major includes two prerequisite courses (FRENCH 228 and FRENCH 271) followed by 24 credits in French.
- The French certificate includes two core courses (FRENCH 228 and FRENCH 271) followed by three additional courses at the 311 level or above.

The majority of UW-Madison French majors or certificate students complete their requirements through a combination of courses taken on campus and abroad with a UW-Madison-sponsored program.

Students have the option to take a class for Honors at almost all levels. For more information, please see the department website and/or consult a department advisor.

## INTRODUCTORY AND INTERMEDIATE FRENCH LANGUAGE SEQUENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 101 | First Semester French | 4 |
| FRENCH 102 | Second Semester French | 4 |
| FRENCH 201 | French for Speakers of Other | 4 |
|  | Romance Languages | 4 |
| FRENCH 203 | Third Semester French | 4 |


| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| :---: | :---: | :---: |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| After FRENCH 228, courses focus on language, culture, and literature. |  |  |
| ADVANCED COURSES IN LANGUAGE |  |  |
| Code | Title | Credits |
| FRENCH 301 <br> \& FRENCH 302 | Practical French Conversation and Practical French Conversation | 2 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ <br> INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH 590 | Advanced Phonetics | 3 |
| ADVANCED COURSES IN CULTURE |  |  |
| Code | Title | Credits |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 451 | Medieval, Renaissance, and Early Modern Studies | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 568 | Undergraduate Seminar in French/ Francophone Cultural Studies | 3 |

## ADVANCED COURSES IN LITERATURE

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 321 | Introduction to Medieval, <br> Renaissance, and Early Modern <br> Literature | 3 |
| FRENCH 322 | Introduction to Literature of <br> Modernity | 3 |
| FRENCH 430 | Readings in Medieval and <br> Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and Twenty- <br> First Century Literature | 3 |
| FRENCH 461 | French/Francophone Literary <br> Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and <br> Women | 3 |
| FRENCH 567 | Undergraduate Seminar in French/ | 3 |


| FRENCH 595 | Theory and Practice of French/ <br> Francophone Drama | 4 |
| :--- | :--- | ---: |
| FRENCH 681 <br> \& FRENCH 682 | Senior Honors Thesis <br> and Senior Honors Thesis | 6 |
| FRENCH 698 | Directed Study |  |
| FRENCH 699 | Directed Study | $1-6$ |
| French courses at the 600 level or above (not including those listed |  |  |
| above) are primarily graduate courses and require permission of an |  |  |
| undergraduate advisor and the instructor. |  |  |


| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| FRENCH 240 | Immigration and Expression | 3 |
| FRENCH 248 | Ethnic Studies in the French/ | 3 |
|  | Francophone World(s) | 3 |
| FRENCH/CLASSICS/ | Advanced Interdisciplinary Studies |  |
| HISTORY/ITALIAN/ | in Medieval Civilization |  |
| MEDIEVAL 550 |  |  |

For information on teacher training in French, see the School of Education (p. 1380) section in the Guide.

For courses in French literature in translation, see the Literature in Translation (http://guide.wisc.edu/courses/littrans) course listing.

## HOW TO GET IN

Students can declare the French major or certificate at any time.
Students are strongly encouraged to consult with a French advisor as early as possible to discuss various paths available to complete the requirements. Please note that study abroad can make gaining a major or a certificate very manageable.

Roughly 75 percent of French majors also major in at least one other area on campus, from the humanities to the sciences.

For more information, contact a French advisor (http://frit.wisc.edu/ undergraduate/french/academic_advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

Liberal Arts
and Science
Coursework
Depth of
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90 th credit |

Minimum
GPAs
2.000 in all coursework at UW-Madison
2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

\section*{REQUIREMENTS FOR THE MAJOR INTRODUCTORY (PREREQUISITE) COURSES <br> | Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 228 | Intermediate Language and Culture | $3-4$ |
| FRENCH 271 | Introduction to Literary Analysis | $3-4$ |
| Total Credits |  | $6-8$ |}

## TOTAL CREDITS

To complete the French major, 24 credits are needed beyond the introductory (prerequisite) courses, at the 300 level or above. Please note that Literature in Translation courses cannot be counted toward the major.

## REQUIRED FRENCH/FRANCOPHONE LITERATURE AND CULTURE

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 321 | Introduction to Medieval, |  |
|  | Renaissance, and Early Modern <br> Literature | 3 |
| FRENCH 322 | Introduction to Literature of <br> Modernity | 3 |
| FRENCH 347 | Introduction to Medieval, <br> Renaissance, and Early Modern <br> Civilization <br> or FRENCH 451 | 3 |

Total Credits
9

## ADDITIONAL FRENCH/FRANCOPHONE LITERATURE AND/OR CULTURE

Course list-select one:

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH/ | Professional Communication and | 3 |
| INTL BUS 313 | Culture in the Francophone World |  |
| FRENCH/ | Contemporary Issues in | 3 |
| INTL BUS 314 | Government, Organizations, and <br>  <br>  <br> Enterprise |  |


| FRENCH/ <br> INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| :---: | :---: | :---: |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH 361 | Study Abroad: French/Francophone Literature | 2-3 |
| FRENCH 362 | Study Abroad: French/Francophone Civilization | 2-3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH/ <br> AFRICAN 440 | African/Francophone Film | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 451 | Medieval, Renaissance, and Early Modern Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 464 | Literature and Medicine in FrenchSpeaking Cultures | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 567 | Undergraduate Seminar in French/ Francophone Literary Studies | 3 |
| FRENCH 568 | Undergraduate Seminar in French/ Francophone Cultural Studies | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| FRENCH 615 | Grammaire avancee | 3 |
| FRENCH 616 | Social Responsibility in Contemporary French-Language Professional Writing | 3 |
| FRENCH 617 | Contemporary Skill Set Literature in French | 3 |
| FRENCH 618 | Career Strategies for the FrenchSpeaking World | 2 |
| FRENCH 623 | Communication orale en situations professionnelles | 3 |
| FRENCH 626 | Critical Approaches to French Literature | 3 |
| FRENCH 630 | Le Siecle des Lumieres | 3 |
| FRENCH 631 | Litterature Francaise Du XVIIIe Siecle | 3 |
| FRENCH 633 | Le Roman Au XVIIIe Siecle | 3 |
| FRENCH 636 | Le Roman Francais 1850-1900 | 3 |
| FRENCH 637 | La Littérature française du XIXe siècle | 3 |


| FRENCH 639 | La Litterature Du XVIle Siecle | 3 |
| :--- | :--- | ---: |
| FRENCH 640 | La Litterature Du XVIIe Siecle | 3 |
| FRENCH 642 | Culture et sociétés dans le monde <br> francophone | 3 |
| FRENCH 645 | La Litterature Francaise du XVIe <br> Siecle | 3 |
| FRENCH 646 | La Litterature Francaise du XVIe <br> Siecle | 3 |
| FRENCH 647 | Le Roman Francais au XXe Siecle | 3 |
| FRENCH 653 | Cinéma français/francophone | 3 |
| FRENCH 657 | La Poesie Francaise du XIXe Siecle | 3 |
| FRENCH 665 | Introduction aux etudes <br> francophones | 3 |
| FRENCH 671 | La Critique Litteraire | 3 |
| FRENCH 681 | Senior Honors Thesis | 3 |
| FRENCH 682 | Senior Honors Thesis | 3 |
| FRENCH 691 | Thesis | 2 |
| FRENCH 692 | Thesis | 2 |

## AT LEAST ONE FRENCH/FRANCOPHONE LITERATURE AND/OR CULTURE COURSE AT THE 400 LEVEL OR HIGHER

Course list-select one:

| Code | Title | Credits |
| :---: | :---: | :---: |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH/ AFRICAN 440 | African/Francophone Film | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 451 | Medieval, Renaissance, and Early Modern Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 567 | Undergraduate Seminar in French/ Francophone Literary Studies | 3 |
| FRENCH 568 | Undergraduate Seminar in French/ Francophone Cultural Studies | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| FRENCH 615 | Grammaire avancee | 3 |
| FRENCH 616 | Social Responsibility in Contemporary French-Language Professional Writing | 3 |
| FRENCH 617 | Contemporary Skill Set Literature in French | 3 |


| FRENCH 618 | Career Strategies for the FrenchSpeaking World | 2 |
| :---: | :---: | :---: |
| FRENCH 623 | Communication orale en situations professionnelles | 3 |
| FRENCH 626 | Critical Approaches to French Literature | 3 |
| FRENCH 630 | Le Siecle des Lumieres | 3 |
| FRENCH 631 | Litterature Francaise Du XVIIIe Siecle | 3 |
| FRENCH 633 | Le Roman Au XVIIIe Siecle | 3 |
| FRENCH 636 | Le Roman Francais 1850-1900 | 3 |
| FRENCH 637 | La Littérature française du XIXe siècle | 3 |
| FRENCH 639 | La Litterature Du XVIIe Siecle | 3 |
| FRENCH 640 | La Litterature Du XVIIe Siecle | 3 |
| FRENCH 642 | Culture et sociétés dans le monde francophone | 3 |
| FRENCH 645 | La Litterature Francaise du XVIe Siecle | 3 |
| FRENCH 646 | La Litterature Francaise du XVIe Siecle | 3 |
| FRENCH 647 | Le Roman Francais au XXe Siecle | 3 |
| FRENCH 653 | Cinéma français/francophone | 3 |
| FRENCH 657 | La Poesie Francaise du XIXe Siecle | 3 |
| FRENCH 665 | Introduction aux etudes francophones | 3 |
| FRENCH 671 | La Critique Litteraire | 3 |
| FRENCH 681 | Senior Honors Thesis | 3 |
| FRENCH 682 | Senior Honors Thesis | 3 |
| FRENCH 691 | Thesis | 2 |
| FRENCH 692 | Thesis | 2 |

## LANGUAGE COURSE NUMBERED 300 OR ABOVE

| Course list-select one: |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| FRENCH 316 | Study Abroad: Advanced French Language | 2-6 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH 590 | Advanced Phonetics | 3 |

## RESIDENCE AND QUALITY OF WORK

1. 2.000 GPA in all FRENCH and major courses
2. 2.000 GPA on at least 15 credits of upper-level work in the major, taken in residence: FRENCH 300 through FRENCH 699
3. 15 credits in FRENCH taken on campus at UW-Madison

## HONORS IN THE MAJOR

Students may declare Honors in the French Major in consultation with a French undergraduate advisor.

## HONORS IN THE FRENCH MAJOR REQUIREMENTS

To earn Honors in the Major in French, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all FRENCH courses and all courses counting in the major
- Complete at least 8 credits, taken for Honors, beyond FRENCH $271^{1}$
- Complete a two-semester Senior Honors Thesis in FRENCH 681 and FRENCH 682, for a total of 6 credits $^{2}$

1 Study abroad in France or in another French-speaking country is highly recommended, and the 8 credits taken for Honors can be fulfilled through French courses taken abroad at the appropriate level.
2 In certain circumstances (particularly when the student is an Honors candidate in two or more departments), two courses in literature or cultural studies at the 500 or 600 level may be substituted for the Senior Honors Thesis.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Demonstrate that they understand and can analyze literary and nonliterary texts in French representing a broad spectrum of topics, time periods, and geographical regions (interpretive communication).
2. Express themselves effectively in spoken and written French to inform, persuade, and narrate for different audiences of listeners, viewers, or readers (presentational communication).
3. Express themselves effectively in spoken and written French to share information, reactions, and opinions related to a broad spectrum of topics and texts (interpersonal communication).
4. Recognize and explain cultural artifacts, practices, and perspectives of the French-speaking world including how these cultural elements relate to literary and non-literary texts in French (cultural knowledge).
5. Demonstrate a good degree of understanding of lexical, grammatical, syntactic, and stylistic features of the French language (linguistic knowledge).
6. Demonstrate awareness of difference and diversity by comparing and contrasting culturally situated beliefs, behaviors, and norms of the French-speaking world with those found in their own culture (crosscultural awareness).
7. Engage in a sustained fashion with the French language, its users, and cultural artifacts in and beyond the classroom, e.g., in their own community, virtual communities, and study abroad (engagement with the French language and culture).

## ADVISING AND CAREERS

The Department of French and Italian encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## ADVISING RESOURCES

- For information on language proficiency, language placement, and retrocredits, please see the French and Italian department
website (http://frit.wisc.edu/undergraduate/french/placement) or the Language Institute (http://languages.wisc.edu/advising) website.
- For language and international directions advising, please contact Michael Kruse, International Directions Advisor in the Language Institute (http://languages.wisc.edu/languageadvising).
- For advising on the French Major or Certificate, please contact a French advisor (http://frit.wisc.edu/undergraduate/french/ academic_advising).


## PEOPLE

## FRENCH

Professors Bousquet, Debaisieux, Goodkin, Langer, Miernowski, Tochon, Vatan, Vila

Associate Professors El Nossery, Willis Allen
Assistant Professors Armstrong, Dima, Gipson
Faculty Associates Deitz, Irving
Senior Lecturer Miernowska

## RESOURCES AND SCHOLARSHIPS

## FRENCH HOUSE

La Maison Française (http://uwfrenchhouse.org), a francophone (French-speaking) residence hall and cultural center, is managed by the Department of French and Italian. Residence is open to UW-Madison students with the equivalent of a fourth-semester level of French. At least two native French graduate students reside in the house, aiding in conversation and facilitating the use of French. Most residents are Americans: prospective teachers of French, French majors, and students in other disciplines who want to speak French on a daily basis. Applications should be made well in advance. More information is available at uwfrenchhouse.org.

The French House is open for lunch, Monday - Friday, for all UW-Madison students. Students wishing to receive a credit for FRENCH 301 or FRENCH 302 must attend 4 times per week on average.

The French House is open to the public for Wednesday dinner and Friday lunch during the academic year.

## PIAZZA ITALIA

The department sponsors Piazza Italia (https://www.housing.wisc.edu/ residencehalls-Ic-ilc-languagehouses.htm), the Italian floor in the Lakeshore residence halls. An Italian graduate student serves as the resident house fellow, facilitating conversation in Italian and assisting a faculty member in a special 1-credit course on Italian culture. Students studying Italian will find a collegial atmosphere at Piazza Italia, which features special Italian-oriented programming including films, lectures, games, current events material, and regular meals "allitaliana" with guests from the Italian program. Piazza Italia is part of the International Learning Community (ILC) (https://www.housing.wisc.edu/residence-halls/learning-communities/international), which is dedicated to enriching cross-cultural understanding through a variety of social and educational programs.

## CLUBS AND OTHER ACTIVITIES

## French

French conversation groups and The French Ambassadors (http:// frit.wisc.edu/undergraduate/french/ambassadors), a student organization, give students the opportunity to converse in French and participate in cultural events. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see department website (https://www.frit.wisc.edu) and the French House website (http://uwfrenchhouse.org) for event details).

## Italian

Caffè Culturale (https://www.facebook.com/events/1100461163336722), an Italian conversation group, gives students the opportunity to converse in Italian, while the Italian Club (https://www.facebook.com/ groups/28276254670) allows students to participate in cultural events on campus and in the community. Cineteca Italiana (https:// www.facebook.com/UWCineteca/?fref=ts) organizes weekly screenings of Italian films. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see department website (https://www.frit.wisc.edu) for event details).

## FRENCH, B.S.

The French program at UW-Madison offers students opportunities for cultural and literary learning about the French-speaking world through dynamic, in-class experiences and extracurricular components such as the French House, an immersion residence hall and cultural center, and the French Ambassador program, a student organization that engages students with French and Francophone cultural events in and around Madison.

Students intending to major in French or complete the certificate enter the program at the appropriate level depending on their language proficiency.

- The French major includes two prerequisite courses (FRENCH 228 and FRENCH 271) followed by 24 credits in French.
- The French certificate includes two core courses (FRENCH 228 and FRENCH 271) followed by three additional courses at the 311 level or above.

The majority of UW-Madison French majors or certificate students complete their requirements through a combination of courses taken on campus and abroad with a UW-Madison-sponsored program.

Students have the option to take a class for Honors at almost all levels. For more information, please see the department website and/or consult a department advisor.

INTRODUCTORY AND INTERMEDIATE FRENCH
LANGUAGE SEQUENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 101 | First Semester French | 4 |
| FRENCH 102 | Second Semester French | 4 |
| FRENCH 201 | French for Speakers of Other <br>  <br>  <br> Romance Languages | 4 |
| FRENCH 203 | Third Semester French | 4 |
| FRENCH 204 | Fourth Semester French | 4 |


| FRENCH 227 | Exploring French: Intermediate- <br> Level Course for Entering Students | 3 |
| :--- | :--- | ---: |
| FRENCH 228 | Intermediate Language and Culture | $3-4$ |

After FRENCH 228, courses focus on language, culture, and literature.

## ADVANCED COURSES IN LANGUAGE

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 301 | Practical French Conversation |  |
| \& FRENCH 302 | and Practical French Conversation | 2 |
| FRENCH 311 | Advanced Composition and <br> Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written <br> Expression: Writing Across the <br> Humanities | 3 |
|  | Professional Communication and | 3 |
| FRENCH/ |  |  |
| INTL BUS 313 | Culture in the Francophone World | 3 |
| FRENCH/ | Contemporary Issues in <br> Government, Organizations, and | 3 |
| INTL BUS 314 | Enterprise |  |
| FRENCH/ | Advanced Interdisciplinary Studies <br> in Professional Communication | 3 |
| INTL BUS 315 | Applied French Language Studies | $1-3$ |
| FRENCH 350 | Advanced Phonetics | 3 |
| FRENCH 590 | Adra |  |

## ADVANCED COURSES IN CULTURE

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 347 | Introduction to Medieval, <br> Renaissance, and Early Modern <br> Civilization | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 451 | Medieval, Renaissance, and Early <br> Modern Studies | 3 |
| FRENCH 462 | French/Francophone Cultural <br> Studies Across the Centuries | 3 |
| FRENCH 568 | Undergraduate Seminar in French/ <br> Francophone Cultural Studies | 3 |

## ADVANCED COURSES IN LITERATURE

| Code | Title | Credits |
| :---: | :---: | :---: |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 567 | Undergraduate Seminar in French/ Francophone Literary Studies | 3 |


| FRENCH 595 | Theory and Practice of French/ <br> Francophone Drama | 4 |
| :--- | :--- | ---: |
| FRENCH 681 | Senior Honors Thesis |  |
| \& FRENCH 682 | and Senior Honors Thesis | 6 |
| FRENCH 698 | Directed Study | $1-6$ |
| FRENCH 699 | Directed Study | $1-6$ |
| French courses at the 600 <br> above) level or above (not including those listed <br> undergraduate advisor and the instructor. |  |  |

## COURSES TAUGHT IN ENGLISH

The following are introductory culture courses taught in English and do not count for credit toward the major or the certificate in French:

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| FRENCH 240 | Immigration and Expression | 3 |
| FRENCH 248 | Ethnic Studies in the French/ | 3 |
|  | Francophone World(s) |  |
| FRENCH/CLASSICS/ | Advanced Interdisciplinary Studies | 3 |
| HISTORY/ITALIAN/ | in Medieval Civilization |  |
| MEDIEVAL 550 |  |  |

For information on teacher training in French, see the School of Education (p. 1380) section in the Guide.

For courses in French literature in translation, see the Literature in Translation (http://guide.wisc.edu/courses/littrans) course listing.

## HOW TO GET IN

Students can declare the French major or certificate at any time.
Students are strongly encouraged to consult with a French advisor as early as possible to discuss various paths available to complete the requirements. Please note that study abroad can make gaining a major or a certificate very manageable.

Roughly 75 percent of French majors also major in at least one other area on campus, from the humanities to the sciences.

For more information, contact a French advisor (http://frit.wisc.edu/ undergraduate/french/academic_advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

[^26]
## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.) <br> Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign
Language
Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits
and Science
Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR INTRODUCTORY (PREREQUISITE) COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 228 | Intermediate Language and Culture | $3-4$ |
| FRENCH 271 | Introduction to Literary Analysis | $3-4$ |
| Total Credits |  | $6-8$ |

## TOTAL CREDITS

To complete the French major, 24 credits are needed beyond the introductory (prerequisite) courses, at the 300 level or above. Please note that Literature in Translation courses cannot be counted toward the major.
REQUIRED FRENCH/FRANCOPHONE LITERATURE AND CULTURE

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 321 | Introduction to Medieval, <br> Renaissance, and Early Modern <br> Literature | 3 |
| FRENCH 322 | Introduction to Literature of <br> Modernity | 3 |
| FRENCH 347 | Introduction to Medieval, <br> Renaissance, and Early Modern <br> Civilization <br> Medieval, Renaissance, and Early Modern Studies |  |

Total Credits

## ADDITIONAL FRENCH/FRANCOPHONE LITERATURE AND/OR CULTURE

| Course list-select one: |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH 361 | Study Abroad: French/Francophone Literature | 2-3 |


| FRENCH 362 | Study Abroad: French/Francophone Civilization | 2-3 |
| :---: | :---: | :---: |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH/ AFRICAN 440 | African/Francophone Film | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 451 | Medieval, Renaissance, and Early Modern Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 464 | Literature and Medicine in FrenchSpeaking Cultures | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 567 | Undergraduate Seminar in French/ Francophone Literary Studies | 3 |
| FRENCH 568 | Undergraduate Seminar in French/ Francophone Cultural Studies | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| FRENCH 615 | Grammaire avancee | 3 |
| FRENCH 616 | Social Responsibility in Contemporary French-Language Professional Writing | 3 |
| FRENCH 617 | Contemporary Skill Set Literature in French | 3 |
| FRENCH 618 | Career Strategies for the FrenchSpeaking World | 2 |
| FRENCH 623 | Communication orale en situations professionnelles | 3 |
| FRENCH 626 | Critical Approaches to French Literature | 3 |
| FRENCH 630 | Le Siecle des Lumieres | 3 |
| FRENCH 631 | Litterature Francaise Du XVIIIe Siecle | 3 |
| FRENCH 633 | Le Roman Au XVIIIe Siecle | 3 |
| FRENCH 636 | Le Roman Francais 1850-1900 | 3 |
| FRENCH 637 | La Littérature française du XIXe siècle | 3 |
| FRENCH 639 | La Litterature Du XVIIe Siecle | 3 |
| FRENCH 640 | La Litterature Du XVIIe Siecle | 3 |
| FRENCH 642 | Culture et sociétés dans le monde francophone | 3 |
| FRENCH 645 | La Litterature Francaise du XVIe Siecle | 3 |
| FRENCH 646 | La Litterature Francaise du XVIe Siecle | 3 |


| FRENCH 647 | Le Roman Francais au XXe Siecle | 3 |
| :--- | :--- | :--- |
| FRENCH 653 | Cinéma français/francophone | 3 |
| FRENCH 657 | La Poesie Francaise du XIXe Siecle | 3 |
| FRENCH 665 | Introduction aux etudes <br> francophones | 3 |
| FRENCH 671 | La Critique Litteraire | 3 |
| FRENCH 681 | Senior Honors Thesis | 3 |
| FRENCH 682 | Senior Honors Thesis | 3 |
| FRENCH 691 | Thesis | 2 |
| FRENCH 692 | Thesis | 2 |

## AT LEAST ONE FRENCH/FRANCOPHONE LITERATURE AND/OR CULTURE COURSE AT THE 400 LEVEL OR HIGHER

| Course list-select one: |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH/ <br> AFRICAN 440 | African/Francophone Film | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 451 | Medieval, Renaissance, and Early Modern Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 567 | Undergraduate Seminar in French/ Francophone Literary Studies | 3 |
| FRENCH 568 | Undergraduate Seminar in French/ Francophone Cultural Studies | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| FRENCH 615 | Grammaire avancee | 3 |
| FRENCH 616 | Social Responsibility in Contemporary French-Language Professional Writing | 3 |
| FRENCH 617 | Contemporary Skill Set Literature in French | 3 |
| FRENCH 618 | Career Strategies for the FrenchSpeaking World | 2 |
| FRENCH 623 | Communication orale en situations professionnelles | 3 |
| FRENCH 626 | Critical Approaches to French Literature | 3 |
| FRENCH 630 | Le Siecle des Lumieres | 3 |


| FRENCH 631 | Litterature Francaise Du XVIIIe Siecle | 3 |
| :---: | :---: | :---: |
| FRENCH 633 | Le Roman Au XVIIIe Siecle | 3 |
| FRENCH 636 | Le Roman Francais 1850-1900 | 3 |
| FRENCH 637 | La Littérature française du XIXe siècle | 3 |
| FRENCH 639 | La Litterature Du XVIIe Siecle | 3 |
| FRENCH 640 | La Litterature Du XVIIe Siecle | 3 |
| FRENCH 642 | Culture et sociétés dans le monde francophone | 3 |
| FRENCH 645 | La Litterature Francaise du XVIe Siecle | 3 |
| FRENCH 646 | La Litterature Francaise du XVIe Siecle | 3 |
| FRENCH 647 | Le Roman Francais au XXe Siecle | 3 |
| FRENCH 653 | Cinéma français/francophone | 3 |
| FRENCH 657 | La Poesie Francaise du XIXe Siecle | 3 |
| FRENCH 665 | Introduction aux etudes francophones | 3 |
| FRENCH 671 | La Critique Litteraire | 3 |
| FRENCH 681 | Senior Honors Thesis | 3 |
| FRENCH 682 | Senior Honors Thesis | 3 |
| FRENCH 691 | Thesis | 2 |
| FRENCH 692 | Thesis | 2 |

## LANGUAGE COURSE NUMBERED 300 OR ABOVE

## Course list-select one:

| Code | Title | Credits |
| :---: | :---: | :---: |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| FRENCH 316 | Study Abroad: Advanced French Language | 2-6 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH 590 | Advanced Phonetics | 3 |

## RESIDENCE AND QUALITY OF WORK

1. 2.000 GPA in all FRENCH and major courses
2. 2.000 GPA on at least 15 credits of upper-level work in the major, taken in residence: FRENCH 300 through FRENCH 699
3. 15 credits in FRENCH taken on campus at UW-Madison

## HONORS IN THE MAJOR

Students may declare Honors in the French Major in consultation with a French undergraduate advisor.

## HONORS IN THE FRENCH MAJOR REQUIREMENTS

To earn Honors in the Major in French, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all FRENCH courses and all courses counting in the major
- Complete at least 8 credits, taken for Honors, beyond FRENCH $271^{1}$
- Complete a two-semester Senior Honors Thesis in FRENCH 681 and FRENCH 682, for a total of 6 credits $^{2}$

1 Study abroad in France or in another French-speaking country is highly recommended, and the 8 credits taken for Honors can be fulfilled through French courses taken abroad at the appropriate level.
2
In certain circumstances (particularly when the student is an Honors candidate in two or more departments), two courses in literature or cultural studies at the 500 or 600 level may be substituted for the Senior Honors Thesis.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Demonstrate that they understand and can analyze literary and nonliterary texts in French representing a broad spectrum of topics, time periods, and geographical regions (interpretive communication).
2. Express themselves effectively in spoken and written French to inform, persuade, and narrate for different audiences of listeners, viewers, or readers (presentational communication).
3. Express themselves effectively in spoken and written French to share information, reactions, and opinions related to a broad spectrum of topics and texts (interpersonal communication).
4. Recognize and explain cultural artifacts, practices, and perspectives of the French-speaking world including how these cultural elements relate to literary and non-literary texts in French (cultural knowledge).
5. Demonstrate a good degree of understanding of lexical, grammatical, syntactic, and stylistic features of the French language (linguistic knowledge).
6. Demonstrate awareness of difference and diversity by comparing and contrasting culturally situated beliefs, behaviors, and norms of the French-speaking world with those found in their own culture (crosscultural awareness).
7. Engage in a sustained fashion with the French language, its users, and cultural artifacts in and beyond the classroom, e.g., in their own community, virtual communities, and study abroad (engagement with the French language and culture).

## ADVISING AND CAREERS

The Department of French and Italian encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## ADVISING RESOURCES

- For information on language proficiency, language placement, and retrocredits, please see the French and Italian department website (http://frit.wisc.edu/undergraduate/french/placement) or the Language Institute (http://languages.wisc.edu/advising) website.
- For language and international directions advising, please contact Michael Kruse, International Directions Advisor in the Language Institute (http://languages.wisc.edu/languageadvising).
- For advising on the French Major or Certificate, please contact a French advisor (http://frit.wisc.edu/undergraduate/french/ academic_advising).


## PEOPLE

## FRENCH

Professors Bousquet, Debaisieux, Goodkin, Langer, Miernowski, Tochon, Vatan, Vila

Associate Professors El Nossery, Willis Allen
Assistant Professors Armstrong, Dima, Gipson
Faculty Associates Deitz, Irving
Senior Lecturer Miernowska

## RESOURCES AND SCHOLARSHIPS

## FRENCH HOUSE

La Maison Française (http://uwfrenchhouse.org), a francophone (French-speaking) residence hall and cultural center, is managed by the Department of French and Italian. Residence is open to UW-Madison students with the equivalent of a fourth-semester level of French. At least two native French graduate students reside in the house, aiding in conversation and facilitating the use of French. Most residents are Americans: prospective teachers of French, French majors, and students in other disciplines who want to speak French on a daily basis. Applications should be made well in advance. More information is available at uwfrenchhouse.org.

The French House is open for lunch, Monday - Friday, for all UW-Madison students. Students wishing to receive a credit for FRENCH 301 or FRENCH 302 must attend 4 times per week on average.

The French House is open to the public for Wednesday dinner and Friday lunch during the academic year.

## PIAZZA ITALIA

The department sponsors Piazza Italia (https://www.housing.wisc.edu/ residencehalls-Ic-ilc-languagehouses.htm), the Italian floor in the Lakeshore residence halls. An Italian graduate student serves as the resident house fellow, facilitating conversation in Italian and assisting a faculty member in a special 1-credit course on Italian culture. Students studying Italian will find a collegial atmosphere at Piazza Italia, which features special Italian-oriented programming including films, lectures, games, current events material, and regular meals "all'italiana" with guests from the Italian program. Piazza Italia is part of the International Learning Community (ILC) (https://www.housing.wisc.edu/residence-halls/learning-communities/international), which is dedicated to enriching cross-cultural understanding through a variety of social and educational programs.

## CLUBS AND OTHER ACTIVITIES

## French

French conversation groups and The French Ambassadors (http:// frit.wisc.edu/undergraduate/french/ambassadors), a student organization, give students the opportunity to converse in French and participate in cultural events. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see
department website (https://www.frit.wisc.edu) and the French House website (http://uwfrenchhouse.org) for event details).

## Italian

Caffè Culturale (https://www.facebook.com/events/1100461163336722), an Italian conversation group, gives students the opportunity to converse in Italian, while the Italian Club (https://www.facebook.com/ groups/28276254670) allows students to participate in cultural events on campus and in the community. Cineteca Italiana (https:// www.facebook.com/UWCineteca/?fref=ts) organizes weekly screenings of Italian films. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see department website (https://www.frit.wisc.edu) for event details).

## FRENCH, CERTIFICATE

The undergraduate certificate in French offers students the opportunity to develop their proficiency in French language and their knowledge of literature and culture in the French-speaking world, thereby complementing their major(s) in other subjects across the university. It also strengthens the applications of students who intend to pursue careers or graduate study in areas where French is useful. The certificate is open to all undergraduate students.

## HOW TO GET IN

Students may declare the undergraduate certificate in French at any time and are encouraged to do so as early as possible, once enrolled as an undergraduate. Please make an appointment with an undergraduate advisor (http://frit.wisc.edu/undergraduate/french/academic_advising) to declare the certificate.

## REQUIREMENTS

The undergraduate certificate in French requires 15 credits of French coursework (or 5 courses) including FRENCH 228, FRENCH 271, and courses at the 311 level and above. Nine of the 15 credits must be taken on the UW-Madison campus. Courses for the certificate cannot be taken on a credit/no credit or pass/fail basis. Retroactive credits may not be applied toward the certificate

Please note that:

- Up to 6 credits of UW-Madison Study Abroad and 3 credits of transfer coursework may apply to the 15 credits total needed for the certificate.
- Students must maintain a 2.000 cumulative GPA in all courses required for the certificate.

The 15 credits required for the certificate will be distributed as follows:
Code Title Credits

Required Core Courses (2 courses)
FRENCH 228 Intermediate Language and Culture
FRENCH 271 Introduction to Literary Analysis
Advanced Language Course (1 course)
FRENCH 311 Advanced Composition and
Conversation

| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities |
| :---: | :---: |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World |
| FRENCH/ INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise |
| FRENCH/ <br> INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication |
| FRENCH 316 | Study Abroad: Advanced French Language |
| FRENCH 350 | Applied French Language Studies |
| FRENCH 590 | Advanced Phonetics |
| Credits to reach 15 | redit minimum for certificate: |
| FRENCH 311 | Advanced Composition and Conversation |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise |
| FRENCH/ INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature |
| FRENCH 322 | Introduction to Literature of Modernity |
| FRENCH 325 | Visual Culture in French/ Francophone Studies |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization |
| FRENCH 348 | Modernity Studies |
| FRENCH 350 | Applied French Language Studies |
| FRENCH 430 | Readings in Medieval and Renaissance Literature |
| FRENCH 431 | Readings in Early Modern Literature |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature |
| FRENCH/ <br> AFRICAN 440 | African/Francophone Film |
| FRENCH 449 | Francophone Modernity Studies |
| FRENCH 451 | Medieval, Renaissance, and Early Modern Studies |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries |
| FRENCH 464 | Literature and Medicine in FrenchSpeaking Cultures |
| FRENCH 465 | French/Francophone Film |


| FRENCH 467 | Aspects of Contemporary French <br> Literature |
| :--- | :--- |
| FRENCH 472 | French/Francophone Literature and <br> Women |
| FRENCH 555 | Colloquium: Research Possibilities <br> in French Studies |
| FRENCH 567 | Undergraduate Seminar in French/ <br> Francophone Literary Studies |
| FRENCH 568 | Undergraduate Seminar in French/ <br> Francophone Cultural Studies |
| FRENCH 590 | Advanced Phonetics |
| FRENCH 595 | Theory and Practice of French/ <br> Francophone Drama |

Total
Note: For courses taken on campus at the FRENCH 311 level or higher, prerequisites must be met or permission given by the department.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Interpretive communication) Demonstrate that they understand and can analyze of literary and non-literary texts in French representing a variety of topics, time periods, and geographical regions.
2. (Presentational communication) Express themselves effectively in spoken and written French to inform, persuade, and narrate for different audiences of listeners, viewers, or readers.
3. (Interpersonal communication) Express themselves effectively in spoken and written French to share information, reactions, and opinions related to a variety of topics and texts.
4. (Cultural knowledge) Recognize and explain cultural artifacts, practices, and perspectives of the French-speaking world.
5. (Linguistic knowledge) Demonstrate a good degree of understanding of lexical, grammatical, syntactic, and stylistic features of the French language.
6. (Cross-cultural awareness) Demonstrate awareness of difference and diversity by comparing and contrasting culturally situated beliefs, behaviors, and norms of the French-speaking world with their own.
7. (Engagement with the French language and culture) Engage in a sustained fashion with the French language, its users, and cultural artifacts in and beyond the classroom, e.g., in their own community, virtual communities, and study abroad.

## PEOPLE

## FRENCH

Professors Bousquet, Debaisieux, Goodkin, Langer, Miernowski, Tochon, Vatan, Vila

Associate Professors El Nossery, Willis Allen

Assistant Professors Armstrong, Dima, Gipson

Faculty Associates Deitz, Irving

Senior Lecturer Miernowska

## ITALIAN, B.A.

The Italian program at UW-Madison offers students opportunities for growth in the language and for increased cultural fluency through dynamic, in-class learning experiences and multiple extracurricular components such as Piazza Italia (an Italian immersion floor in the Lakeshore residence halls), Caffè Culturale (an Italian conversation group), Italian Club, and Cineteca Italiana (an Italian film club).

- The Italian major includes 24 credits taken beyond ITALIAN 204.
- The Italian certificate includes 2 core courses followed by 3 additional courses beyond ITALIAN 204 for a total of 15 credits.

The majority of UW-Madison Italian majors and certificate students complete their requirements through a combination of courses taken on campus and abroad with a UW-Madison Study Abroad program.

Students have the option to take a class for Honors at almost all levels. For more information, please see the department website and/or consult a department advisor.

INTRODUCTORY AND INTERMEDIATE ITALIAN LANGUAGE SEQUENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN 101 | First Semester Italian | 4 |
| ITALIAN 102 | Second Semester Italian | 4 |
| ITALIAN 201 | Italian for Speakers of Other | 4 |
|  | Romance Languages | 4 |
| ITALIAN 202 | Fast-track Intermediate Italian for | 4 |
|  | Speakers of Romance Languages | 4 |
| ITALIAN 203 | Third Semester Italian | 4 |

After ITALIAN 204, courses focus on language, literature, and culture.

## ADVANCED LANGUAGE

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN 311 | Advanced Italian Language | 3 |
| ITALIAN 312 | Writing Workshop | 3 |
| ITALIAN 340 | Structures of Italian | 3 |
| ITALIAN 423 | Corso Di Stilistica Applicata | 3 |

## ADVANCED LITERATURE

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN 321 | Studies in Italian Literature and | 3 |
|  | Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and <br> Culture II | 3 |
| ITALIAN 450 | Special Topics in Italian Literature | 3 |

## INTERMEDIATE/ADVANCED CULTURE

| Code | Title | Credits |
| :---: | :---: | :---: |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN/ COM ARTS 460 | Italian Film | 3 |

## 600-LEVEL COURSES

The following courses are open to both graduate and undergraduate students:

| Code | Title | Credits |
| :---: | :---: | :---: |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 <br> \& ITALIAN 622 | II Settecento and II Settecento | 6 |
| ITALIAN 623 | II Teatro Italiano | 3 |
| ITALIAN 631 <br> \& ITALIAN 632 | Lineamenti Di Letteratura Italiana and Lineamenti Di Letteratura Italiana | 6 |
| ITALIAN 635 <br> \& ITALIAN 636 | II Romanzo Italiano and II Romanzo Italiano | 6 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 641 | II Seicento: Ribelli, Libertini e Ortodossi | 3 |
| ITALIAN 651 | Il Rinascimento | 3 |
| ITALIAN/ <br> MEDIEVAL 659 <br> \& ITALIAN/ <br> MEDIEVAL 660 | Dante's Divina Commedia and Dante's Divina Commedia | 6 |
| ITALIAN/ <br> MEDIEVAL 671 <br> \& ITALIAN/ <br> MEDIEVAL 672 | II Duecento and II Duecento | 6 |
| ITALIAN 681 <br> \& ITALIAN 682 | Senior Honors Thesis and Senior Honors Thesis | 6 |
| ITALIAN 698 | Directed Study | 1-6 |
| ITALIAN 699 | Directed Study | 1-6 |

## COURSES TAUGHT IN ENGLISH

The following are intermediate/advanced culture courses taught in English and count for credit toward the major or the certificate in Italian:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN/ | Rome: The Changing Shape of the | $3-4$ |
| CLASSICS 350 | Eternal City |  |
| ITALIAN/FRENCH/ Introduction to the Romance <br> PORTUG/ Languages <br> SPANISH 429  <br> ITALIAN/ Italian Film <br> COM ARTS 460  <br> For information on teacher training in Italian, see the School of Education  <br> (p. 1380) section in this Guide.  |  |  |

For courses in Italian literature in translation, see Literature in Translation (http://guide.wisc.edu/courses/littrans) course listing.

## HOW TO GET IN

Students can declare the Italian major or certificate at any time.
Students are strongly encouraged to consult with an Italian advisor as early as possible to discuss various paths available to complete the requirements. Please note that study abroad can make gaining a major or a certificate very manageable.

Roughly 75 percent of all Italian majors also major in at least one other area on campus, from the humanities to the sciences.

For more information, contact an Italian advisor (http://frit.wisc.edu/ undergraduate/italian/academic_advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

| Mathematics | Fulfilled with completion of University General Education <br> requirements Quantitative Reasoning a (QR A) and <br> Quantitative Reasoning b (QR B) coursework. Please <br> note that some majors may require students to complete <br> additional math coursework beyond the B.A. mathematics <br> requirement. |
| :--- | :--- |
| Foreign |  |
| Language | - Complete the fourth unit of a foreign language; OR |
| - Complete the third unit of a foreign language and the |  |
| second unit of an additional foreign language |  |

Liberal Arts 108 credits

## and Science

Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work
Major Declare and complete at least one (1) major
Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit
Minimum $\quad 2.000$ in all coursework at UW-Madison
GPAs $\quad 2.000$ in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Italian majors must complete 24 credits beyond ITALIAN 204. Please note that Literature in Translation courses cannot be counted toward the major.

The 24 credits required for the Italian major will be distributed as follows:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Required Core Courses |  | 15 |
| ITALIAN 230 | Modern Italian Culture |  |
| ITALIAN 311 | Advanced Italian Language |  |
| ITALIAN 312 | Writing Workshop |  |
| ITALIAN 321 | Studies in Italian Literature and Culture I |  |
| ITALIAN 322 | Studies in Italian Literature and Culture II |  |
| Additional credits to reach 24-credit minimum |  | 9 |
| ITALIAN 340 | Structures of Italian |  |
| ITALIAN/ CLASSICS 350 | Rome: The Changing Shape of the Eternal City |  |
| ITALIAN 420 | Topics in Italian: Study Abroad |  |
| ITALIAN 423 | Corso Di Stilistica Applicata |  |
| ITALIAN/FRENCH PORTUG/ SPANISH 429 | Introduction to the Romance Languages |  |
| ITALIAN 450 | Special Topics in Italian Literature |  |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language |  |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language |  |
| ITALIAN/ COM ARTS 460 | Italian Film |  |
| ITALIAN 601 | L'Ottocento |  |
| ITALIAN 621 <br> \& ITALIAN 622 | II Settecento and II Settecento |  |
| ITALIAN 623 | II Teatro Italiano |  |
| ITALIAN 631 <br> \& ITALIAN 632 | Lineamenti Di Letteratura Italiana and Lineamenti Di Letteratura Italiana |  |
| ITALIAN 635 \& ITALIAN 636 | Il Romanzo Italiano and II Romanzo Italiano |  |
| ITALIAN 637 | La Poesia del Novecento |  |
| ITALIAN 641 | Il Seicento: Ribelli, Libertini e Ortodossi |  |
| ITALIAN 651 | Il Rinascimento |  |
| ITALIAN/ <br> MEDIEVAL 659 <br> \& ITALIAN/ <br> MEDIEVAL 660 | Dante's Divina Commedia and Dante's Divina Commedia |  |
| ITALIAN/ MEDIEVAL 671 \& ITALIAN/ MEDIEVAL 672 | II Duecento and II Duecento |  |
| ITALIAN 681 | Senior Honors Thesis |  |
| ITALIAN 682 | Senior Honors Thesis |  |
| ITALIAN 691 | Senior Thesis |  |
| ITALIAN 692 | Senior Thesis |  |
| ITALIAN 698 | Directed Study |  |
| ITALIAN 699 | Directed Study |  |
| Total Credits |  | 24 |

## RESIDENCY AND QUALITY OF WORK

1. 2.000 GPA in all ITALIAN and major courses
2. 2.000 GPA on at least 15 credits of upper-level work in the major, in residence: ITALIAN 300 through ITALIAN 699
3. 15 credits in ITALIAN taken on campus at UW-Madison

## HONORS IN THE MAJOR

Students may declare Honors in the Italian Major in consultation with the Italian undergraduate advisor.

## HONORS IN THE ITALIAN MAJOR: REQUIREMENTS

To earn Honors in the Major in Italian, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all ITALIAN courses and courses counting toward the major
- Complete at least 15 credits, taken for Honors, beyond ITALIAN 204, earning individual grades of B or better in each course. 6 of those credits must come from completing a two-semester Senior Honors Thesis in ITALIAN 681 Senior Honors Thesis and ITALIAN 682 Senior Honors Thesis. ${ }^{1}$

1 Students may be allowed to substitute two semesters of literature course work at the 600 level for the Senior Honors Thesis. See the undergraduate advisor in Italian.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

## Residency

Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Demonstrate that they understand and can analyze literary and nonliterary texts in Italian representing a broad spectrum of topics, time periods, and geographical regions (interpretive communication).
2. Express themselves effectively in spoken and written Italian to inform, persuade, and narrate for different audiences of listeners, viewers, or readers (presentational communication).
3. Express themselves effectively in spoken and written Italian to share information, reactions, and opinions related to a broad spectrum of topics and texts (interpersonal communication).
4. Recognize and explain cultural artifacts, practices, and perspectives of the Italian-speaking world including how these cultural elements relate to literary and non-literary texts in Italian (cultural knowledge).
5. Demonstrate a good degree of understanding of lexical, grammatical, syntactic, and stylistic features of the Italian language (linguistic knowledge).
6. Demonstrate awareness of difference and diversity by comparing and contrasting culturally situated beliefs, behaviors, and norms of the Italianspeaking world with those found in their own culture (cross-cultural awareness).
7. Engage in a sustained fashion with the Italian language, its users, and cultural artifacts in and beyond the classroom, e.g., in their own community, virtual communities, and study abroad (engagement with the Italian language and culture).

## ADVISING AND CAREERS

The Department of French and Italian encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## ADVISING RESOURCES

- For advising on language proficiency, language placement, and retrocredits, please see the French and Italian department website (http://frit.wisc.edu/undergraduate/italian/
placement_permissions) or the Language Institute (http:// languages.wisc.edu/advising) website.
- For language and international directions advising, please contact Michael Kruse, International Directions Advisor in the Language Institute (http://languages.wisc.edu/languageadvising).
- For advising on the Italian Major or Certificate, please contact an Italian advisor (http://frit.wisc.edu/undergraduate/italian/ academic_advising).


## PEOPLE

## ITALIAN

Professors Buccini, Livorni, Rumble
Associate Professors Menechella, Phillips-Court, Todorovic.

## RESOURCES AND SCHOLARSHIPS

## FRENCH HOUSE

La Maison Française (http://uwfrenchhouse.org), a francophone (French-speaking) residence hall and cultural center, is managed by the Department of French and Italian. Residence is open to UW-Madison students with the equivalent of a fourth-semester level of French. At least two native French graduate students reside in the house, aiding in conversation and facilitating the use of French. Most residents are Americans: prospective teachers of French, French majors, and students in other disciplines who want to speak French on a daily basis. Applications should be made well in advance. More information is available at uwfrenchhouse.org.

The French House is open for lunch, Monday - Friday, for all UW-Madison students. Students wishing to receive a credit for FRENCH 301 or FRENCH 302 must attend 4 times per week on average.

The French House is open to the public for Wednesday dinner and Friday lunch during the academic year.

## PIAZZA ITALIA

The department sponsors Piazza Italia (https://www.housing.wisc.edu/ residencehalls-Ic-ilc-languagehouses.htm), the Italian floor in the Lakeshore residence halls. An Italian graduate student serves as the resident house fellow, facilitating conversation in Italian and assisting a faculty member in a special 1-credit course on Italian culture. Students studying Italian will find a collegial atmosphere at Piazza Italia, which features special Italian-oriented programming including films, lectures, games, current events material, and regular meals "all'italiana" with guests from the Italian program. Piazza Italia is part of the International Learning Community (ILC) (https://www.housing.wisc.edu/residence-halls/learning-communities/international), which is dedicated to enriching cross-cultural understanding through a variety of social and educational programs.

## CLUBS AND OTHER ACTIVITIES

## French

French conversation groups and The French Ambassadors (http:// frit.wisc.edu/undergraduate/french/ambassadors), a student organization, give students the opportunity to converse in French and participate in cultural events. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see
department website (https://www.frit.wisc.edu) and the French House website (http://uwfrenchhouse.org) for event details).

## Italian

Caffè Culturale (https://www.facebook.com/events/1100461163336722), an Italian conversation group, gives students the opportunity to converse in Italian, while the Italian Club (https://www.facebook.com/ groups/28276254670) allows students to participate in cultural events on campus and in the community. Cineteca Italiana (https:// www.facebook.com/UWCineteca/?fref=ts) organizes weekly screenings of Italian films. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see department website (https://www.frit.wisc.edu) for event details).

## ITALIAN, B.S.

The Italian program at UW-Madison offers students opportunities for growth in the language and for increased cultural fluency through dynamic, in-class learning experiences and multiple extracurricular components such as Piazza Italia (an Italian immersion floor in the Lakeshore residence halls), Caffè Culturale (an Italian conversation group), Italian Club, and Cineteca Italiana (an Italian film club).

- The Italian major includes 24 credits taken beyond ITALIAN 204.
- The Italian certificate includes 2 core courses followed by 3 additional courses beyond ITALIAN 204 for a total of 15 credits.

The majority of UW-Madison Italian majors and certificate students complete their requirements through a combination of courses taken on campus and abroad with a UW-Madison Study Abroad program.

Students have the option to take a class for Honors at almost all levels. For more information, please see the department website and/or consult a department advisor.

## INTRODUCTORY AND INTERMEDIATE ITALIAN LANGUAGE SEQUENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN 101 | First Semester Italian | 4 |
| ITALIAN 102 | Second Semester Italian | 4 |
| ITALIAN 201 | Italian for Speakers of Other | 4 |
|  | Romance Languages | 4 |
| ITALIAN 202 | Fast-track Intermediate Italian for <br> Speakers of Romance Languages | 4 |
| ITALIAN 203 | Third Semester Italian | 4 |
| ITALIAN 204 | Fourth Semester Italian | 4 |

After ITALIAN 204, courses focus on language, literature, and culture.
ADVANCED LANGUAGE

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN 311 | Advanced Italian Language | 3 |
| ITALIAN 312 | Writing Workshop | 3 |
| ITALIAN 340 | Structures of Italian | 3 |
| ITALIAN 423 | Corso Di Stilistica Applicata | 3 |

## ADVANCED LITERATURE

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN 321 | Studies in Italian Literature and | 3 |
| ITALIAN 322 | Culture I |  |
|  | Studies in Italian Literature and <br> Culture II | 3 |
| ITALIAN 450 | Special Topics in Italian Literature | 3 |

## INTERMEDIATE/ADVANCED CULTURE

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: | 3 |
|  | Culture, Film, Language |  |

## 600-LEVEL COURSES

The following courses are open to both graduate and undergraduate students:

| Code | Title | Credits |
| :---: | :---: | :---: |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 <br> \& ITALIAN 622 | II Settecento and II Settecento | 6 |
| ITALIAN 623 | II Teatro Italiano | 3 |
| ITALIAN 631 <br> \& ITALIAN 632 | Lineamenti Di Letteratura Italiana and Lineamenti Di Letteratura Italiana | 6 |
| ITALIAN 635 <br> \& ITALIAN 636 | II Romanzo Italiano and II Romanzo Italiano | 6 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 641 | II Seicento: Ribelli, Libertini e Ortodossi | 3 |
| ITALIAN 651 | II Rinascimento | 3 |
| ITALIAN/ <br> MEDIEVAL 659 <br> \& ITALIAN/ <br> MEDIEVAL 660 | Dante's Divina Commedia and Dante's Divina Commedia | 6 |
| ITALIAN/ <br> MEDIEVAL 671 <br> \& ITALIAN/ <br> MEDIEVAL 672 | II Duecento and II Duecento | 6 |
| ITALIAN 681 <br> \& ITALIAN 682 | Senior Honors Thesis and Senior Honors Thesis | 6 |
| ITALIAN 698 | Directed Study | 1-6 |
| ITALIAN 699 | Directed Study | 1-6 |

## COURSES TAUGHT IN ENGLISH

The following are intermediate/advanced culture courses taught in English and count for credit toward the major or the certificate in Italian:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ITALIAN/ | Rome: The Changing Shape of the | $3-4$ |
| CLASSICS 350 | Eternal City |  |


| ITALIAN/FRENCH/ | Introduction to the Romance <br> PORTUG/ | 3 |
| :--- | :--- | :--- |
| SPANISH 429 |  | 3 |
| ITALIAN/ | Italian Film | 3 |

## COM ARTS 460

For information on teacher training in Italian, see the School of Education (p. 1380) section in this Guide.

For courses in Italian literature in translation, see Literature in Translation (http://guide.wisc.edu/courses/littrans) course listing.

## HOW TO GET IN

Students can declare the Italian major or certificate at any time.
Students are strongly encouraged to consult with an Italian advisor as early as possible to discuss various paths available to complete the requirements. Please note that study abroad can make gaining a major or a certificate very manageable.

Roughly 75 percent of all Italian majors also major in at least one other area on campus, from the humanities to the sciences.

For more information, contact an Italian advisor (http://frit.wisc.edu/ undergraduate/italian/academic_advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4- or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT |
| Limit one each: COMP SCI, STAT |  |

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |$\quad$| work |  |
| :--- | :--- |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Italian majors must complete 24 credits beyond ITALIAN 204. Please note that Literature in Translation courses cannot be counted toward the major.

The 24 credits required for the Italian major will be distributed as follows:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Required Core Courses | 15 |  |
| ITALIAN 230 | Modern Italian Culture |  |
| ITALIAN 311 | Advanced Italian Language |  |
| ITALIAN 312 | Writing Workshop |  |
| ITALIAN 321 | Studies in Italian Literature and <br> Culture I |  |
| ITALIAN 322 | Studies in Italian Literature and <br> Culture II |  |


| Additional credits to reach 24-credit minimum |  |
| :--- | :--- |
| ITALIAN 340 | Structures of Italian |
| ITALIAN/ | Rome: The Changing Shape of the |
| CLASSICS 350 | Eternal City |
| ITALIAN 420 | Topics in Italian: Study Abroad |
| ITALIAN 423 | Corso Di Stilistica Applicata |
| ITALIAN/FRENCH/ Introduction to the Romance  <br> PORTUG/ Languages <br> SPANISH 429  <br> ITALIAN 450 Special Topics in Italian Literature <br> ITALIAN 452 Special Topics in Italian Studies: |  |

ITALIAN 453 Special Topics in Italian Studies: Culture, Film, Language

ITALIAN/ Italian Film
COM ARTS 460
ITALIAN 601 L'Ottocento
ITALIAN 621 II Settecento
\& ITALIAN 622 and II Settecento
ITALIAN 623 II Teatro Italiano
ITALIAN 631 Lineamenti Di Letteratura Italiana
\& ITALIAN 632 and Lineamenti Di Letteratura Italiana

ITALIAN 635 Il Romanzo Italiano
\& ITALIAN 636 and II Romanzo Italiano
ITALIAN 637 La Poesia del Novecento
ITALIAN 641 Il Seicento: Ribelli, Libertini e
Ortodossi
ITALIAN 651 Il Rinascimento
ITALIAN/ Dante's Divina Commedia
MEDIEVAL 659 and Dante's Divina Commedia
\& ITALIAN/
MEDIEVAL 660
ITALIAN/ II Duecento
MEDIEVAL 671 and II Duecento
\& ITALIAN/
MEDIEVAL 672
ITALIAN 681 Senior Honors Thesis
ITALIAN 682 Senior Honors Thesis

| ITALIAN 691 | Senior Thesis |  |
| :--- | :--- | :--- |
| ITALIAN 692 | Senior Thesis |  |
| ITALIAN 698 | Directed Study |  |
| ITALIAN 699 | Directed Study | 24 |

## RESIDENCY AND QUALITY OF WORK

## 1. 2.000 GPA in all ITALIAN and major courses

2. 2.000 GPA on at least 15 credits of upper-level work in the major, in residence: ITALIAN 300 through ITALIAN 699
3. 15 credits in ITALIAN taken on campus at UW-Madison

## HONORS IN THE MAJOR

Students may declare Honors in the Italian Major in consultation with the talian undergraduate advisor.

## HONORS IN THE ITALIAN MAJOR: REQUIREMENTS

To earn Honors in the Major in Italian, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all ITALIAN courses and courses counting toward the major
- Complete at least 15 credits, taken for Honors, beyond ITALIAN 204, earning individual grades of B or better in each course. 6 of those credits must come from completing a two-semester Senior Honors Thesis in ITALIAN 681 Senior Honors Thesis and ITALIAN 682 Senior Honors Thesis. ${ }^{1}$

1 Students may be allowed to substitute two semesters of literature course work at the 600 level for the Senior Honors Thesis. See the undergraduate advisor in Italian.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Demonstrate that they understand and can analyze literary and nonliterary texts in Italian representing a broad spectrum of topics, time periods, and geographical regions (interpretive communication).
2. Express themselves effectively in spoken and written Italian to inform, persuade, and narrate for different audiences of listeners, viewers, or readers (presentational communication).
3. Express themselves effectively in spoken and written Italian to share information, reactions, and opinions related to a broad spectrum of topics and texts (interpersonal communication).
4. Recognize and explain cultural artifacts, practices, and perspectives of the Italian-speaking world including how these cultural elements relate to literary and non-literary texts in Italian (cultural knowledge).
5. Demonstrate a good degree of understanding of lexical, grammatical, syntactic, and stylistic features of the Italian language (linguistic knowledge).
6. Demonstrate awareness of difference and diversity by comparing and contrasting culturally situated beliefs, behaviors, and norms of the Italianspeaking world with those found in their own culture (cross-cultural awareness).
7. Engage in a sustained fashion with the Italian language, its users, and cultural artifacts in and beyond the classroom, e.g., in their own community, virtual communities, and study abroad (engagement with the Italian language and culture).

## ADVISING AND CAREERS

The Department of French and Italian encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## ADVISING RESOURCES

- For advising on language proficiency, language placement, and retrocredits, please see the French and Italian department website (http://frit.wisc.edu/undergraduate/italian/ placement_permissions) or the Language Institute (http:// languages.wisc.edu/advising) website.
- For language and international directions advising, please contact Michael Kruse, International Directions Advisor in the Language Institute (http://languages.wisc.edu/languageadvising).
- For advising on the Italian Major or Certificate, please contact an Italian advisor (http://frit.wisc.edu/undergraduate/italian/ academic_advising).


## PEOPLE

ITALIAN
Professors Buccini, Livorni, Rumble
Associate Professors Menechella, Phillips-Court, Todorovic.

## RESOURCES AND SCHOLARSHIPS

## FRENCH HOUSE

La Maison Française (http://uwfrenchhouse.org), a francophone (French-speaking) residence hall and cultural center, is managed by the Department of French and Italian. Residence is open to UW-Madison students with the equivalent of a fourth-semester level of French. At least two native French graduate students reside in the house, aiding in conversation and facilitating the use of French. Most residents are Americans: prospective teachers of French, French majors, and students in other disciplines who want to speak French on a daily basis. Applications should be made well in advance. More information is available at uwfrenchhouse.org.

The French House is open for lunch, Monday - Friday, for all UW-Madison students. Students wishing to receive a credit for FRENCH 301 or FRENCH 302 must attend 4 times per week on average.

The French House is open to the public for Wednesday dinner and Friday lunch during the academic year.

## PIAZZA ITALIA

The department sponsors Piazza Italia (https://www.housing.wisc.edu/ residencehalls-lc-ilc-languagehouses.htm), the Italian floor in the Lakeshore residence halls. An Italian graduate student serves as the resident house fellow, facilitating conversation in Italian and assisting a faculty member in a special 1-credit course on Italian culture. Students studying Italian will find a collegial atmosphere at Piazza Italia, which features special Italian-oriented programming including films, lectures, games, current events material, and regular meals "all'italiana" with guests from the Italian program. Piazza Italia is part of the International Learning Community (ILC) (https://www.housing.wisc.edu/residence-halls/learning-communities/international), which is dedicated to enriching cross-cultural understanding through a variety of social and educational programs.

## CLUBS AND OTHER ACTIVITIES

## French

French conversation groups and The French Ambassadors (http:// frit.wisc.edu/undergraduate/french/ambassadors), a student organization, give students the opportunity to converse in French and participate in cultural events. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see department website (https://www.frit.wisc.edu) and the French House website (http://uwfrenchhouse.org) for event details).

## Italian

Caffè Culturale (https://www.facebook.com/events/1100461163336722), an Italian conversation group, gives students the opportunity to converse in Italian, while the Italian Club (https://www.facebook.com/ groups/28276254670) allows students to participate in cultural events on campus and in the community. Cineteca Italiana (https:// www.facebook.com/UWCineteca/?fref=ts) organizes weekly screenings of Italian films. Undergraduates are also welcome at scholarly talks and department events on an array of subjects (see department website (https://www.frit.wisc.edu) for event details).

## ITALIAN, CERTIFICATE

The undergraduate certificate in Italian offers students the opportunity to develop their proficiency in Italian language and their knowledge of literature and culture in the Italian-speaking world. Advanced courses ( 300 and 400 level) will allow students to build on the foundation developed in 200 level courses by choosing from a range of courses in Italian literature, linguistics, cinema, culture, and professional communication. The certificate also strengthens the applications of students who intend to pursue careers or graduate study in areas where Italian is useful. The undergraduate certificate in Italian is open to all undergraduate students.

## HOW TO GET IN

Students may declare the undergraduate certificate in Italian at any time and are encouraged to do so as early as possible, once enrolled as an undergraduate. Please make an appointment with an undergraduate advisor (http://frit.wisc.edu/undergraduate/italian/academic_advising) to declare the certificate.

## REQUIREMENTS

## 15 CREDITS, TO INCLUDE: ${ }^{1}$

| Code | Title | Credits |
| :--- | :--- | ---: |
| Foundation (two courses): | 6 |  |
| ITALIAN 311 | Advanced Italian Language |  |
| ITALIAN 312 | Writing Workshop |  |


| ITALIAN 312 | Writing Workshop |
| :---: | :---: |
| ITALIAN 321 | Studies in Italian Literature and Culture I |
| ITALIAN 322 | Studies in Italian Literature and Culture II |
| ITALIAN 340 | Structures of Italian |
| ITALIAN/ CLASSICS 350 | Rome: The Changing Shape of the Eternal City |
| ITALIAN 420 | Topics in Italian: Study Abroad |
| ITALIAN 423 | Corso Di Stilistica Applicata |
| ITALIAN/FRENCH/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages |
| ITALIAN 450 | Special Topics in Italian Literature |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language |
| ITALIAN/ COM ARTS 460 | Italian Film |
| One (and only one) course may be chosen from: |  |
| LITTRANS 213 | Love and Sex in Italian Comedy |
| LITTRANS/ MEDIEVAL/ RELIG ST 253 | Of Demons and Angels. Dante's Divine Comedy |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance |
| LITTRANS 255 | Literature in Translation: <br> Boccaccio's Decameron-The Human Comedy |
| LITTRANS 256 | Lit in Translation: Images of the Individual in the Italian Renaissance |
| LITTRANS 260 | Italy and the Invention of America: from Columbus to World War II |
| LITTRANS 410 | In Translation: Special Topics in Italian Literature |

Total Credits

## RESIDENCE AND QUALITY OF WORK

9 credits taken on the UW-Madison campus
2.000 GPA on all courses taken in the certificate

1 Courses taken pass/fail are not eligible for the certificate.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Interpretive communication) Demonstrate that they understand and can analyze of literary and nonliterary texts in Italian representing a variety of topics, time periods, and geographical regions.
2. (Presentational communication) Express themselves effectively in spoken and written Italian to inform, persuade, and narrate for different audiences of listeners, viewers, or readers.
3. (Interpersonal communication) Express themselves effectively in spoken and written Italian to share information, reactions, and opinions related to a variety of topics and texts.
4. (Cultural knowledge) Recognize and explain cultural artifacts, practices, and perspectives of the Italian-speaking world.
5. (Linguistic knowledge) Demonstrate a good degree of understanding of lexical, grammatical, syntactic, and stylistic features of the Italian language.
6. (Cross-cultural awareness) Demonstrate awareness of difference and diversity by comparing and contrasting culturally situated beliefs, behaviors, and norms of the Italian-speaking world with their own.
7. (Engagement with the Italian language and culture) Engage in a sustained fashion with the Italian language, its users, and cultural artifacts in and beyond the classroom, e.g., in their own community, virtual communities, and study abroad.

## ADVISING AND CAREERS

Please make an appointment with an undergraduate advisor (http:// frit.wisc.edu/undergraduate/italian/academic_advising) to get academic advising for the certificate.

## PEOPLE

## ITALIAN

Professors Buccini, Livorni, Rumble
Associate Professors Menechella, Phillips-Court, Todorovic.

## GENDER AND WOMENS STUDIES

The gender and women's studies major and certificate provide a unique background for students seeking to analyze gender and other vectors of inequality, both historically and in contemporary society, as reflected through texts, social practices, and social institutions in the U.S. and abroad. Our graduates have gone on to provide this kind of analysis in fields like health policy, immigration law, social work, reproductive justice, educational administration, employment policy, medicine, architectural design, and media production.

The curriculum reflects the interdisciplinary nature of gender and women's studies, offering to all students an opportunity to study gender and women in such areas as literature, history, anthropology, sociology, education, law, biology, psychology, philosophy, political science, economics, and the arts. Department courses have been designed to fulfill breadth requirements in the appropriate divisions.

The undergraduate major is a 30 -credit program and the certificate is a 15 -credit program. The interdisciplinary nature of gender and women's studies lends itself to working well with and complementing many other programs and plans across campus.

## DEGREES/MAJORS/CERTIFICATES

- Gender and Women's Studies, B.A. (p. 675)
- Gender and Women's Studies, B.S. (p. 682)
- Gender and Women's Studies, Certificate (p. 689)
- LGBTQ+ Studies, Certificate (p. 692)


## PEOPLE

## FACULTY

Professors Jill Casid (https://gws.wisc.edu/staff/casid-jill-h), Finn Enke (https://gws.wisc.edu/staff/enke-finn), Susan Friedman (https:// gws.wisc.edu/staff/friedman-susan-stanford), Christine Garlough (https://gws.wisc.edu/staff/garlough-christine), (https://gws.wisc.edu/ staff/hyde-janet-shibley) Janet Hyde (https://gws.wisc.edu/staff/hyde-janet-shibley), (https://gws.wisc.edu/staff/hyde-janet-shibley) Maria Lepowsky (https://gws.wisc.edu/staff/lepowsky-maria), Myra Marx Ferree (https://gws.wisc.edu/staff/marx-ferree-myra), Aili Mari Tripp (https://gws.wisc.edu/staff/tripp-aili-mari)

Associate Professors Jenny Higgins (https://jennyhiggins.net), (https:// gws.wisc.edu/staff/higgins-jenny) Judith Houck (https://gws.wisc.edu/ staff/houck-judy), Pernille Ipsen (https://gws.wisc.edu/staff/ipsenpernille), Ellen Samuels (https://gws.wisc.edu/staff/samuels-ellen),

Assistant Professors Chris Barcelos (https://gws.wisc.edu/staff/ barcelos-chris), Keisha Lindsay (https://gws.wisc.edu/staff/lindsaykeisha), Annie Menzel (https://gws.wisc.edu/staff/menzel-annie), Sami Schalk (https://gws.wisc.edu/staff/schalk-sami)

Faculty Affiliates: See the GEN\&WS Faculty Affiliates (https:// gws.wisc.edu/people/affiliates-directory) for more information about instructors on campus who are engaged in feminist-inspired teaching and research.

## LECTURERS AND TEACHING ASSISTANTS

See the current semester's GEN\&WS Lecturers and Teaching Assistants directory (https://gws.wisc.edu/people/lecturers-and-teaching-assistants-ta).

## UNDERGRADUATE STUDENT SERVICES

Academic Advising: Susan Nelson (https://gws.wisc.edu/staff/nelsonsusan)

Enrollment Inquiries: Diane Walton (https://gws.wisc.edu/staff/waltondiane)

Curricular Planning: Nina Valeo Cooke (https://gws.wisc.edu/staff/valeonina)

## GENDER AND WOMENS STUDIES, <br> B.A.

The gender and women's studies major and certificate provide a unique background for students seeking to analyze gender and other vectors of inequality, both historically and in contemporary society, as reflected through texts, social practices, and social institutions in the U.S. and abroad. Our graduates have gone on to provide this kind of analysis in
fields like health policy, immigration law, social work, reproductive justice, educational administration, employment policy, medicine, architectural design, and media production.

The curriculum reflects the interdisciplinary nature of gender and women's studies, offering to all students an opportunity to study gender and women in such areas as literature, history, anthropology, sociology, education, law, biology, psychology, philosophy, political science, economics, and the arts. Department courses have been designed to fulfill breadth requirements in the appropriate divisions.

The undergraduate major is a 30 -credit program and the certificate is a 15 -credit program. The interdisciplinary nature of gender and women's studies lends itself to working well with and complementing many other programs and plans across campus.

## HOW TO GET IN

## APPLICATION

To become a gender and women's studies major, students must first complete GEN\&WS 101 Gender, Women, and Cultural Representation, GEN\&WS 102 Gender, Women, and Society in Global Perspective, OR GEN\&WS 103 Women and Their Bodies in Health and Disease with a grade of $B$ or better. Then they must declare their intention to complete the gender and women's studies major with the undergraduate advisor (https://gws.wisc.edu/undergraduate/undergraduate-advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

Liberal Arts 108 credits
and Science
Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90 th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

[^27]
# - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work) 

## REQUIREMENTS FOR THE MAJOR

Majors in gender and women's studies are required to take foundational work in gender and women's studies, courses reflecting each of four approaches to knowledge (humanities, social science, theory, and biological or health sciences), one course from three of four issue areas (sexuality, disability and embodiment, race/ethnicity, and global), and a capstone seminar or thesis.

All majors complete a minimum of 30 credits in GEN\&WS including: ${ }^{1}$

## INTRODUCTORY GEN\&WS <br> Code Title

GEN\&WS 101 Gender, Women, and Cultural
Credits

Representation (only one of these
courses may count toward the major)
or GEN\&WS 102 Gender, Women, and Society in Global Perspective

| GEN\&WS 103 | Women and Their Bodies in Health <br> and Disease |
| :--- | :--- |

Total Credits

## APPROACHES ${ }^{2}$

1 course from each area:

## Biology and Health

Explore health as both a physiological and a socio\#cultural experience, and recognize ways in which gender and other axes of social inequality influence health. Develop critical tools to place the medical field, scientific research, and public health and policy organizations into social contexts, and recognize how these institutions both can reflect and perpetuate dominant ideologies. Learn about feminist approaches to, and histories of, science, medicine, and health activism.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/HIST SCI/ MED HIST 524 | The Medical History of Sex and Sexuality | 3 |
| GEN\&WS 530 | Biology and Gender | 3 |
| GEN\&WS/HIST SCI/ MED HIST 531 | Women and Health in American History | 3 |
| GEN\&WS/HIST SCI/ MED HIST 532 | The History of the (American) Body | 3 |
| GEN\&WS 533 | Special Topics in Women and Health | 3 |
| GEN\&WS 534 | Gender, Sexuality, and Reproduction: Public Health Perspectives | 3 |
| GEN\&WS/ INTL ST 535 | Women's Global Health and Human Rights | 3 |
| GEN\&WS/ HIST SCI 537 | Childbirth in the United States | 3 |

## Humanities

Engage with humanities-based theories, content areas, and methodologies as they relate to gender and women's studies. These include, but are not limited to, critical text analysis, discourse analysis, historical approaches and archival work, media studies, ethnography, and digital humanities. (GEN\&WS courses with H, L or Z designations)

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies | 3-4 |
| GEN\&WS/ <br> LITTRANS 205 | Women in Russian Literature in Translation | 3-4 |
| GEN\&WS/ <br> AFROAMER 221 | Introduction to Black Women's Studies | 3 |
| GEN\&WS/ <br> AFROAMER 222 | Introduction to Black Women Writers | 3 |
| GEN\&WS/ENGL 248 | Women in Ethnic American Literature | 3 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS/ <br> LITTRANS 270 | German Women Writers in Translation | 3 |
| GEN\&WS/ RELIG ST 305 | Women, Gender and Religion | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities | 1-3 |
| GEN\&WS/ HISTORY 315 | Gender, Race and Colonialism | 3 |
| GEN\&WS 319 | Study Abroad Special Topic: Gender, Women and the Humanities | 3-4 |
| GEN\&WS/ <br> AFROAMER 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| GEN\&WS/ <br> AFROAMER 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| GEN\&WS 330 | Topics in Gender/Class/Race/ Ethnicity (Humanities) | 3 |
| GEN\&WS/ CHICLA 332 | Latinas: Self Identity and Social Change | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS 342 | Transgender Studies | 3-4 |
| GEN\&WS 343 | Queer Bodies | 3 |
| GEN\&WS/ CLASSICS 351 | Women and Gender in the Classical World | 3-4 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS 370 | Topics in Gender and Disability | 3 |
| GEN\&WS 371 | Disability and Gender in Film | 3 |
| GEN\&WS 372 | Visualizing Bodies | 3 |
| GEN\&WS 373 | Gender \& the Cultural Politics of Illness | 3 |
| GEN\&WS 414 | Gender, Performance, and Sexuality | 3 |
| GEN\&WS/ <br> THEATRE 415 | Introduction to Contemporary Feminist Theatre and Criticism | 3 |


| GEN\&WS/ COM ARTS 418 | Gender, Sexuality, and the Media | 3 |
| :---: | :---: | :---: |
| GEN\&WS/ENGL 419 | Gender and Language | 3 |
| GEN\&WS/ <br> FOLKLORE 428 | Gender and Expressive Culture | 3 |
| GEN\&WS/ <br> AMER IND/ANTHRO/ <br> FOLKLORE 437 | American Indian Women | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS 442 | Lesbian Culture | 3 |
| GEN\&WS 445 | The Body in Theory | 3 |
| GEN\&WS 449 | Special Topics in Feminism and Social and Cultural Theory | 3 |
| GEN\&WS/ PORTUG 450 | Brazillian Women Writers | 3 |
| GEN\&WS/ PORTUG 460 | Carmen Miranda | 3 |
| GEN\&WS/ASIAN AM/ <br> ENGL 463 | Race and Sexuality in American Literature | 3 |
| GEN\&WS/ASIAN AM/ <br> ENGL 464 | Asian American Women Writers | 3 |
| GEN\&WS/ <br> FOLKLORE 467 | Women and Politics in Popular Culture and Folklore | 3 |
| GEN\&WS/ <br> FOLKLORE 468 | Feminism, Folklore and Comparative Literature | 3 |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change | 3 |
| GEN\&WS/HIST SCI/ MED HIST 524 | The Medical History of Sex and Sexuality | 3 |
| GEN\&WS/HIST SCI/ <br> MED HIST 532 | The History of the (American) Body | 3 |
| GEN\&WS/ENGL 545 | Feminist Theory and Women's Writing in English | 3 |
| GEN\&WS 547 | Theorizing Intersectionality | 3 |
| GEN\&WS/ <br> AFROAMER 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| GEN\&WS/ AFROAMER 625 | Gender, Race and the Civil Rights Movement | 3 |
| GEN\&WS/ <br> AFROAMER 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| GEN\&WS/ <br> AFROAMER 679 | Visual Culture, Gender and Critical Race Theory | 3 |

## Social Science

Engage with social-science-based theories, content areas, and methodologies as they relate to gender and women's studies. These include, but are not limited to, scientific and clinical research, statistical analysis, mixed-methods approaches, and theories of social change. (GEN\&WS courses with S or Z designations)

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, <br> Bisexual, Transgender and Queer+ <br> Studies | $3-4$ |
| GEN\&WS/C\&E SOC/ | Gender and Work in Rural America | 3 |
| SOC 215 |  |  |


| GEN\&WS 320 | Special Topics in Gender, Women and Society | 1-3 |
| :---: | :---: | :---: |
| GEN\&WS/ <br> AFROAMER 323 | Gender, Race and Class: Women in U.S. History | 3 |
| GEN\&WS 329 | Study Abroad Special Topic: Gender, Women in Society | 3-4 |
| GEN\&WS 331 | Topics in Gender/Class/Race/ Ethnicity (Social Sciences) | 3 |
| GEN\&WS/ AFROAMER 333 | Black Feminisms | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ HISTORY 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| GEN\&WS/ HISTORY 392 | Women and Gender in Modern Europe | 3-4 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| GEN\&WS/ <br> LEGAL ST 422 | Women and the Law | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS 427 | Global Feminisms | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS/ <br> ANTHRO 443 | Anthropology by Women | 3 |
| GEN\&WS 449 | Special Topics in Feminism and Social and Cultural Theory | 3 |
| GEN\&WS/ <br> POLI SCI 469 | Women and Politics | 3-4 |
| GEN\&WS/HISTORY/ LCA 472 | Women in Turkish Society | 3 |
| GEN\&WS/SOC 477 | Feminism and Sociological Theory | 3 |
| GEN\&WS/ PSYCH 522 | Psychology of Women and Gender | 3 |
| GEN\&WS/ HIST SCI 537 | Childbirth in the United States | 3 |
| GEN\&WS/ <br> ED POL 560 | Gender and Education | 3 |
| GEN\&WS/SOC 611 | Gender, Science and Technology | 3 |

## Feminist Theory

Explore feminist theoretical approaches, both national and international.

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN\&WS/ | Black Feminisms | 3 |
| AFROAMER 333 |  | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS 445 | The Body in Theory | 3 |
| GEN\&WS 449 | Special Topics in Feminism and <br> Social and Cultural Theory | 3 |

GEN\&WS 547 Theorizing Intersectionality 3

## ISSUE AREAS ${ }^{2}$

## Race/Ethnicity

Explore the role of race/ethnicity as a tool of creating, identifying, materializing, and solidifying human difference. These courses may explore the construction and deployment of race/ethnicity anywhere in the world.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/ <br> AFROAMER 221 | Introduction to Black Women's Studies | 3 |
| GEN\&WS/ AFROAMER 222 | Introduction to Black Women Writers | 3 |
| GEN\&WS/ENGL 248 | Women in Ethnic American Literature | 3 |
| GEN\&WS/ HISTORY 315 | Gender, Race and Colonialism | 3 |
| GEN\&WS/ <br> AFROAMER 323 | Gender, Race and Class: Women in U.S. History | 3 |
| GEN\&WS/ <br> AFROAMER 324 | Black Women in America: Reconstruction to the Present | 3 |
| GEN\&WS/ <br> AFROAMER 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| GEN\&WS 330 | Topics in Gender/Class/Race/ Ethnicity (Humanities) | 3 |
| GEN\&WS 331 | Topics in Gender/Class/Race/ Ethnicity (Social Sciences) | 3 |
| GEN\&WS/ <br> CHICLA 332 | Latinas: Self Identity and Social Change | 3 |
| GEN\&WS/ <br> AFROAMER 333 | Black Feminisms | 3 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ HISTORY 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| GEN\&WS/ AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS/ <br> AMER IND/ANTHRO/ <br> FOLKLORE 437 | American Indian Women | 3 |
| GEN\&WS/ PORTUG 460 | Carmen Miranda | 3 |
| GEN\&WS/ASIAN AM/ ENGL 463 | Race and Sexuality in American Literature | 3 |
| GEN\&WS/ASIAN AM/ <br> ENGL 464 | Asian American Women Writers | 3 |
| GEN\&WS 547 | Theorizing Intersectionality | 3 |
| GEN\&WS/ <br> AFROAMER 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| GEN\&WS/ <br> AFROAMER 625 | Gender, Race and the Civil Rights Movement | 3 |
| GEN\&WS/ <br> AFROAMER 677 | Critical and Theoretical <br> Perspectives in Black Women's Writings | 3 |
| GEN\&WS/ <br> AFROAMER 679 | Visual Culture, Gender and Critical Race Theory | 3 |

## Global

Explore aspects of gender in a comparative national frame. These classes may focus on the process of globalization or they may focus on gendered concerns in at least two national contexts.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/ HISTORY 315 | Gender, Race and Colonialism | 3 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS 414 | Gender, Performance, and Sexuality | 3 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS 427 | Global Feminisms | 3 |
| GEN\&WS/ <br> FOLKLORE 428 | Gender and Expressive Culture | 3 |
| GEN\&WS/ <br> ANTHRO 443 | Anthropology by Women | 3 |
| GEN\&WS/ <br> FOLKLORE 467 | Women and Politics in Popular Culture and Folklore | 3 |
| GEN\&WS/ <br> FOLKLORE 468 | Feminism, Folklore and Comparative Literature | 3 |
| GEN\&WS/ <br> INTL ST 535 | Women's Global Health and Human Rights | 3 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| GEN\&WS 661 | Global Internship in Gender and Women's Studies | 1-6 |

## Sexuality

Explore "sexuality" under the assumption that sexuality is not a natural or self-evident attribute or category, these courses demonstrate how sexuality has come to assume a variety of culturally specific but often contested meanings.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies | 3-4 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS 342 | Transgender Studies | -4 |
| GEN\&WS 343 | Queer Bodies | 3 |
| GEN\&WS/ HISTORY 346 | Trans/Gender in Historical Perspective | 3-4 |
| GEN\&WS/ $\text { CLASSICS } 351$ | Women and Gender in the Classical World | 3-4 |
| GEN\&WS 414 | Gender, Performance, and Sexuality | 3 |
| GEN\&WS/ENGL 419 | Gender and Language | 3 |
| GEN\&WS/ASIAN AM/ ENGL 463 | Race and Sexuality in American Literature | 3 |
| GEN\&WS/ <br> FOLKLORE 468 | Feminism, Folklore and Comparative Literature | 3 |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change | 3 |


| GEN\&WS/HIST SCI/ | The Medical History of Sex and <br> MED HIST 524 | 3 |
| :--- | :--- | ---: |
| SExuality |  |  |
| MED HIST 532 | 3 |  |
| GEN\&WS 534 | Gender, Sexuality, and <br> Reproduction: Public Health <br> Perspectives | 3 |

## Disability \& Embodiment

Examine the creation and evolution of different categories of embodiment and the experience of living through and as bodies These courses focus on gender and disability, exploring disability as a social category, a medical realm, a political identity, an analytical approach, and a lived experience.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS 343 | Queer Bodies | 3 |
| GEN\&WS 370 | Topics in Gender and Disability | 3 |
| GEN\&WS 371 | Disability and Gender in Film | 3 |
| GEN\&WS 372 | Visualizing Bodies | 3 |
| GEN\&WS 445 | The Body in Theory | 3 |
| CAPSTONE |  |  |
| Code | Title | Credits |
| Capstone course or Thesis Sequence: |  | 3-6 |
| GEN\&WS 640 | Capstone Seminar in Gender and Women's Studies |  |
| GEN\&WS 681 <br> \& GEN\&WS 682 | Senior Honors Thesis I and Senior Honors Thesis II |  |
| GEN\&WS 691 <br> \& GEN\&WS 682 | Senior Thesis I and Senior Honors Thesis II |  |

Total Credits
3-6

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all GEN\&WS and major courses
2.000 GPA on 15 upper-level major credits, taken in Residence ${ }^{3}$

15 credits in GEN\&WS, taken on the UW-Madison campus

## NOTES

A maximum three courses designated as Elementary level may apply in the major, overall. Directed Study courses typically do not count toward the minimum credits required in the major.
2
A single course may apply to both Approach and Issues but a course may not apply to more than one Approach and it may not more than one Issue area.
3 Courses in GEN\&WS and approved for the major that carry the Intermediate- or Advanced-level designation are considered upper level in the major.

## RESEARCH IN THE MAJOR

Students interested in the doing research in Gender \& Women's Studies are encouraged to incorporate coursework outside of Gender and Women's Studies and develop a thesis (GEN\&WS 691-GEN\&WS 692 or GEN\&WS 681-GEN\&WS 682) in consultation with a member of the faculty. The thesis sequence would serve as the Capstone requirement in the
major. In this case, the student may still take GEN\&WS 640 Capstone Seminar in Gender and Women's Studies as an elective in the major.

## HONORS IN THE MAJOR

To declare Honors in the Major in Gender and Women's Studies, students must submit a letter of application to the undergraduate advisor prior to enrollment in GEN\&WS 681 Senior Honors Thesis I. The letter should include:

- A list of all planned and declared degrees, major and certificate programs
- Area(s) of research interest within gender and women's studies and ideas for an Senior Honors Thesis
- A letter from a faculty member agreeing to supervise the thesis project


## HONORS IN THE GENDER AND WOMEN'S STUDIES MAJOR REQUIREMENTS

To earn Honors in the Major in Gender and Women's Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all GEN\&WS courses
- Complete at least 2 courses, for a total of 6 or more credits, with a grade of B or better, taken for Honors in GEN\&WS
- Complete a two-semester Senior Honors Thesis in GEN\&WS 681 Senior Honors Thesis I and GEN\&WS 682 Senior Honors Thesis II, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. |
| formats and credits earned in UW-Madison Study |  |

## LEARNING OUTCOMES

1. (Gender) Understand the concept of gender as an identity and an institution along its multiple dimensions (cultural, social, political, economic) and how gender in forms power relations.
2. (Intersectionality) Recognize how gender intersects with other axes of inequality, such as race, class, disability status, sexuality, gender
expression, nationality, geography and age. Identify the difference between intersectional and universalist understandings of gender.
3. (Feminist theory-) Apply feminist theoretical approaches, both national and international.
4. (Class) Recognize the role of economic inequalities in creating material and cultural differences in the US and other national contexts and their gendered implications.
5. (Race/Ethnicity) Understand the role of race/ethnicity as a tool of creating, identifying, materializing, and solidifying human difference and its relationship to gender.
6. (Global Processes) Appreciate historical, political, cultural and socio\# economic influences on gender relations in global context. Understand global dimensions of gender inequality, including hierarchies among women within and across nations. Identify gendered dynamics of globalization in historical or contemporary contexts.
7. (Sexuality) Understand that sexuality is not a natural or self\#evident attribute or category and that sexuality assumes a variety of culturally specific and contested meanings.
8. (Disability and Embodiment) Understand the creation and evolution of different categories of embodiment and the experience of living through and as bodies.
9. (Health and Science-) Identify that health is both a physiological and a socio\#cultural experience, and recognize ways in which gender and other axes of social inequality influence health. Develop critical tools to place the medical field, scientific research, and public health and policy organizations into social contexts, and recognize how these institutions both can reflect and perpetuate dominant ideologies. Learn about feminist approaches to, and histories of, science, medicine, and health activism.
10. (Contemporary and Historical Issues) Gain familiarity with a variety of issue areas in which gender is important, both historically and today, in national and transnational spheres. These include but are not limited to: health, the body, science, politics, citizenship, feminism, activism, labor, history, media, language, literature and the arts.
11. (Problem solving) Identify important historical and contemporary issues relating to gender and women's studies, evaluate responses to them, and adapt the knowledge gained through this process to everyday situations.
12. (Research and inquiry) Identify a problem related to gender and women's studies. Produce or locate resources and learn to build a research agenda. Read broadly in order to develop well-focused projects, using primary and secondary sources. Delineate key points in scholarly articles and respond to them. Use different modes of research, including empirical methods, scholarly literature, and theoretical and artistic engagement. Develop advanced library skills tailored to specific research projects, including facility with electronic databases, bibliographic reference materials, archival documents, and image and sound repositories. Evaluate resources for their reliability.
13. (Interdisciplinarity) Engage in interdisciplinary inquiry and research and understand the strengths and limits of interdisciplinarity.
14. (Critical thinking) Be able to perform critical thinking along four dimensions: critical analysis, in which one can identify and evaluate arguments, rhetorical styles, synthesize ideas, and develop well\#
substantiated, coherent, and concise arguments; logical reasoning, in which one can identify and follow a logical sequence or argument through to its end and recognize faulty reasoning or premature closure; abstract thinking, in which one can generalize for a specific purpose and/or in a way that clarifies and heightens understanding of major issues at stake, or identifies the essential or most relevant elements of a concept, event, object, text, etc; argumentation, in which one can marshal appropriate and relevant evidence in order to develop a clear claim or stance using specific rhetorical approaches.
15. (Writing) Express ideas effectively in written form, develop sufficient evidence for arguments, and tailor arguments to audience and context.
16. (Oral Communication) Express ideas effectively in verbal form, tailoring arguments and presentation styles to audience and context.
17. (Collaboration) Work collectively, take initiative, offer and receive constructive criticism, exchange ideas and creatively work together toward a common endeavor.
18. (Creativity) Bring together a variety of texts, ideas, theoretical, political, empirical, aesthetic and rhetorical approaches in order to respond imaginatively to a social, political or intellectual issue.
19. (Career skills) Create the building blocks for a career after graduation with all of the above skills.
20. (Critical self\#awareness) Demonstrate self\#reflexivity about one's ideas and social and political positions.
21. (Critical social awareness) Engage critically with social institutions that influence our personal and social lives, such as media, politics, the healthcare system, the economy and education.
22. (Ethics) Apply ethical frameworks, informed by the study of gender, feminism and social justice movements, to address unequal treatment or advantage in a variety of contexts.
23. (Engaged Practices) Link theory with practice. Recognize and advocate for social change at the local, national or transnational level.
24. (Advanced accomplishment) Demonstrate synthesis of skills acquired and performed in advanced coursework.
25. (Application beyond the Gender and Women's Studies classroom)Apply key Gender and Women's Studies concepts to one's life, activist projects, and to non\#Gender and Women's Studies academic coursework.

## ADVIIING AND CAREERS

## ADVISING AND CAREERS UNDERGRADUATE ADVISING IN GENDER AND WOMEN'S STUDIES AND LGBT STUDIES (HTTPS://GWS.WISC.EDU/ UNDERGRADUATE/UNDERGRADUATE-ADVISING)

Connecting and working with your gender and women's studies undergraduate advisor as early as possible helps you create a meaningful course plan and stay on track as you complete your degree requirements.

Our undergraduate advisor is available to consult on a variety of topics including: program declaration, adding an additional major or certificate, course planning and four-year graduation plans, volunteer and internship opportunities, graduate school, and career development.

## INTERNSHIP PROGRAM IN GENDER AND WOMEN'S STUDIES (HTTP://GUIDE.WISC.EDU/UNDERGRADUATE/ LETTERS-SCIENCE/GENDER-WOMENS-STUDIES/ GENDER-WOMENS-STUDIES-BA/\%20HTTPS:// WOMENSSTUDIES.WISCWEB.WISC.EDU/INTERNSHIP)

Applied learning through internships within the field of gender and women's studies allows students the opportunity to connect the classroom to the community and put theory into practice. Recognizing the power and importance of experiential and service learning, we proudly offer both local and global internship opportunities in our department.

Our internship program is designed to provide students with opportunities for learning and working in organizations and settings that connect their coursework in gender and women's studies to specific issues in community settings. The connected internship seminar provides a venue for students to engage deeply in feminist-based work and reflection while thinking critically about participating as feminists in activism and professional settings.

Internship courses in GEN\&WS:

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN\&WS 660 | Internship in Gender and Women's | 3 |
|  | Studies |  |
| GEN\&WS 661 | Global Internship in Gender and <br>  <br>  <br> Women's Studies | $1-6$ |

## CAREER DEVELOPMENT IN GENDER AND WOMEN'S STUDIES

The Department of Gender and Women's Studies is committed to helping our students understand and articulate how skills and concepts learned in the classroom can be applied in a professional setting. As reflected in our Learning Outcomes, (https://womensstudies.wiscweb.wisc.edu/ wp-content/uploads/sites/249/2017/09/GWSLearningOutcomes.pdf) students in gender and women's studies develop desirable professional skills, such as written and oral communication, critical thinking, problem solving, and collaboration skills, as well as critical self and social awareness.

The department continues to expand career development opportunities for our students by working with our alumni, and offering workshops, panels, and networking opportunities. To learn more about career development opportunities in Gender \& Women's Studies, contact the Undergraduate Advisor. (https://gws.wisc.edu/undergraduate/ undergraduate-advising)

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/Isci)


## PEOPLE

## FACULTY

Professors Jill Casid (https://gws.wisc.edu/staff/casid-jill-h), Finn Enke (https://gws.wisc.edu/staff/enke-finn), Susan Friedman (https:// gws.wisc.edu/staff/friedman-susan-stanford), Christine Garlough (https://gws.wisc.edu/staff/garlough-christine), (https://gws.wisc.edu/ staff/hyde-janet-shibley) Janet Hyde (https://gws.wisc.edu/staff/hyde-janet-shibley), (https://gws.wisc.edu/staff/hyde-janet-shibley) Maria Lepowsky (https://gws.wisc.edu/staff/lepowsky-maria), Myra Marx Ferree (https://gws.wisc.edu/staff/marx-ferree-myra), Aili Mari Tripp (https://gws.wisc.edu/staff/tripp-aili-mari)

Associate Professors Jenny Higgins (https://jennyhiggins.net), (https:// gws.wisc.edu/staff/higgins-jenny) Judith Houck (https://gws.wisc.edu/ staff/houck-judy), Pernille Ipsen (https://gws.wisc.edu/staff/ipsenpernille), Ellen Samuels (https://gws.wisc.edu/staff/samuels-ellen),

Assistant Professors Chris Barcelos (https://gws.wisc.edu/staff/ barcelos-chris), Keisha Lindsay (https://gws.wisc.edu/staff/lindsaykeisha), Annie Menzel (https://gws.wisc.edu/staff/menzel-annie), Sami Schalk (https://gws.wisc.edu/staff/schalk-sami)

Faculty Affiliates: See the GEN\&WS Faculty Affiliates (https:// gws.wisc.edu/people/affiliates-directory) for more information about instructors on campus who are engaged in feminist-inspired teaching and research.

## LECTURERS AND TEACHING ASSISTANTS

See the current semester's GEN\&WS Lecturers and Teaching Assistants directory (https://gws.wisc.edu/people/lecturers-and-teaching-assistants-ta).

## UNDERGRADUATE STUDENT SERVICES

Academic Advising: Susan Nelson (https://gws.wisc.edu/staff/nelsonsusan)

Enrollment Inquiries: Diane Walton (https://gws.wisc.edu/staff/waltondiane)

Curricular Planning: Nina Valeo Cooke (https://gws.wisc.edu/staff/valeonina)

## GENDER AND WOMEN'S STUDIES, B.S.

The gender and women's studies major and certificate provide a unique background for students seeking to analyze gender and other vectors of inequality, both historically and in contemporary society, as reflected through texts, social practices, and social institutions in the U.S. and abroad. Our graduates have gone on to provide this kind of analysis in
fields like health policy, immigration law, social work, reproductive justice, educational administration, employment policy, medicine, architectural design, and media production.

The curriculum reflects the interdisciplinary nature of gender and women's studies, offering to all students an opportunity to study gender and women in such areas as literature, history, anthropology, sociology, education, law, biology, psychology, philosophy, political science, economics, and the arts. Department courses have been designed to fulfill breadth requirements in the appropriate divisions.

The undergraduate major is a 30 -credit program and the certificate is a 15 -credit program. The interdisciplinary nature of gender and women's studies lends itself to working well with and complementing many other programs and plans across campus.

## HOW TO GET IN

## APPLICATION

To become a gender and women's studies major, students must first complete GEN\&WS 101 Gender, Women, and Cultural Representation, GEN\&WS 102 Gender, Women, and Society in Global Perspective, OR GEN\&WS 103 Women and Their Bodies in Health and Disease with a grade of $B$ or better. Then they must declare their intention to complete the gender and women's studies major with the undergraduate advisor (https://gws.wisc.edu/undergraduate/undergraduate-advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT |

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

[^28]
## REQUIREMENTS FOR THE MAJOR

Majors in gender and women's studies are required to take foundational work in gender and women's studies, courses reflecting each of four approaches to knowledge (humanities, social science, theory, and biological or health sciences), one course from three of four issue areas (sexuality, disability and embodiment, race/ethnicity, and global), and a capstone seminar or thesis.

All majors complete a minimum of 30 credits in GEN\&WS including: ${ }^{1}$

## INTRODUCTORY GEN\&WS

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN\&WS 101 | Gender, Women, and Cultural | 3 |
|  | Representation (only one of these <br> courses may count toward the <br> major) |  |
| or GEN\&WS 102 | Gender, Women, and Society in Global Perspective |  |
| GEN\&WS 103 | Women and Their Bodies in Health <br> and Disease |  |

Total Credits

## APPROACHES ${ }^{2}$

1 course from each area:

## Biology and Health

Explore health as both a physiological and a socio\#cultural experience, and recognize ways in which gender and other axes of social inequality influence health. Develop critical tools to place the medical field, scientific research, and public health and policy organizations into social contexts, and recognize how these institutions both can reflect and perpetuate dominant ideologies.
Learn about feminist approaches to, and histories of, science, medicine, and health activism.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/HIST SCI/ MED HIST 524 | The Medical History of Sex and Sexuality | 3 |
| GEN\&WS 530 | Biology and Gender | 3 |
| GEN\&WS/HIST SCI/ MED HIST 531 | Women and Health in American History | 3 |
| GEN\&WS/HIST SCI/ MED HIST 532 | The History of the (American) Body | 3 |
| GEN\&WS 533 | Special Topics in Women and Health | 3 |
| GEN\&WS 534 | Gender, Sexuality, and Reproduction: Public Health Perspectives | 3 |
| GEN\&WS/ <br> INTL ST 535 | Women's Global Health and Human Rights | 3 |
| GEN\&WS/ <br> HIST SCI 537 | Childbirth in the United States | 3 |

## Humanities

Engage with humanities-based theories, content areas, and methodologies as they relate to gender and women's studies.
These include, but are not limited to, critical text analysis, discourse analysis, historical approaches and archival work, media studies,
ethnography, and digital humanities. (GEN\&WS courses with $\mathrm{H}, \mathrm{L}$ or $Z$ designations)

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies | -4 |
| GEN\&WS/ LITTRANS 205 | Women in Russian Literature in Translation | 3-4 |
| GEN\&WS/ <br> AFROAMER 221 | Introduction to Black Women's Studies | 3 |
| GEN\&WS/ AFROAMER 222 | Introduction to Black Women Writers | 3 |
| GEN\&WS/ENGL 248 | Women in Ethnic American Literature | 3 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS/ <br> LITTRANS 270 | German Women Writers in Translation | 3 |
| GEN\&WS/ <br> RELIG ST 305 | Women, Gender and Religion | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities | 1-3 |
| GEN\&WS/ HISTORY 315 | Gender, Race and Colonialism | 3 |
| GEN\&WS 319 | Study Abroad Special Topic: Gender, Women and the Humanities | 3-4 |
| GEN\&WS/ <br> AFROAMER 324 | Black Women in America: Reconstruction to the Present | 3 |
| GEN\&WS/ <br> AFROAMER 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| GEN\&WS 330 | Topics in Gender/Class/Race/ <br> Ethnicity (Humanities) | 3 |
| GEN\&WS/ <br> CHICLA 332 | Latinas: Self Identity and Social Change | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS 342 | Transgender Studies | 3-4 |
| GEN\&WS 343 | Queer Bodies | 3 |
| GEN\&WS/ CLASSICS 351 | Women and Gender in the Classical World | 3-4 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS 370 | Topics in Gender and Disability | 3 |
| GEN\&WS 371 | Disability and Gender in Film | 3 |
| GEN\&WS 372 | Visualizing Bodies | 3 |
| GEN\&WS 373 | Gender \& the Cultural Politics of Illness | 3 |
| GEN\&WS 414 | Gender, Performance, and Sexuality | 3 |
| GEN\&WS/ <br> THEATRE 415 | Introduction to Contemporary Feminist Theatre and Criticism | 3 |
| GEN\&WS/ COM ARTS 418 | Gender, Sexuality, and the Media | 3 |
| GEN\&WS/ENGL 419 | Gender and Language | 3 |
| GEN\&WS/ <br> FOLKLORE 428 | Gender and Expressive Culture | 3 |


| GEN\&WS/ | American Indian Women | 3 |
| :---: | :---: | :---: |
| AMER IND/ANTHRO/ FOLKLORE 437 |  |  |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS 442 | Lesbian Culture | 3 |
| GEN\&WS 445 | The Body in Theory | 3 |
| GEN\&WS 449 | Special Topics in Feminism and Social and Cultural Theory | 3 |
| GEN\&WS/ PORTUG 450 | Brazillian Women Writers | 3 |
| GEN\&WS/ PORTUG 460 | Carmen Miranda | 3 |
| GEN\&WS/ASIAN AM/ ENGL 463 | Race and Sexuality in American Literature | 3 |
| GEN\&WS/ASIAN AM/ ENGL 464 | Asian American Women Writers | 3 |
| GEN\&WS/ <br> FOLKLORE 467 | Women and Politics in Popular Culture and Folklore | 3 |
| GEN\&WS/ <br> FOLKLORE 468 | Feminism, Folklore and Comparative Literature | 3 |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change | 3 |
| GEN\&WS/HIST SCI/ MED HIST 524 | The Medical History of Sex and Sexuality | 3 |
| GEN\&WS/HIST SCI/ MED HIST 532 | The History of the (American) Body | 3 |
| GEN\&WS/ENGL 545 | Feminist Theory and Women's Writing in English | 3 |
| GEN\&WS 547 | Theorizing Intersectionality | 3 |
| GEN\&WS/ <br> AFROAMER 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| GEN\&WS/ AFROAMER 625 | Gender, Race and the Civil Rights Movement | 3 |
| GEN\&WS/ AFROAMER 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| GEN\&WS/ AFROAMER 679 | Visual Culture, Gender and Critical Race Theory | 3 |

## Social Science

Engage with social-science-based theories, content areas, and methodologies as they relate to gender and women's studies. These include, but are not limited to, scientific and clinical research, statistical analysis, mixed-methods approaches, and theories of social change. (GEN\&WS courses with S or $Z$ designations)

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, <br> Bisexual, Transgender and Queer+ <br> Studies | $3-4$ |
| GEN\&WS/C\&E SOC/ | Gender and Work in Rural America | 3 |
| SOC 215 | Special Topics in Gender, Women <br> and Society | $1-3$ |
| GEN\&WS 320 | Gender, Race and Class: Women in <br> GEN\&WS/ | 3 |
| AFROAMER 323 | Study Abroad Special Topic: Gender, <br> GEN\&WS 329 | $3-4$ |


| GEN\&WS 331 | Topics in Gender/Class/Race/ Ethnicity (Social Sciences) | 3 |
| :---: | :---: | :---: |
| GEN\&WS/ <br> AFROAMER 333 | Black Feminisms | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ HISTORY 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| GEN\&WS/ HISTORY 392 | Women and Gender in Modern Europe | 3-4 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| GEN\&WS/ LEGALST 422 | Women and the Law | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS 427 | Global Feminisms | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS/ ANTHRO 443 | Anthropology by Women | 3 |
| GEN\&WS 449 | Special Topics in Feminism and Social and Cultural Theory | 3 |
| GEN\&WS/ POLI SCI 469 | Women and Politics | 3-4 |
| GEN\&WS/HISTORY/ <br> LCA 472 | Women in Turkish Society | 3 |
| GEN\&WS/SOC 477 | Feminism and Sociological Theory | 3 |
| GEN\&WS/ PSYCH 522 | Psychology of Women and Gender | 3 |
| GEN\&WS/ HIST SCI 537 | Childbirth in the United States | 3 |
| GEN\&WS/ ED POL 560 | Gender and Education | 3 |
| GEN\&WS/SOC 611 | Gender, Science and Technology | 3 |

## Feminist Theory

Explore feminist theoretical approaches, both national and international.

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN\&WS/ | Black Feminisms | 3 |
| AFROAMER 333 |  | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS 445 | The Body in Theory | 3 |
| GEN\&WS 449 | Special Topics in Feminism and <br> Social and Cultural Theory | 3 |
| GEN\&WS/SOC 477 | Feminism and Sociological Theory | 3 |

## ISSUE AREAS ${ }^{2}$

## Race/Ethnicity

Explore the role of race/ethnicity as a tool of creating, identifying, materializing, and solidifying human difference. These courses
may explore the construction and deployment of race/ethnicity anywhere in the world.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/ <br> AFROAMER 221 | Introduction to Black Women's Studies | 3 |
| GEN\&WS/ <br> AFROAMER 222 | Introduction to Black Women Writers | 3 |
| GEN\&WS/ENGL 248 | Women in Ethnic American Literature | 3 |
| GEN\&WS/ HISTORY 315 | Gender, Race and Colonialism | 3 |
| GEN\&WS/ <br> AFROAMER 323 | Gender, Race and Class: Women in U.S. History | 3 |
| GEN\&WS/ <br> AFROAMER 324 | Black Women in America: Reconstruction to the Present | 3 |
| GEN\&WS/ <br> AFROAMER 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| GEN\&WS 330 | Topics in Gender/Class/Race/ Ethnicity (Humanities) | 3 |
| GEN\&WS 331 | Topics in Gender/Class/Race/ Ethnicity (Social Sciences) | 3 |
| GEN\&WS/ <br> CHICLA 332 | Latinas: Self Identity and Social Change | 3 |
| GEN\&WS/ <br> AFROAMER 333 | Black Feminisms | 3 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ HISTORY 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| GEN\&WS/ AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS/ <br> AMER IND/ANTHRO/ <br> FOLKLORE 437 | American Indian Women | 3 |
| GEN\&WS/ PORTUG 460 | Carmen Miranda | 3 |
| GEN\&WS/ASIAN AM/ ENGL 463 | Race and Sexuality in American Literature | 3 |
| GEN\&WS/ASIAN AM/ <br> ENGL 464 | Asian American Women Writers | 3 |
| GEN\&WS 547 | Theorizing Intersectionality | 3 |
| GEN\&WS/ <br> AFROAMER 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| GEN\&WS/ <br> AFROAMER 625 | Gender, Race and the Civil Rights Movement | 3 |
| GEN\&WS/ <br> AFROAMER 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| GEN\&WS/ <br> AFROAMER 679 | Visual Culture, Gender and Critical Race Theory | 3 |

## Global

Explore aspects of gender in a comparative national frame. These classes may focus on the process of globalization or they may focus on gendered concerns in at least two national contexts.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/ HISTORY 315 | Gender, Race and Colonialism | 3 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS 414 | Gender, Performance, and Sexuality | 3 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS 427 | Global Feminisms | 3 |
| GEN\&WS/ <br> FOLKLORE 428 | Gender and Expressive Culture | 3 |
| GEN\&WS/ <br> ANTHRO 443 | Anthropology by Women | 3 |
| GEN\&WS/ <br> FOLKLORE 467 | Women and Politics in Popular Culture and Folklore | 3 |
| GEN\&WS/ <br> FOLKLORE 468 | Feminism, Folklore and Comparative Literature | 3 |
| GEN\&WS/ <br> INTL ST 535 | Women's Global Health and Human Rights | 3 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| GEN\&WS 661 | Global Internship in Gender and Women's Studies | 1-6 |

## Sexuality

Explore "sexuality" under the assumption that sexuality is not a natural or self-evident attribute or category, these courses demonstrate how sexuality has come to assume a variety of culturally specific but often contested meanings.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies | 3-4 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS 342 | Transgender Studies | 3-4 |
| GEN\&WS 343 | Queer Bodies | 3 |
| GEN\&WS/ HISTORY 346 | Trans/Gender in Historical Perspective | 3-4 |
| GEN\&WS/ CLASSICS 351 | Women and Gender in the Classical World | 3-4 |
| GEN\&WS 414 | Gender, Performance, and Sexuality | 3 |
| GEN\&WS/ENGL 419 | Gender and Language | 3 |
| GEN\&WS/ASIAN AM/ <br> ENGL 463 | Race and Sexuality in American Literature | 3 |
| GEN\&WS/ FOLKLORE 468 | Feminism, Folklore and Comparative Literature | 3 |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change | 3 |
| GEN\&WS/HIST SCI/ MED HIST 524 | The Medical History of Sex and Sexuality | 3 |
| GEN\&WS/HIST SCI/ MED HIST 532 | The History of the (American) Body | 3 |


| GEN\&WS 534 | Gender, Sexuality, and Reproduction: Public Health Perspectives | 3 |
| :---: | :---: | :---: |
| Disabilit <br> Examine embodim <br> These co a social approach | mbodiment <br> ation and evolution of different d the experience of living throug focus on gender and disability, ex $y$, a medical realm, a political ide lived experience. | dies <br> bility as lytical |
| Code | Title | Credits |
| GEN\&WS 343 | Queer Bodies | 3 |
| GEN\&WS 370 | Topics in Gender and Disability | 3 |
| GEN\&WS 371 | Disability and Gender in Film | 3 |
| GEN\&WS 372 | Visualizing Bodies | 3 |
| GEN\&WS 445 | The Body in Theory | 3 |

## CAPSTONE

| Code | Title | Credits |
| :--- | :--- | ---: |
| Capstone course or Thesis Sequence: | $3-6$ |  |
| GEN\&WS 640 | Capstone Seminar in Gender and <br> Women's Studies |  |
| GEN\&WS 681 | Senior Honors Thesis I <br> \& GEN\&WS 682 |  |
| GEN\&WS Senior Honors Thesis II | Senior Thesis I |  |
| \& GEN\&WS 682 | and Senior Honors Thesis II |  |

## Total Credits

3-6

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all GEN\&WS and major courses
2.000 GPA on 15 upper-level major credits, taken in Residence ${ }^{3}$

15 credits in GEN\&WS, taken on the UW-Madison campus

## NOTES

1 A maximum three courses designated as Elementary level may apply in the major, overall. Directed Study courses typically do not count toward the minimum credits required in the major.
2
A single course may apply to both Approach and Issues but a course may not apply to more than one Approach and it may not more than one Issue area.
3 Courses in GEN\&WS and approved for the major that carry the Intermediate- or Advanced-level designation are considered upper level in the major.

## RESEARCH IN THE MAJOR

Students interested in the doing research in Gender \& Women's Studies are encouraged to incorporate coursework outside of Gender and Women's Studies and develop a thesis (GEN\&WS 691-GEN\&WS 692 or GEN\&WS 681-GEN\&WS 682) in consultation with a member of the faculty. The thesis sequence would serve as the Capstone requirement in the major. In this case, the student may still take GEN\&WS 640 Capstone Seminar in Gender and Women's Studies as an elective in the major.

## HONORS IN THE MAJOR

To declare Honors in the Major in Gender and Women's Studies, students must submit a letter of application to the undergraduate advisor prior
to enrollment in GEN\&WS 681 Senior Honors Thesis I. The letter should include:

- A list of all planned and declared degrees, major and certificate programs
- Area(s) of research interest within gender and women's studies and ideas for an Senior Honors Thesis
- A letter from a faculty member agreeing to supervise the thesis project


## HONORS IN THE GENDER AND WOMEN'S STUDIES MAJOR REQUIREMENTS

To earn Honors in the Major in Gender and Women's Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all GEN\&WS courses
- Complete at least 2 courses, for a total of 6 or more credits, with a grade of $B$ or better, taken for Honors in GEN\&WS
- Complete a two-semester Senior Honors Thesis in GEN\&WS 681 Senior Honors Thesis I and GEN\&WS 682 Senior Honors Thesis II, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Gender) Understand the concept of gender as an identity and an institution along its multiple dimensions (cultural, social, political, economic) and how gender in forms power relations.
2. (Intersectionality) Recognize how gender intersects with other axes of inequality, such as race, class, disability status, sexuality, gender expression, nationality, geography and age. Identify the difference between intersectional and universalist understandings of gender.
3. (Feminist theory-) Apply feminist theoretical approaches, both national and international.
4. (Class) Recognize the role of economic inequalities in creating material and cultural differences in the US and other national contexts and their gendered implications.
5. (Race/Ethnicity) Understand the role of race/ethnicity as a tool of creating, identifying, materializing, and solidifying human difference and its relationship to gender.
6. (Global Processes) Appreciate historical, political, cultural and socio\# economic influences on gender relations in global context. Understand global dimensions of gender inequality, including hierarchies among women within and across nations. Identify gendered dynamics of globalization in historical or contemporary contexts.
7. (Sexuality) Understand that sexuality is not a natural or self\#evident attribute or category and that sexuality assumes a variety of culturally specific and contested meanings.
8. (Disability and Embodiment) Understand the creation and evolution of different categories of embodiment and the experience of living through and as bodies.
9. (Health and Science-) Identify that health is both a physiological and a socio\#cultural experience, and recognize ways in which gender and other axes of social inequality influence health. Develop critical tools to place the medical field, scientific research, and public health and policy organizations into social contexts, and recognize how these institutions both can reflect and perpetuate dominant ideologies. Learn about feminist approaches to, and histories of, science, medicine, and health activism.
10. (Contemporary and Historical Issues) Gain familiarity with a variety of issue areas in which gender is important, both historically and today, in national and transnational spheres. These include but are not limited to: health, the body, science, politics, citizenship, feminism, activism, labor, history, media, language, literature and the arts.
11. (Problem solving) Identify important historical and contemporary issues relating to gender and women's studies, evaluate responses to them, and adapt the knowledge gained through this process to everyday situations.
12. (Research and inquiry) Identify a problem related to gender and women's studies. Produce or locate resources and learn to build a research agenda. Read broadly in order to develop well-focused projects, using primary and secondary sources. Delineate key points in scholarly articles and respond to them. Use different modes of research, including empirical methods, scholarly literature, and theoretical and artistic engagement. Develop advanced library skills tailored to specific research projects, including facility with electronic databases, bibliographic reference materials, archival documents, and image and sound repositories. Evaluate resources for their reliability.
13. (Interdisciplinarity) Engage in interdisciplinary inquiry and research and understand the strengths and limits of interdisciplinarity.
14. (Critical thinking) Be able to perform critical thinking along four dimensions: critical analysis, in which one can identify and evaluate arguments, rhetorical styles, synthesize ideas, and develop well\# substantiated, coherent, and concise arguments; logical reasoning, in which one can identify and follow a logical sequence or argument through to its end and recognize faulty reasoning or premature closure; abstract thinking, in which one can generalize for a specific purpose and/or in a way that clarifies and heightens understanding of major
issues at stake, or identifies the essential or most relevant elements of a concept, event, object, text, etc; argumentation, in which one can marshal appropriate and relevant evidence in order to develop a clear claim or stance using specific rhetorical approaches.
15. (Writing) Express ideas effectively in written form, develop sufficient evidence for arguments, and tailor arguments to audience and context.
16. (Oral Communication) Express ideas effectively in verbal form, tailoring arguments and presentation styles to audience and context.
17. (Collaboration) Work collectively, take initiative, offer and receive constructive criticism, exchange ideas and creatively work together toward a common endeavor.
18. (Creativity) Bring together a variety of texts, ideas, theoretical, political, empirical, aesthetic and rhetorical approaches in order to respond imaginatively to a social, political or intellectual issue.
19. (Career skills ) Create the building blocks for a career after graduation with all of the above skills.
20. (Critical self\#awareness) Demonstrate self\#reflexivity about one's ideas and social and political positions.
21. (Critical social awareness) Engage critically with social institutions that influence our personal and social lives, such as media, politics, the healthcare system, the economy and education.
22. (Ethics) Apply ethical frameworks, informed by the study of gender, feminism and social justice movements, to address unequal treatment or advantage in a variety of contexts.
23. (Engaged Practices) Link theory with practice. Recognize and advocate for social change at the local, national or transnational level.
24. (Advanced accomplishment) Demonstrate synthesis of skills acquired and performed in advanced coursework.
25. (Application beyond the Gender and Women's Studies classroom)Apply key Gender and Women's Studies concepts to one's life, activist projects, and to non\#Gender and Women's Studies academic coursework.

## ADVISING AND CAREERS

## ADVISING AND CAREERS UNDERGRADUATE ADVISING IN GENDER AND WOMEN'S STUDIES AND LGBT STUDIES (HTTPS://GWS.WISC.EDU/ UNDERGRADUATE/UNDERGRADUATE-ADVISING)

Connecting and working with your gender and women's studies undergraduate advisor as early as possible helps you create a meaningful course plan and stay on track as you complete your degree requirements.

Our undergraduate advisor is available to consult on a variety of topics including: program declaration, adding an additional major or certificate, course planning and four-year graduation plans, volunteer and internship opportunities, graduate school, and career development.

## INTERNSHIP PROGRAM IN GENDER AND WOMEN'S STUDIES (HTTP://GUIDE.WISC.EDU/UNDERGRADUATE/ LETTERS-SCIENCE/GENDER-WOMENS-STUDIES/ GENDER-WOMENS-STUDIES-BS/\%20HTTPS:// WOMENSSTUDIES.WISCWEB.WISC.EDU/INTERNSHIP)

Applied learning through internships within the field of gender and women's studies allows students the opportunity to connect the classroom to the community and put theory into practice. Recognizing the power and importance of experiential and service learning, we proudly offer both local and global internship opportunities in our department.

Our internship program is designed to provide students with opportunities for learning and working in organizations and settings that connect their coursework in gender and women's studies to specific issues in community settings. The connected internship seminar provides a venue for students to engage deeply in feminist-based work and reflection while thinking critically about participating as feminists in activism and professional settings.

Internship courses in GEN\&WS:

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN\&WS 660 | Internship in Gender and Women's | 3 |
|  | Studies |  |
| GEN\&WS 661 | Global Internship in Gender and <br> Women's Studies | $1-6$ |

## CAREER DEVELOPMENT IN GENDER AND WOMEN'S STUDIES

The Department of Gender and Women's Studies is committed to helping our students understand and articulate how skills and concepts learned in the classroom can be applied in a professional setting. As reflected in our Learning Outcomes, (https://womensstudies.wiscweb.wisc.edu/ wp-content/uploads/sites/249/2017/09/GWSLearningOutcomes.pdf) students in gender and women's studies develop desirable professional skills, such as written and oral communication, critical thinking, problem solving, and collaboration skills, as well as critical self and social awareness.

The department continues to expand career development opportunities for our students by working with our alumni, and offering workshops, panels, and networking opportunities. To learn more about career development opportunities in Gender \& Women's Studies, contact the Undergraduate Advisor. (https://gws.wisc.edu/undergraduate/ undergraduate-advising)

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

Professors Jill Casid (https://gws.wisc.edu/staff/casid-jill-h), Finn Enke (https://gws.wisc.edu/staff/enke-finn), Susan Friedman (https:// gws.wisc.edu/staff/friedman-susan-stanford), Christine Garlough (https://gws.wisc.edu/staff/garlough-christine), (https://gws.wisc.edu/ staff/hyde-janet-shibley) Janet Hyde (https://gws.wisc.edu/staff/hyde-janet-shibley), (https://gws.wisc.edu/staff/hyde-janet-shibley) Maria Lepowsky (https://gws.wisc.edu/staff/lepowsky-maria), Myra Marx Ferree (https://gws.wisc.edu/staff/marx-ferree-myra), Aili Mari Tripp (https://gws.wisc.edu/staff/tripp-aili-mari)

Associate Professors Jenny Higgins (https://jennyhiggins.net), (https:// gws.wisc.edu/staff/higgins-jenny) Judith Houck (https://gws.wisc.edu/ staff/houck-judy), Pernille Ipsen (https://gws.wisc.edu/staff/ipsenpernille), Ellen Samuels (https://gws.wisc.edu/staff/samuels-ellen),

Assistant Professors Chris Barcelos (https://gws.wisc.edu/staff/ barcelos-chris), Keisha Lindsay (https://gws.wisc.edu/staff/lindsaykeisha), Annie Menzel (https://gws.wisc.edu/staff/menzel-annie), Sami Schalk (https://gws.wisc.edu/staff/schalk-sami)

Faculty Affiliates: See the GEN\&WS Faculty Affiliates (https:// gws.wisc.edu/people/affiliates-directory) for more information about instructors on campus who are engaged in feminist-inspired teaching and research.

## LECTURERS AND TEACHING ASSISTANTS

See the current semester's GEN\&WS Lecturers and Teaching Assistants directory (https://gws.wisc.edu/people/lecturers-and-teaching-assistants-ta).

## UNDERGRADUATE STUDENT SERVICES

Academic Advising: Susan Nelson (https://gws.wisc.edu/staff/nelsonsusan)

Enrollment Inquiries: Diane Walton (https://gws.wisc.edu/staff/waltondiane)

Curricular Planning: Nina Valeo Cooke (https://gws.wisc.edu/staff/valeonina)

## GENDER AND WOMEN'S STUDIES, CERTIFICATE

The certificate program requires 15 credits of coursework in gender and women's studies. Students can tailor the certificate to reflect their interest, compliment their major or plan for graduate or professional school.

## HOW TO GET IN

Intent to pursue the certificate must be declared by meeting with the Department of Gender and Women's Studies undergraduate advisor (https://gws.wisc.edu/undergraduate/undergraduate-advising) as early as possible in the certificate program.

## REQUIREMENTS

## GEN\&WS CERTIFICATE REQUIREMENTS

15 credits to include at least 12 credits in GEN\&WS, to include: ${ }^{1,2}$

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Humanities credits in GEN\&WS | 3 |
| Social Science credits in GEN\&WS | 3 |
| Natural or Biological science credits in GEN\&WS | 3 |
| Additional credits | 6 |
| Total Credits | 15 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all certificate credits

9 credits at the intermediate or advanced level

8 credits in residence

## NOTES

1 Students may apply only one of GEN\&WS 101 Gender, Women, and Cultural Representation or GEN\&WS 102 Gender, Women, and Society in Global Perspective to the certificate.
2 Courses taken pass/fail do not apply to the certificate.

## COURSE LISTS

| Humanities courses in GEN\&WS |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| GEN\&WS 101 | Gender, Women, and Cultural Representation | 3 |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies | 3-4 |
| GEN\&WS/ <br> LITTRANS 205 | Women in Russian Literature in Translation | 3-4 |
| GEN\&WS/ <br> AFROAMER 221 | Introduction to Black Women's Studies | 3 |
| GEN\&WS/ <br> AFROAMER 222 | Introduction to Black Women Writers | 3 |
| GEN\&WS/ENGL 248 | Women in Ethnic American Literature | 3 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS/ <br> LITTRANS 270 | German Women Writers in Translation | 3 |
| GEN\&WS/ RELIG ST 305 | Women, Gender and Religion | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities | 1-3 |


| GEN\&WS/ HISTORY 315 | Gender, Race and Colonialism | 3 |
| :---: | :---: | :---: |
| GEN\&WS 319 | Study Abroad Special Topic: Gender, Women and the Humanities | 3-4 |
| GEN\&WS/ <br> AFROAMER 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| GEN\&WS/ <br> AFROAMER 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| GEN\&WS 330 | Topics in Gender/Class/Race/ Ethnicity (Humanities) | 3 |
| GEN\&WS/ CHICLA 332 | Latinas: Self Identity and Social Change | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS 342 | Transgender Studies | 3-4 |
| GEN\&WS 343 | Queer Bodies | 3 |
| GEN\&WS/ CLASSICS 351 | Women and Gender in the Classical World | 3-4 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS 370 | Topics in Gender and Disability | 3 |
| GEN\&WS 371 | Disability and Gender in Film | 3 |
| GEN\&WS 372 | Visualizing Bodies | 3 |
| GEN\&WS 373 | Gender \& the Cultural Politics of Illness | 3 |
| GEN\&WS 414 | Gender, Performance, and Sexuality | 3 |
| GEN\&WS/ THEATRE 415 | Introduction to Contemporary Feminist Theatre and Criticism | 3 |
| GEN\&WS/ <br> COM ARTS 418 | Gender, Sexuality, and the Media | 3 |
| GEN\&WS/ENGL 419 | Gender and Language | 3 |
| GEN\&WS/ <br> FOLKLORE 428 | Gender and Expressive Culture | 3 |
| GEN\&WS/ AMER IND/ANTHRO/ FOLKLORE 437 | American Indian Women | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS 442 | Lesbian Culture | 3 |
| GEN\&WS 445 | The Body in Theory | 3 |
| GEN\&WS 449 | Special Topics in Feminism and Social and Cultural Theory | 3 |
| GEN\&WS/ PORTUG 450 | Brazillian Women Writers | 3 |
| GEN\&WS/ PORTUG 460 | Carmen Miranda | 3 |
| GEN\&WS/ASIAN AM/ ENGL 463 | Race and Sexuality in American Literature | 3 |
| GEN\&WS/ASIAN AM/ ENGL 464 | Asian American Women Writers | 3 |
| GEN\&WS/ <br> FOLKLORE 467 | Women and Politics in Popular Culture and Folklore | 3 |
| GEN\&WS/ <br> FOLKLORE 468 | Feminism, Folklore and Comparative Literature | 3 |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change | 3 |


| GEN\&WS/HIST SCI/ MED HIST 524 | The Medical History of Sex and Sexuality | 3 |
| :---: | :---: | :---: |
| GEN\&WS/HIST SCI/ MED HIST 532 | The History of the (American) Body | 3 |
| GEN\&WS/ENGL 545 | Feminist Theory and Women's Writing in English | 3 |
| GEN\&WS 547 | Theorizing Intersectionality | 3 |
| GEN\&WS/ <br> AFROAMER 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| GEN\&WS/ <br> AFROAMER 625 | Gender, Race and the Civil Rights Movement | 3 |
| GEN\&WS/ <br> AFROAMER 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| GEN\&WS/ AFROAMER 679 | Visual Culture, Gender and Critical Race Theory | 3 |
| ENGL 443 | Outstanding Figure(s) in Literature since 1800 (Virginia Woolf) | 3 |
| ENGL 538 | Women's Traditions in the Novel | 3 |
| FOLKLORE/ GEN\&WS 468 | Feminism, Folklore and Comparative Literature | 3 |
| HISTORY 275 | Topics in LGBT History | 3 |
| HISTORY 221 | Explorations in American History <br> (H) (Gender) | 3-4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| CLASSICS 373 | Topics in Classical Culture (Sex and Power) | 1-3 |

## Social Science courses in GEN\&WS

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN\&WS 102 | Gender, Women, and Society in Global Perspective | 3 |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies | 3-4 |
| GEN\&WS/C\&E SOC/ SOC 215 | Gender and Work in Rural America | 3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society | 1-3 |
| GEN\&WS/ <br> AFROAMER 323 | Gender, Race and Class: Women in U.S. History | 3 |
| GEN\&WS 329 | Study Abroad Special Topic: Gender, Women in Society | 3-4 |
| GEN\&WS 331 | Topics in Gender/Class/Race/ Ethnicity (Social Sciences) | 3 |
| GEN\&WS/ AFROAMER 333 | Black Feminisms | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ HISTORY 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| GEN\&WS/ HISTORY 392 | Women and Gender in Modern Europe | 3-4 |


| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| :---: | :---: | :---: |
| GEN\&WS/ <br> LEGAL ST 422 | Women and the Law | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS 427 | Global Feminisms | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS/ <br> ANTHRO 443 | Anthropology by Women | 3 |
| GEN\&WS 449 | Special Topics in Feminism and Social and Cultural Theory | 3 |
| GEN\&WS/ <br> POLI SCI 469 | Women and Politics | 3-4 |
| GEN\&WS/HISTORY/ <br> LCA 472 | Women in Turkish Society | 3 |
| GEN\&WS/SOC 477 | Feminism and Sociological Theory | 3 |
| GEN\&WS/ PSYCH 522 | Psychology of Women and Gender | 3 |
| GEN\&WS/ <br> HIST SCI 537 | Childbirth in the United States | 3 |
| GEN\&WS/ <br> ED POL 560 | Gender and Education | 3 |
| GEN\&WS/SOC 611 | Gender, Science and Technology | 3 |
| HISTORY 275 | Topics in LGBT History | 3 |
| ANTHRO 310 | Topics in Archaeology (Gender, Tech) | 3 |


| Natural and Biological science Courses in GEN\&WS |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| GEN\&WS 103 | Women and Their Bodies in Health and Disease | 3 |
| GEN\&WS 530 | Biology and Gender ${ }^{3}$ | 3 |
| GEN\&WS/HIST SCI/ MED HIST 531 | Women and Health in American History ${ }^{3}$ | 3 |
| GEN\&WS 533 | Special Topics in Women and Health ${ }^{3}$ | 3 |
| GEN\&WS/ <br> INTL ST 535 | Women's Global Health and Human Rights ${ }^{3}$ | 3 |

3 GEN\&WS 103 Women and Their Bodies in Health and Disease is a prerequisite for all upper-level biology and health courses in gender and women's studies.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. Knowledge of core concepts of gender and women's studies, including: gender, intersectionality, feminist theory, epistemology, class, race/ethnicity, global processes, sexuality, disability \& embodiment, health and science, and contemporary and historical issues.
2. Intellectual and practical skills relating to gender and women's studies, including: problem solving, interdisciplinarity, critical thinking, writing, oral communication, collaboration, and creativity.
3. Personal and social responsibility anchored through active involvement with diverse communities and real-world challenges. This category may include things like developing critical self and social awareness, applying ethical frameworks, learning through engaged practices.
4. Integrative learning demonstrated through the application of knowledge, skills and responsibilities to new settings and complex problems. Understand and recognize the importance of the relationship between Gender \& Women's Studies and various other disciplines and fields of study.

## ADVISING AND CAREERS

## TO MEET WITH THE GENDER AND WOMEN'S STUDIES UNDERGRADUATE ADVISOR DURING THE ACADEMIC YEAR:

Please visit the undergraduate advisor's calendar for the gender and women's studies (GEN\&WS) certificate to make an appointment (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/wuCLByLC.html). To declare a major or certificate, please plan on a 15-minute appointment. Otherwise, schedule the time of a meeting according to your needs. Drop-in advising (https://gws.wisc.edu/undergraduate/undergraduateadvising) is also available.

There is no undergraduate advising available over the summer in GEN\&WS.

## PEOPLE

## FACULTY

Professors Jill Casid (https://gws.wisc.edu/staff/casid-jill-h), Finn Enke (https://gws.wisc.edu/staff/enke-finn), Susan Friedman (https:// gws.wisc.edu/staff/friedman-susan-stanford), Christine Garlough (https://gws.wisc.edu/staff/garlough-christine), (https://gws.wisc.edu/ staff/hyde-janet-shibley) Janet Hyde (https://gws.wisc.edu/staff/hyde-janet-shibley), (https://gws.wisc.edu/staff/hyde-janet-shibley) Maria Lepowsky (https://gws.wisc.edu/staff/lepowsky-maria), Myra Marx Ferree (https://gws.wisc.edu/staff/marx-ferree-myra), Aili Mari Tripp (https://gws.wisc.edu/staff/tripp-aili-mari)

Associate Professors Jenny Higgins (https://jennyhiggins.net), (https:// gws.wisc.edu/staff/higgins-jenny) Judith Houck (https://gws.wisc.edu/ staff/houck-judy), Pernille Ipsen (https://gws.wisc.edu/staff/ipsenpernille), Ellen Samuels (https://gws.wisc.edu/staff/samuels-ellen),

Assistant Professors Chris Barcelos (https://gws.wisc.edu/staff/ barcelos-chris), Keisha Lindsay (https://gws.wisc.edu/staff/lindsay-
keisha), Annie Menzel (https://gws.wisc.edu/staff/menzel-annie), Sami Schalk (https://gws.wisc.edu/staff/schalk-sami)

Faculty Affiliates: See the GEN\&WS Faculty Affiliates (https:// gws.wisc.edu/people/affiliates-directory) for more information about instructors on campus who are engaged in feminist-inspired teaching and research.

## LECTURERS AND TEACHING ASSISTANTS

See the current semester's GEN\&WS Lecturers and Teaching Assistants directory (https://gws.wisc.edu/people/lecturers-and-teaching-assistants-ta).

## UNDERGRADUATE STUDENT SERVICES

Academic Advising: Susan Nelson (https://gws.wisc.edu/staff/nelsonsusan)

Enrollment Inquiries: Diane Walton (https://gws.wisc.edu/staff/waltondiane)

Curricular Planning: Nina Valeo Cooke (https://gws.wisc.edu/staff/valeonina)

## LGBTQ+ STUDIES, CERTIFICATE

The LGBTQ+ studies certificate program, housed administratively in the Department of Gender and Women's Studies, is a campuswide program open to students in any major. Courses that count toward this interdisciplinary certificate come from a wide range of fields including literature, history, sociology, medical history, as well as from gender and women's studies, which is in itself an interdisciplinary field. This certificate can compliment many other programs and plans across campus, including, but not limited to gender and women's studies. New courses are added to the program each semester.

## HOW TO GET IN

Intent to pursue the certificate must be declared by meeting with the LGBTQ+ studies undergraduate advisor (https://gws.wisc.edu/ undergraduate/undergraduate-advising) as early as possible in the certificate program and before completing requirements.

## REQUIREMENTS

## LGBTQ+ STUDIES COURSE REQUIREMENTS

The certificate requires 15 credits distributed as follows: ${ }^{1}$

| Code <br> Introduction to LGBT Studies | Credits |  |
| :--- | :--- | ---: |
| GEN\&WS/SOC 200 | Introduction to Lesbian, Gay, <br> Bisexual, Transgender and Queer+ <br> Studies | $3-4$ |
| $\mathbf{3}$ courses and 9 credits in LGBT Studies |  |  |
| GEN\&WS/ | Women and Gender in the Classical <br> CLASSICS 351 <br> World | 9 |
| CLASSICS/ Sex and Power in Greece and Rome <br> GEN\&WS 361  <br> GEN\&WS/ Gender, Sexuality, and the Media <br> COM ARTS 418  |  |  |


| GEN\&WS/ ENGL 419 | Gender and Language |
| :---: | :---: |
| GEN\&WS/ ASIAN AM/ ENGL 463 | Race and Sexuality in American Literature |
| GEN\&WS/ <br> FOLKLORE 468 | Feminism, Folklore and Comparative Literature |
| GEN\&WS 280 | Honors Seminar: Studies in Gender, Sex, and Sexuality |
| GEN\&WS 340 | Topics in LGBTQ Sexuality ${ }^{2}$ |
| GEN\&WS 342 | Transgender Studies |
| GEN\&WS 343 | Queer Bodies |
| GEN\&WS/ <br> THEATRE 415 | Introduction to Contemporary Feminist Theatre and Criticism |
| GEN\&WS 442 | Lesbian Culture |
| GEN\&WS 445 | The Body in Theory |
| GEN\&WS 534 | Gender, Sexuality, and Reproduction: Public Health Perspectives |
| GEN\&WS/ HISTORY 346 | Trans/Gender in Historical Perspective |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change |
| GEN\&WS/ <br> HIST SCI/ <br> MED HIST 532 | The History of the (American) Body |
| HISTORY 275 | Topics in LGBT History ${ }^{2}$ |
| HISTORY/ GEN\&WS 354 | Women and Gender in the U.S. Since 1870 |
| GEN\&WS 414 | Gender, Performance, and Sexuality |
| ANTHRO 490 | Undergraduate Seminar (Anthropology of Sexuality) |
| ART HIST 425 | Race and Gender in Italian Early Modern Art |
| ART HIST 431 | Topics in Theory (Queer) |
| CLASSICS 373 | Topics in Classical Culture (Sex and Power) |
| COM ARTS 610 | Special Topics in Rhetoric and Public Address (Queer) |
| COM ARTS 608 | Special Topics in Media and Cultural Studies (Gender, Sex) |
| ED POL 600 | Problems in Educational Policy (Sex and Sexuality) |
| ENGL 171 | Literature, Gender, and Sexuality |
| ENGL 236 | Bascom Course (Queer) |
| ENGL 438 | Topic in Eighteenth-Century Literature and Culture (Gender \& Sexuality) |
| ENGL 457 | Topic in American Literature and Culture since 1900 (Sexual Politics) |
| ENGL 474 | Topic in Contemporary Literature (Queer Literature) |
| ENGL 474 | Topic in Contemporary Literature (Literature and HIV/AIDS) |
| ENGL 516 | English Grammar in Use (Queer) |


| ENGL 559 | Topic in Literary or Cultural Theory (Cultural Theories) |
| :---: | :---: |
| FRENCH 211 | French Interdisciplinary Studies (Sex \& Gender) |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Gender) |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer) |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Queer) |
| GEN\&WS 449 | Special Topics in Feminism and Social and Cultural Theory (Queer) |
| GEN\&WS 449 | Special Topics in Feminism and Social and Cultural Theory (Sexualities) |
| GEN\&WS/ PORTUG 460 | Carmen Miranda |
| GEN\&WS/ <br> HIST SCI/ <br> MED HIST 524 | The Medical History of Sex and Sexuality |
| GEN\&WS 533 | Special Topics in Women and Health (Queer) |
| GEN\&WS/ <br> ED POL 560 | Gender and Education |
| MED HIST/ GEN\&WS/ HIST SCI 524 | The Medical History of Sex and Sexuality |
| SOC WORK 662 | Topics in Contemporary Social Welfare |
| THEATRE 420 | Theatre and Society |
| Advanced Seminar in LGBT Studies ${ }^{3}$ |  |
| GEN\&WS 642 | Advanced Seminar in LGBT Studies <br> (LGBT Studies Capstone) |
| Total Credits | 15-16 |
| Not more than one course can be taken at the elementary level to count for the LGBTQ+ studies certificate. Courses taken on a pass/ fail basis will not satisfy certificate requirements. |  |
| Topics courses, such as HISTORY 275 and GEN\&WS 340, may be taught with a number of different LGBTQ+ topics and therefore may be taken more than once, so long as the topic is different. |  |
| 3 Students must h certificate before Advanced Semin | ve already completed at least 9 credits in the aking the capstone course, GEN\&WS 642 in LGBT Studies (LGBT Studies Capstone). |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all GEN\&WS courses and all certificate courses 8 credits In residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Knowledge of core concepts and debates in the interdisciplines of Gender and LGBTQ+ Studies, including: gender diversities and sexualities, cultural contexts, critical feminist, queer and race theories, disability \& embodiment, epistemologies and methodologies, ethical and engaged practices in related fields of study and social life.
2. Intellectual and practical skills relating to LGBTQ+ Studies, including: critical thinking and analysis, inquiry and research, written and oral communication, collaboration, creativities, leadership and career skills.
3. Understanding relationships among the various fields of multi- and inter-disciplinary LGBTQ+ scholarship and the institutions that structure everyday life.
4. Integrative learning demonstrated through the application of knowledge, skills and social engagement to new settings and complex research projects.

## ADVISING AND CAREERS

## TO MEET WITH THE LGBTQ+ STUDIES UNDERGRADUATE ADVISOR DURING THE ACADEMIC YEAR:

Please visit the undergraduate advisor's calendar for the LGBTQ + certificate to make an appointment (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/wuCLByLC.html). To declare a major or certificate, please plan on a 15-minute appointment. Otherwise, schedule the time of a meeting according to your needs. Drop-in advising is available Wednesdays from noon to 2 p.m. Please visit Sterling Hall, room 3312.

There is no undergraduate advising available over the summer in LGBTQ+ studies.

Please note: For students also declared for the gender and women's studies major or certificate, a maximum 6 credits may apply to both programs.

## PEOPLE

## LGBT STUDIES FACULTY

LGBT STUDIES CERTIFICATE STEERING COMMITTEE
Severino João Albuquerque (http://spanport.wisc.edu/people/faculty/ severino-jo\%C3\%A3o-albuquerque), Department of Spanish and Portuguese

Leslie Bow (https://english.wisc.edu/faculty-bow.htm), Department of English

Chris Barcelos (https://gws.wisc.edu/staff/barcelos-chris), Department of Gender and Women's Studies

Colleen Capper (https://elpa.education.wisc.edu/elpa/people/faculty-and-staff-directory/colleen-capper), Department of Educational Leadership and Policy Analysis

Jill Casid (https://gws.wisc.edu/staff/casid-jill-h), Department of Art History and Department Gender and Women's Studies

Russ Castronovo (https://english.wisc.edu/staff/castronovo-russ), Department of English

Laurie Beth Clark (https://irh.wisc.edu/fellows/laurie-beth-clark), Department of Art

Suzanne Desan (https://history.wisc.edu/faculty_sd.htm), Department of History

Alex Dressler (https://canes.wisc.edu/alex-dressler.htm), Department of Classics

Finn Enke (https://gws.wisc.edu/staff/enke-finn), Department of History and Department of Gender and Women's Studies

Nan Enstad (https://history.wisc.edu/faculty_ne.htm), Department of History

Ramzi Fawaz (https://english.wisc.edu/staff/fawaz-ramzi), Department of English

Cecilia Ford (https://english.wisc.edu/faculty-ford.htm), Department of English

Christine Garlough (https://gws.wisc.edu/staff/garlough-christine), Department of Gender and Women's Studies and Department of Comparative Literature and Folklore

April Haynes (https://history.wisc.edu/faculty_aha.htm), Department of History

Judith Houck (https://gws.wisc.edu/staff/houck-judy), Department of Medical History and Bioethics and Department of Gender and Women's Studies

Aida Levy-Hussen (https://english.wisc.edu/faculty-hussen.htm), Department of English and Department of Afro-American Studies

Susan Johnson (https://history.wisc.edu/faculty_sj.htm), Department of History
J. Mark Kenoyer (http://www.anthropology.wisc.edu/staff/kenoyer-jmark), Department of Anthropology
B. Venkat Mani (http://german.wisc.edu/about/people/faculty/b-venkatmani), Department of German

Laura McClure (https://canes.wisc.edu/laura-mcclure.htm), Department of Classics

Michael Jay McClure (https://arthistory.wisc.edu/michael-jay-mcclurebiography.htm), Department of Art History

Michael Peterson (https://english.wisc.edu/intertheatrestudies/people/ core-faculty), Department of Theatre and Drama

Mary Lou Roberts (https://history.wisc.edu/faculty_mlr.htm), Department of History

Ellen Samuels (https://gws.wisc.edu/staff/samuels-ellen), Departments of English and Department of Gender and Women's Studies

Claire Wendland (http://www.anthropology.wisc.edu/people/clairewendland), Department of Anthropology, Department of Obstetrics and Gynecology, and Department of Medical History and Bioethics

Susan Zaeske (https://commarts.wisc.edu/people/szaeske), Department of Communication Arts

# UNDERGRADUATE STUDENT SERVICES <br> ACADEMIC ADVISING <br> Susan Nelson (https://gws.wisc.edu/staff/nelson-susan) 

## ENROLLMENT QUESTIONS

Diane Walton (https://gws.wisc.edu/staff/walton-diane)

CURRICULAR PLANNING<br>Nina Valeo Cooke (https://gws.wisc.edu/staff/valeo-nina)

## GEOGRAPHY

Geography studies the interaction between people and their environments including the ways in which the people, the environments, and the interactions all vary from place to place over the earth. Because it is concerned with the character of people and their cultures on the one hand, and with the character of the earth's surface and its resources on theother, it is both a social and a natural science. Being broad and integrative, geography provides an appropriate foundation for a liberal education. It also provides a base for employment in public or private agencies, both domestic and international, concerned with environmental management, locational analysis or planning (urban, regional, land use).

Cartography/GIS, also known more broadly as geographic information science, studies and develops digital technology and the theory behind this technology to help people work with geographic information. This broad area interfaces with work from the physical and social sciences. It is a field devoted to the acquisition, management, analysis, visualization, and representation of geospatial data. It is a relatively new discipline that incorporates geography, cartography, spatial analysis, and related fields such as geovisualization, geodesy, geocomputation, cognition, and computer science. At the present time professionals trained in geographic information science are very much in demand by federal agencies, state and local governments, and private firms.

The student desiring a limited introduction to the field of geography may select any introductory course in cultural or physical geography. Students with special interests in any of a number of fields outside of geography, such as history, political science, economics, anthropology, sociology, meteorology, geology, etc., will find useful background courses in geography. The student desiring a limited introduction to the field of GIScience may select either GEOG 170 Our Digital Globe: An Overview of GIScience and its Technology or GEOG 370 Introduction to Cartography or GEOG/CIV ENGR/ENVIR ST 377 An Introduction to Geographic Information Systems. Students in landscape architecture, urban and regional planning, civil and environmental engineering, medical illustration, or the environmental sciences may find GIScience a useful addition to their major course of study.

Department course offerings are listed in five major groups:

1. Physical Geography: Earth Systems and Environmental Processes
2. People-Environment Interaction
3. Human Geography
4. Area Studies and Global Systems
5. Cartography and Geographic Information Science

Courses in groups 1 and 5 (except GEOG 577 Environmental Modeling with GIS) are counted as physical science; those in groups 2 (except GEOG/ENVIR ST/SOIL SCI 230 Soil: Ecosystem and Resource and BOTANY 240 Plants and Humans), 3, and 4 are counted as social science.

## DEGREES/MAJORS/CERTIFICATES

- Cartography and Geographic Information Systems, B.A. (p. 695)
- Cartography and Geographic Information Systems, B.S. (p. 699)
- Geography, B.A. (p. 703)
- Geography, B.S. (p. 708)


## PEOPLE

Professors Burt, Cadwallader, Cronon, Downey, Kaiser, Knox, Mason, Naughton, Olds, Ostergren, Turner, Williams, Zhu

Associate Professors Alatout, Dennis
Assistant Professors Baird, Gibbs, Marin-Spiotta, Ozdogan, Robertson, Roth, Schneider, Woodward, Young

## CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS, B.A.

Cartography and GIS, also known more broadly as geographic information science, studies and develops digital technology and the theory behind it to help people work with geographic information. This broad area interfaces with work from the physical and social sciences. It is a field devoted to the acquisition, management, analysis, visualization, and representation of geospatial data. It is a relatively new discipline that incorporates geography, cartography, spatial analysis, and related fields such as geovisualization, geodesy, geocomputation, cognition, and computer science. At the present time professionals trained in geographic information science are very much in demand by federal agencies, state and local governments, and private firms.

## HOW TO GET IN

Exploring the field of geographic information science at UW-Madison is easy. Interested students are strongly encouraged to take introductory courses in the field. The Department of Geography offers four intro courses in geographic information science:

- GEOG 170 Our Digital Globe: An Overview of GIScience and its Technology (online);
- GEOG 370 Introduction to Cartography;
- GEOG/ENVIR ST/F\&W ECOL/G L E/GEOSCI/ LAND ARC 371 Introduction to Environmental Remote Sensing; and
- GEOG/CIV ENGR/ENVIR ST 377 An Introduction to Geographic Information Systems

Students who intend to declare their major as cartography and GIS need to schedule an appointment with the geography undergraduate advisor, Joel Gruley, at jgruley@wisc.edu.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b$ ( $Q R B$ ) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

## BREADTH

3 courses, 1 each from these areas:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Human Geography (1 course) | 3 |  |
| GEOG 101 | Introduction to Human Geography |  |


| GEOG 355 | Africa, South of the Sahara |
| :--- | :--- |
| GEOG 358 | Human Geography of Southeast |
|  | Asia |


| Physical Geography (1 course) |  | 3 |
| :---: | :---: | :---: |
| GEOG/ <br> ENVIR ST 120 | Introduction to the Earth System |  |
| GEOG/ <br> ENVIR ST 127 | Physical Systems of the Environment |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 320 \end{aligned}$ | Geomorphology |  |
| GEOG 321 | Climatology |  |
| GEOG/ <br> ATM OCN 323 | Science of Climate Change |  |
| GEOG/ <br> ENVIR ST 325 | Analysis of the Physical Environment |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 326 \end{aligned}$ | Landforms-Topics and Regions |  |
| GEOG 329 | Landforms and Landscapes of North America |  |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts |  |
| GEOG/ <br> BOTANY 338 | Environmental Biogeography |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG 344 | The American West |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 420 \end{aligned}$ | Glacial and Pleistocene Geology |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 523 \end{aligned}$ | Quaternary Vegetation Dynamics |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 524 \end{aligned}$ | Advanced Landform Geography |  |
| GEOG/ <br> SOIL SCI 525 | Soil Geomorphology |  |
| GEOG/ <br> SOIL SCI 526 | Human Transformations of Earth Surface Processes |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 527 \end{aligned}$ | The Quaternary Period |  |
| GEOG/ATM OCN/ <br> ENVIR ST 528 | Past Climates and Climatic Change |  |

Total Credits 9

## SKILLS, TECHNIQUES \& METHODOLOGY

| Code | Title | Credits |
| :---: | :---: | :---: |
| Core Cartography/GIS |  |  |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG/ENVIR ST/ F\&W ECOL/ GLE/GEOSCI/ LAND ARC 371 | Introduction to Environmental Remote Sensing | 3 |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| GEOG 378 | Introduction to Geocomputing | 4 |
| Quantitative Methods | (1 course) | 3-4 |
| GEOG 360 | Quantitative Methods in Geographical Analysis (offered only in spring) |  |
| GEOG 560 | Advanced Quantitative Methods |  |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |


| STAT 324 | Introductory Applied Statistics for Engineers |  |
| :---: | :---: | :---: |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| Mathematics Proficiency |  | 6 |
| Complete one of the following by Placement or by completing the course |  |  |
| MATH 112 <br> \& MATH 113 | Algebra and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| Total Credits |  | 24-25 |
| DEPTH |  |  |
| Code | Title | Credits |
| Two courses |  | 7-8 |
| GEOG 572 | Graphic Design in Cartography |  |
| GEOG 574 | Geospatial Database Design and Development |  |
| GEOG 575 | Interactive Cartography \& Geovisualization |  |
| GEOG 576 | Geospatial Web and Mobile Programming |  |
| GEOG 578 | GIS Applications |  |
| GEOG 579 | GIS and Spatial Analysis |  |
| Total Credits |  | 7-8 |

CAPSTONE
\(\left.$$
\begin{array}{llr}\text { Code } & \text { Title } & \text { Credits } \\
\text { Complete one of: } & & 3-6 \\
\text { GEOG 565 } & \begin{array}{l}\text { Colloquium for Undergraduate } \\
\text { Majors }\end{array}
$$ \& <br>
\hline GEOG 681 \& \begin{array}{l}Senior Honors Thesis <br>

\& GEOG 682\end{array} \& and Senior Honors Thesis\end{array}\right]\)| GEOG 691 | Senior Thesis |
| :--- | :--- |
| \& GEOG 692 | and Senior Thesis |

Total Credits

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in GEOG and major courses
2.000 GPA on 15 upper-level credits, taken in residence ${ }^{2}$

15 credits in GEOG, taken on the UW-Madison campus
2 GEOG courses designated Intermediate/Advanced are upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Cartography and GIS Major in consultation with the Geography undergraduate advisor.

## HONORS IN THE CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS MAJOR REQUIREMENTS

To earn Honors in the Major in Cartography and GIS, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all GEOG courses, and all courses accepted in the major
- Complete GEOG 578: GIS Applications with a grade of B or better
- Complete at least one advanced-level course OR 6 credits of honors credits in the major at the 300 level or above
- Complete a two-semester Senior Honors Thesis in GEOG 681 Senior Honors Thesis and GEOG 682 Senior Honors Thesis, a piece of original research composition, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

## LEARNING OUTCOMES

1. Broad spectrum of geographical knowledge and skills, as well as a degree of expertise in a specific sub-field of the discipline (Human, People-Environment, Physical, Cart/GIS).
2. Skills in developing and implementing research plans.
3. Critical reasoning and analytical skills.
4. Communication skills - both written and oral.

## ADVISING AND CAREERS

## ADVISING

Students with questions about the major, courses, and careers are encouraged to contact the geography undergraduate advisor, Joel Gruley, at jgruley@wisc.edu.

## CAREERS

Cartography and GIS, and geography more broadly, are remarkably interdisciplinary fields that span the natural sciences, social sciences, and humanities. The types of careers that cartography and GIS can prepare students for thus reflect this diversity. Geographic information scientists work across the public, private, and nonprofit sectors, and commonly work in the following fields, where they acquire, manage, analyze, visualize, and represent geospatial data: environmental policy, conservation, and management; digital
cartography; urban and transportation planning; economic and community development; geospatial intelligence; food security; historic preservation; environmental hazards management; demography and human health; human migration and displacement; journalism; international conflict resolution; tourism.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Burt, Cadwallader, Cronon, Downey, Kaiser, Knox, Mason, Naughton, Olds, Ostergren, Turner, Williams, Zhu

Associate Professors Alatout, Dennis
Assistant Professors Baird, Gibbs, Marin-Spiotta, Ozdogan, Robertson, Roth, Schneider, Woodward, Young

## CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS, B.S.

Cartography and GIS, also known more broadly as geographic information science, studies and develops digital technology and the theory behind it to help people work with geographic information. This broad area interfaces with work from the physical and social sciences. It is a field devoted to the acquisition, management, analysis, visualization, and representation of geospatial data. It is a relatively new discipline that incorporates geography, cartography, spatial analysis, and related fields such as geovisualization, geodesy, geocomputation, cognition, and computer science. At the present time professionals trained in geographic information science are very much in demand by federal agencies, state and local governments, and private firms.

## HOW TO GET IN

courses in the field. The Department of Geography offers four intro courses in geographic information science:

- GEOG 170 Our Digital Globe: An Overview of GIScience and its Technology (online);
- GEOG 370 Introduction to Cartography;
- GEOG/ENVIR ST/F\&W ECOL/G L E/GEOSCI/ LAND ARC 371 Introduction to Environmental Remote Sensing; and
- GEOG/CIV ENGR/ENVIR ST 377 An Introduction to Geographic Information Systems

Students who intend to declare their major as cartography and GIS need to schedule an appointment with the geography undergraduate advisor, Joel Gruley, at jgruley@wisc.edu.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth—Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF SCIENCE DEGREE REQUIREMENTS
Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT

Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits
and Science
Coursework
Depth of
60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR
BREADTH
3 courses, 1 each from these areas:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Human Geography (1 course) | 3 |  |
| GEOG 101 | Introduction to Human Geography |  |
| GEOG 104 | Introduction to Human Geography |  |
| GEOG 301 | Geography of Social Organization |  |
| GEOG 302 | Economic Geography: Locational <br> Behavior |  |


| GEOG/ <br> URB R PL 305 | Introduction to the City |  |
| :---: | :---: | :---: |
| GEOG 318 | Introduction to Geopolitics |  |
| GEOG 340 | World Regions in Global Context |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG 348 | Latin America |  |
| GEOG 349 | Europe |  |
| GEOG 353 | Russia and the NIS-Topical Analysis |  |
| GEOG 355 | Africa, South of the Sahara |  |
| GEOG 358 | Human Geography of Southeast Asia |  |
| GEOG/ENVIR ST/ HISTORY 469 | The Making of the American Landscape |  |
| GEOG 501 | Space and Place: A Geography of Experience |  |
| GEOG/ <br> URB R PL 503 | Researching the City: Qualitative Strategies |  |
| GEOG/ <br> URB R PL 505 | Urban Spatial Patterns and Theories |  |
| GEOG/ <br> URB R PL 506 | Historical Geography of European Urbanization |  |
| GEOG 508 | Landscape and Settlement in the North American Past |  |
| GEOG 510 | Economic Geography |  |
| GEOG 518 | Power, Place, Identity |  |
| GEOG 566 | History of Geographic Thought |  |
| People-Environment | (1 course) | 3 |
| GEOG/ <br> ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography |  |
| GEOG/ENVIR ST/ SOIL SCI 230 | Soil: Ecosystem and Resource |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { ENVIR ST } 309 \end{aligned}$ | People, Land and Food: Comparative Study of Agriculture Systems |  |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts |  |
| GEOG/ <br> ENVIR ST 337 | Nature, Power and Society |  |
| GEOG/ <br> BOTANY 338 | Environmental Biogeography |  |
| GEOG/ <br> ENVIR ST 339 | Environmental Conservation |  |
| GEOG 340 | World Regions in Global Context |  |
| GEOG 344 | The American West |  |
| GEOG 359 | Australia: Environment and Society |  |
| GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes |  |
| GEOG/ <br> ENVIR ST 439 | US Environmental Policy and Regulation |  |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History |  |
| GEOG 508 | Landscape and Settlement in the North American Past |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { SOIL SCI } 526 \end{aligned}$ | Human Transformations of Earth Surface Processes |  |


| GEOG/ <br> ENVIR ST 534 | Environmental Governance: <br> Markets, States and Nature |  |
| :---: | :---: | :---: |
| GEOG/ <br> ENVIR ST 537 | Culture and Environment |  |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development |  |
| GEOG/ <br> ENVIR ST 557 | Development and Environment in Southeast Asia |  |
| Physical Geography (1 course) |  | 3 |
| GEOG/ <br> ENVIR ST 120 | Introduction to the Earth System |  |
| GEOG/ <br> ENVIR ST 127 | Physical Systems of the Environment |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 320 \end{aligned}$ | Geomorphology |  |
| GEOG 321 | Climatology |  |
| GEOG/ <br> ATM OCN 323 | Science of Climate Change |  |
| GEOG/ <br> ENVIR ST 325 | Analysis of the Physical Environment |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 326 \end{aligned}$ | Landforms-Topics and Regions |  |
| GEOG 329 | Landforms and Landscapes of North America |  |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts |  |
| GEOG/ <br> BOTANY 338 | Environmental Biogeography |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG 344 | The American West |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 420 \end{aligned}$ | Glacial and Pleistocene Geology |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 523 \end{aligned}$ | Quaternary Vegetation Dynamics |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 524 \end{aligned}$ | Advanced Landform Geography |  |
| GEOG/ <br> SOIL SCI 525 | Soil Geomorphology |  |
| GEOG/ <br> SOIL SCI 526 | Human Transformations of Earth Surface Processes |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 527 \end{aligned}$ | The Quaternary Period |  |
| GEOG/ATM OCN/ <br> ENVIR ST 528 | Past Climates and Climatic Change |  |
| Total Credits |  | 9 |

SKILLS, TECHNIQUES \& METHODOLOGY

| Code | Title | Credits |
| :--- | :--- | ---: |
| Core Cartography/GIS |  |  |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG/ENVIR ST/ | Introduction to Environmental | 3 |
| F\&W ECOL/ | Remote Sensing |  |
| G L E/GEOSCI/ |  | 4 |
| LAND ARC 371 |  | 4 |
| GEOG/CIV ENGR/ | An Introduction to Geographic |  |
| ENVIR ST 377 | Information Systems |  |

GEOG 378 Introduction to Geocomputing 4
Quantitative Methods (1 course) 3-4

| GEOG 360 | Quantitative Methods in <br> Geographical Analysis (offered only <br> in spring) |
| :--- | :--- |
| GEOG 560 | Advanced Quantitative Methods |
| STAT 302 | Accelerated Introduction to <br> Statistical Methods |
| STAT 324 | Introductory Applied Statistics for <br> Engineers |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |

Mathematics Proficiency
Complete one of the following by Placement or by completing the course

| MATH 112 | Algebra |  |
| :--- | :--- | :--- |
| \& MATH 113 | and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| Total Credits |  | $24-25$ |

## DEPTH

| Code | Title | Credits |
| ---: | :--- | ---: |
| Two courses |  | $7-8$ |
| GEOG 572 | Graphic Design in Cartography |  |
| GEOG 574 | Geospatial Database Design and <br> Development |  |
| GEOG 575 |  <br> Geovisualization |  |
| GEOG 576 | Geospatial Web and Mobile <br> Programming |  |
| GEOG 578 | GIS Applications |  |
| GEOG 579 | GIS and Spatial Analysis | $7-8$ |
| Total Credits |  |  |

## CAPSTONE

| Code | Title | Credits |
| :--- | :--- | ---: |
| Complete one of: |  | $3-6$ |
| GEOG 565 | Colloquium for Undergraduate <br> Majors |  |
| GEOG 681 | Senior Honors Thesis <br> and Senior Honors Thesis |  |
| GEOG 691 682 | Senior Thesis |  |
| \& GEOG 692 | and Senior Thesis |  |
| Total Credits |  | $3-6$ |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in GEOG and major courses
2.000 GPA on 15 upper-level credits, taken in residence ${ }^{2}$

15 credits in GEOG, taken on the UW-Madison campus

2
GEOG courses designated Intermediate/Advanced are upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Cartography and GIS Major in consultation with the Geography undergraduate advisor.

## HONORS IN THE CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS MAJOR REQUIREMENTS

To earn Honors in the Major in Cartography and GIS, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all GEOG courses, and all courses accepted in the major
- Complete GEOG 578: GIS Applications with a grade of $B$ or better
- Complete at least one advanced-level course OR 6 credits of honors credits in the major at the 300 level or above
- Complete a two-semester Senior Honors Thesis in GEOG 681 Senior Honors Thesis and GEOG 682 Senior Honors Thesis, a piece of original research composition, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
|  | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |

## LEARNING OUTCOMES

1. Broad spectrum of geographical knowledge and skills, as well as a degree of expertise in a specific sub-field of the discipline (Human, People-Environment, Physical, Cart/GIS)
2. Skills in developing and implementing research plans.
3. Critical reasoning and analytical skills.
4. Communication skills - both written and oral.

## ADVISING AND CAREERS

## ADVISING

Students with questions about the major, courses, and careers are encouraged to contact the geography undergraduate advisor, Joel Gruley, at jgruley@wisc.edu.

## CAREERS

Cartography and GIS, and geography more broadly, are remarkably interdisciplinary fields that span the natural sciences, social sciences, and humanities. The types of careers that cartography and GIS can prepare students for thus reflect this diversity. Geographic information scientists work across the public, private, and nonprofit sectors, and commonly work in the following fields, where they acquire, manage, analyze, visualize, and represent geospatial data: environmental policy, conservation, and management; digital cartography; urban and transportation planning; economic and community development; geospatial intelligence; food security; historic preservation; environmental hazards management; demography and human health; human migration and displacement; journalism; international conflict resolution; tourism.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

## - SuccessWorks (https://careers.Is.wisc.edu)

- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Professors Burt, Cadwallader, Cronon, Downey, Kaiser, Knox, Mason, Naughton, Olds, Ostergren, Turner, Williams, Zhu

Associate Professors Alatout, Dennis

Assistant Professors Baird, Gibbs, Marin-Spiotta, Ozdogan, Robertson, Roth, Schneider, Woodward, Young

## GEOGRAPHY, B.A.

Geography studies the interaction between people and their environments, including the ways in which people, environments, and their interactions vary from place to place across Earth. Because it is concerned with the character of people and their cultures on the one hand, and with the character of Earth's surface and its resources on the other, it is both a social and a natural science. Being broad and integrative, Geography provides an appropriate foundation for a liberal education. It also provides a base for employment in public or private agencies, both domestic and international, concerned with environmental management, locational analysis, or planning (urban, regional, land use), among other fields.

## HOW TO GET IN

Exploring the field of geography at UW-Madison is easy. Interested students are strongly encouraged to take introductory courses in the field. The Department of Geography offers four intro courses, each of which surveys one of the four major subareas that comprise the discipline: (1) human geography; (2) people-environment geography; (3) physical geography; (4) and cartography and geographic information science. The four intro classes are:

- GEOG 101 Introduction to Human Geography;
- GEOG/ENVIR ST 120 Introduction to the Earth System;
- GEOG/ENVIR ST 139 Living in the Global Environment: An Introduction to People-Environment Geography; and
- GEOG 170 Our Digital Globe: An Overview of GIScience and its Technology (online).

Students who intend to declare their major in geography must schedule an appointment with the geography undergraduate advisor, Joel Gruley, at jgruley@wisc.edu.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
Foreign
Language

L\&S Breadth
semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major |  |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90 th credit |


| Minimum | 2.000 in all coursework at UW-Madison |
| :--- | :--- |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR CORE REQUIREMENTS FOR ALL MAJOR OPTIONS <br> 30 credits in courses required by the major. All options must complete these core requirements:

## BREADTH

3 courses, 1 each from these areas:

| Code TitleHuman Geography (1 course) |  | Credits |
| :---: | :---: | :---: |
|  |  | 3 |
| GEOG 101 | Introduction to Human Geography |  |
| GEOG 104 | Introduction to Human Geography |  |
| GEOG 301 | Geography of Social Organization |  |
| GEOG 302 | Economic Geography: Locational Behavior |  |
| GEOG/ <br> URB R PL 305 | Introduction to the City |  |
| GEOG 318 | Introduction to Geopolitics |  |
| GEOG 340 | World Regions in Global Context |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG 348 | Latin America |  |
| GEOG 349 | Europe |  |
| GEOG 353 | Russia and the NIS-Topical Analysis |  |
| GEOG 355 | Africa, South of the Sahara |  |
| GEOG 358 | Human Geography of Southeast Asia |  |
| GEOG/ENVIR ST/ HISTORY 469 | The Making of the American Landscape |  |
| GEOG 501 | Space and Place: A Geography of Experience |  |
| GEOG/ <br> URB R PL 503 | Researching the City: Qualitative Strategies |  |
| GEOG/ <br> URB R PL 505 | Urban Spatial Patterns and Theories |  |
| GEOG/ <br> URB R PL 506 | Historical Geography of European Urbanization |  |


| GEOG 508 | Landscape and Settlement in the North American Past |  |
| :---: | :---: | :---: |
| GEOG 510 | Economic Geography |  |
| GEOG 518 | Power, Place, Identity |  |
| GEOG 566 | History of Geographic Thought |  |
| People-Environment | (1 course) | 3 |
| GEOG/ <br> ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography |  |
| GEOG/ENVIR ST/ <br> SOIL SCI 230 | Soil: Ecosystem and Resource |  |
| GEOG/ <br> ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems |  |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { ENVIR ST } 337 \end{aligned}$ | Nature, Power and Society |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { BOTANY } 338 \end{aligned}$ | Environmental Biogeography |  |
| GEOG/ <br> ENVIR ST 339 | Environmental Conservation |  |
| GEOG 340 | World Regions in Global Context |  |
| GEOG 344 | The American West |  |
| GEOG 359 | Australia: Environment and Society |  |
| GEOG/C\&E SOC/ ENVIR ST 434 | People, Wildlife and Landscapes |  |
| GEOG/ <br> ENVIR ST 439 | US Environmental Policy and Regulation |  |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History |  |
| GEOG 508 | Landscape and Settlement in the North American Past |  |
| GEOG/ <br> SOIL SCI 526 | Human Transformations of Earth Surface Processes |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { ENVIR ST } 534 \end{aligned}$ | Environmental Governance: Markets, States and Nature |  |
| GEOG/ <br> ENVIR ST 537 | Culture and Environment |  |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development |  |
| GEOG/ <br> ENVIR ST 557 | Development and Environment in Southeast Asia |  |
| Physical Geography ( | (1 course) | 3 |
| GEOG/ <br> ENVIR ST 120 | Introduction to the Earth System |  |
| GEOG/ <br> ENVIR ST 127 | Physical Systems of the Environment |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 320 \end{aligned}$ | Geomorphology |  |
| GEOG 321 | Climatology |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { ATM OCN } 323 \end{aligned}$ | Science of Climate Change |  |
| GEOG/ <br> ENVIR ST 325 | Analysis of the Physical Environment |  |


| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 326 \end{aligned}$ | Landforms-Topics and Regions |
| :---: | :---: |
| GEOG 329 | Landforms and Landscapes of North America |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts |
| GEOG/ <br> BOTANY 338 | Environmental Biogeography |
| GEOG 342 | Geography of Wisconsin |
| GEOG 344 | The American West |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 420 \end{aligned}$ | Glacial and Pleistocene Geology |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 523 \end{aligned}$ | Quaternary Vegetation Dynamics |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 524 \end{aligned}$ | Advanced Landform Geography |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { SOILSCI } 525 \end{aligned}$ | Soil Geomorphology |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { SOILSCI } 526 \end{aligned}$ | Human Transformations of Earth Surface Processes |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 527 \end{aligned}$ | The Quaternary Period |
| GEOG/ATM OCN/ <br> ENVIR ST 528 | Past Climates and Climatic Change |

$\begin{array}{ll}\text { Total Credits } & 9\end{array}$

## CAPSTONE

| Code | Title | Credits |
| :---: | :---: | :---: |
| Complete one of: |  | 3-6 |
| GEOG 565 | Colloquium for Undergraduate Majors |  |
| GEOG 681 <br> \& GEOG 682 | Senior Honors Thesis and Senior Honors Thesis |  |
| GEOG 691 <br> \& GEOG 692 | Senior Thesis and Senior Thesis |  |
| Total Credits |  | 3-6 |

## NAMED OPTIONS

- Geography: Human Geography (p. 706)
- Geography: People-Environment Geography (p. 707)
- Geography: Physical Geography: Earth Systems and Environmental Processes (p. 708)


## RESIDENCE AND QUALITY OF WORK

2.000 GPA in GEOG and major courses 2.000 GPA on 15 upper-level credits, taken in residence ${ }^{1}$ 15 credits in GEOG, taken on the UW-Madison campus

1 GEOG courses designated Intermediate/Advanced are upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Geography Major in consultation with the Geography undergraduate advisor.



## HONORS IN THE GEOGRAPHY MAJOR REQUIREMENTS

To earn a B.A. or B.S. with Honors in the Major in Geography students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.300 GPA in all GEOG courses and major courses
- At least 1 Advanced level major course or 6 credits in major courses numbered 300 and higher, taken for Honors
- Complete a two-semester Senior Honors Thesis (GEOG 681 and GEOG 682) for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

## LEARNING OUTCOMES

1. A broad spectrum of geographical knowledge and skills, as well as a degree of expertise in a specific sub-field of the discipline (Human, People-Environment, Physical, Cart/GIS).
2. Skills in developing and implementing research plans.
3. Critical reasoning and analytical skills.
4. Communication skills-both written and oral.

## ADVISING AND CAREERS

## ADVISING

Students with questions about the major, courses, and careers are encouraged to contact the geography undergraduate advisor, Joel Gruley, at jgruley@wisc.edu.

## CAREERS

Geography is a remarkably interdisciplinary field that spans the natural sciences, social sciences, and humanities. The types of careers that geography can prepare students for thus reflect this diversity. Geographers work across the public, private, and nonprofit sectors, and typically work in the following fields: environmental policy, conservation,
and management; geospatial analysis; urban and transportation planning; economic and community development; food security; historic preservation; environmental hazards management; demography and health; refugees and immigration; digital cartography; journalism; international conflict resolution; tourism.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Burt, Cadwallader, Cronon, Downey, Kaiser, Knox, Mason, Naughton, Olds, Ostergren, Turner, Williams, Zhu

Associate Professors Alatout, Dennis
Assistant Professors Baird, Gibbs, Marin-Spiotta, Ozdogan, Robertson, Roth, Schneider, Woodward, Young

## GEOGRAPHY: HUMAN GEOGRAPHY

## REQUIREMENTS

## HUMAN GEOGRAPHY OPTION REQUIREMENTS

In addition to completing the requirements for all options, complete these requirements specific to this option

SKILLS, TECHNIQUES \& METHODOLOGY

| Code | Title | Credits |
| :--- | :--- | ---: |
| Quantitative Methodology |  |  |
| GEOG 565 | Colloquium for Undergraduate <br> Majors | 3 |
| Additional Method course | $3-4$ |  |
| GEOG 170 | Our Digital Globe: An Overview of <br> GIScience and its Technology |  |


| GEOG 360 | Quantitative Methods in Geographical Analysis |  |
| :---: | :---: | :---: |
| GEOG 500 | Qualitative Strategies in Geography |  |
| GEOG 560 | Advanced Quantitative Methods |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |
| STAT 324 | Introductory Applied Statistics for Engineers |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| Cartography/GIS (1 course) |  | 3-4 |
| GEOG 170 | Our Digital Globe: An Overview of GIScience and its Technology |  |
| GEOG 370 | Introduction to Cartography |  |
| GEOG/ENVIR ST/ <br> F\&W ECOL/ <br> G L E/GEOSCI/ <br> LAND ARC 371 | Introduction to Environmental Remote Sensing |  |
| GEOG/ENVIR ST/ <br> F\&W ECOL/ <br> G L E/GEOSCI/ <br> LAND ARC 372 | Intermediate Environmental Remote Sensing |  |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems |  |
| GEOG 572 | Graphic Design in Cartography |  |
| GEOG 574 | Geospatial Database Design and Development |  |
| GEOG 575 | Interactive Cartography \& Geovisualization |  |
| GEOG 576 | Geospatial Web and Mobile Programming |  |
| GEOG 578 | GIS Applications |  |
| GEOG 579 | GIS and Spatial Analysis |  |

Total Credits

## DEPTH

| Code | Title | Credits |
| :---: | :---: | :---: |
| 3 courses required |  | 9-12 |
| GEOG 301 | Geography of Social Organization |  |
| GEOG 302 | Economic Geography: Locational Behavior |  |
| GEOG/ <br> URB R PL 305 | Introduction to the City |  |
| GEOG 318 | Introduction to Geopolitics |  |
| GEOG 340 | World Regions in Global Context |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG 348 | Latin America |  |
| GEOG 349 | Europe |  |
| GEOG 353 | Russia and the NIS-Topical Analysis |  |
| GEOG 355 | Africa, South of the Sahara |  |
| GEOG 358 | Human Geography of Southeast Asia |  |
| GEOG 399 | Independent Study (maximum 3 credits may apply) |  |


| GEOG/ENVIR ST/ | The Making of the American |
| :--- | :--- |
| HISTORY 469 | Landscape |
| GEOG/ | Researching the City: Qualitative <br> URB R PL 503 |
| Strategies |  |
| GEOG/ | Urban Spatial Patterns and Theories |
| GEOG/ 505 | Historical Geography of European <br> URB R PL 506 <br> Urbanization |
| GEOG 508 | Landscape and Settlement in the <br> North American Past |
| GEOG 510 | Economic Geography |
| GEOG 518 | Power, Place, Identity |

Total Credits
9-12

## GEOGRAPHY: PEOPLE- <br> ENVIRONMENT GEOGRAPHY

## REQUIREMENTS

## PEOPLE-ENVIRONMENT GEOGRAPHY OPTION REQUIREMENTS

In addition to completing the requirements for all options, complete these requirements specific to this option

## SKILLS, TECHNIQUES \& METHODOLOGY

| Code | Title | Credits |
| :---: | :---: | :---: |
| Quantitative Methodology |  |  |
| GEOG 565 | Colloquium for Undergraduate Majors | 3 |
| Additional Method course |  | 3-4 |
| GEOG 360 | Quantitative Methods in Geographical Analysis |  |
| GEOG 500 | Qualitative Strategies in Geography |  |
| GEOG 560 | Advanced Quantitative Methods |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |
| STAT 324 | Introductory Applied Statistics for Engineers |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| Cartography/GIS (1 course) |  | 3-4 |
| GEOG 370 | Introduction to Cartography |  |
| GEOG/ENVIR ST/ <br> F\&W ECOL/ <br> G L E/GEOSCI/ <br> LAND ARC 371 | Introduction to Environmental Remote Sensing |  |


| GEOG/ENVIR ST/ | Intermediate Environmental Remote |
| :--- | :--- |
| F\&W ECOL/ | Sensing |
| GLE/GEOSCI/ |  |
| LAND ARC 372 |  |
| GEOG/CIV ENGR/ | An Introduction to Geographic |
| ENVIR ST 377 | Information Systems |
| GEOG 572 | Graphic Design in Cartography |
| GEOG 574 | Geospatial Database Design and <br> Development <br>  <br> GEOG 575 |
| GEOG 576 | Geospatial Web and Mobile <br> Programming |
| GEOG 578 | GIS Applications |
| GEOG 579 | GIS and Spatial Analysis |

Total Credits

## DEPTH

Code
3 courses required 9-12

| GEOG/ | People, Land and Food: |
| :--- | :--- |
| ENVIR ST 309 | Comparative Study of Agriculture |
|  | Systems |

GEOG/ATM OCN/ Global Warming: Science and ENVIR ST 332 Impacts
GEOG/ Nature, Power and Society
ENVIR ST 337
GEOG/
Environmental Biogeography
BOTANY 338
GEOG/ Environmental Conservation
ENVIR ST 339
GEOG $340 \quad$ World Regions in Global Contex
GEOG 344 The American West
GEOG 359 Australia: Environment and Society
GEOG 399 Independent Study (maximum 3
credits may apply)
GEOG/C\&E SOC/ People, Wildlife and Landscapes
ENVIR ST 434
GEOG/
US Environmental Policy and
ENVIR ST 439 Regulation
GEOG/ENVIR ST/ American Environmental History
HISTORY 460
GEOG/ENVIR ST/ The Making of the American
HISTORY 469 Landscape
GEOG 508 Landscape and Settlement in the
North American Past
GEOG/
SOIL SCI 526
GEOG/
ENVIR ST 534
GEOG/
ENVIR ST 537
GEOG 538 The Humid Tropics: Ecology,
Subsistence, and Development
GEOG/ Development and Environment in
ENVIR ST 557 Southeast Asia

GEOG 699 Directed Study (maximum 3 credits may apply)

# GEOGRAPHY: PHYSICAL GEOGRAPHY: EARTH SYSTEMS AND ENVIRONMENTAL PROCESSES 

## REQUIREMENTS

## PHYSICAL GEOGRAPHY OPTION REQUIREMENTS

In addition to completing the requirements for all options, complete these requirements specific to this option

DEPTH

## Code

## Title

Credits
3 courses required

| GEOG 301 | Geography of Social Organization |
| :---: | :---: |
| GEOG 302 | Economic Geography: Locational Behavior |
| GEOG/ <br> URB R PL 305 | Introduction to the City |
| GEOG 318 | Introduction to Geopolitics |
| GEOG 340 | World Regions in Global Context |
| GEOG 342 | Geography of Wisconsin |
| GEOG 348 | Latin America |
| GEOG 349 | Europe |
| GEOG 353 | Russia and the NIS-Topical Analysis |
| GEOG 355 | Africa, South of the Sahara |
| GEOG 358 | Human Geography of Southeast Asia |
| GEOG 399 | Independent Study (maximum 3 credits may apply) |
| GEOG/ENVIR ST/ HISTORY 469 | The Making of the American Landscape |
| GEOG/ <br> URB R PL 503 | Researching the City: Qualitative Strategies |
| GEOG/ <br> URB R PL 505 | Urban Spatial Patterns and Theories |
| GEOG/ <br> URB R PL 506 | Historical Geography of European Urbanization |
| GEOG 508 | Landscape and Settlement in the North American Past |
| GEOG 510 | Economic Geography |
| GEOG 518 | Power, Place, Identity |
| GEOG 566 | History of Geographic Thought |
| GEOG 699 | Directed Study (maximum 3 credits may apply) |
| Total Credits |  |

## GEOGRAPHY, B.S.

Geography studies the interaction between people and their environments, including the ways in which people, environments, and their interactions vary from place to place across Earth. Because it is concerned with the character of people and their cultures on the one hand, and with the character of Earth's surface and its resources on the other, it is both a social and a natural science. Being broad and integrative, Geography provides an appropriate foundation for a liberal education. It also provides a base for employment in public or private agencies, both domestic and international, concerned with environmental management, locational analysis, or planning (urban, regional, land use), among other fields.

## HOW TO GET IN

Exploring the field of geography at UW-Madison is easy. Interested students are strongly encouraged to take introductory courses in the field. The Department of Geography offers four intro courses, each of which surveys one of the four major subareas that comprise the discipline: (1) human geography; (2) people-environment geography;
(3) physical geography; (4) and cartography and geographic information science. The four intro classes are:

- GEOG 101 Introduction to Human Geography;
- GEOG/ENVIR ST 120 Introduction to the Earth System;
- GEOG/ENVIR ST 139 Living in the Global Environment: An Introduction to People-Environment Geography; and
- GEOG 170 Our Digital Globe: An Overview of GIScience and its Technology (online).

Students who intend to declare their major in geography must schedule an appointment with the geography undergraduate advisor, Joel Gruley, at jgruley@wisc.edu.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General • Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT

| Foreign | Complete the third unit of a foreign language <br> Language <br> Note: A unit is one year of high school work or one <br> semester/term of college work. |
| :--- | :--- |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in <br> literature |
|  | - Social Sciences, 12 credits |
|  | - Natural Sciences, 12 credits: must include 6 credits |
| in biological science; and must include 6 credits in |  |
| physical science |  |

Liberal Arts 108 credits
and Science
Coursework
Depth of Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

 CORE REQUIREMENTS FOR ALL MAJOR OPTIONS30 credits in courses required by the major. All options must complete these core requirements:

## BREADTH

3 courses, 1 each from these areas:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Human Geography | 1 course) | 3 |
| GEOG 101 | Introduction to Human Geography |  |
| GEOG 104 | Introduction to Human Geography |  |
| GEOG 301 | Geography of Social Organization |  |
| GEOG 302 | Economic Geography: Locational <br> Behavior |  |
| GEOG/ | Introduction to the City |  |
| URB R PL 305 |  |  |


| GEOG 318 | Introduction to Geopolitics |  |
| :---: | :---: | :---: |
| GEOG 340 | World Regions in Global Context |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG 348 | Latin America |  |
| GEOG 349 | Europe |  |
| GEOG 353 | Russia and the NIS-Topical Analysis |  |
| GEOG 355 | Africa, South of the Sahara |  |
| GEOG 358 | Human Geography of Southeast Asia |  |
| GEOG/ENVIR ST/ HISTORY 469 | The Making of the American Landscape |  |
| GEOG 501 | Space and Place: A Geography of Experience |  |
| GEOG/ <br> URB R PL 503 | Researching the City: Qualitative Strategies |  |
| GEOG/ <br> URB R PL 505 | Urban Spatial Patterns and Theories |  |
| GEOG/ <br> URB R PL 506 | Historical Geography of European Urbanization |  |
| GEOG 508 | Landscape and Settlement in the North American Past |  |
| GEOG 510 | Economic Geography |  |
| GEOG 518 | Power, Place, Identity |  |
| GEOG 566 | History of Geographic Thought |  |
| People-Environment | (1 course) | 3 |
| GEOG/ <br> ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography |  |
| GEOG/ENVIR ST/ SOIL SCI 230 | Soil: Ecosystem and Resource |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { ENVIR ST } 309 \end{aligned}$ | People, Land and Food: Comparative Study of Agriculture Systems |  |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts |  |
| GEOG/ <br> ENVIR ST 337 | Nature, Power and Society |  |
| GEOG/ <br> BOTANY 338 | Environmental Biogeography |  |
| GEOG/ <br> ENVIR ST 339 | Environmental Conservation |  |
| GEOG 340 | World Regions in Global Context |  |
| GEOG 344 | The American West |  |
| GEOG 359 | Australia: Environment and Society |  |
| GEOG/C\&E SOC/ ENVIR ST 434 | People, Wildlife and Landscapes |  |
| GEOG/ ENVIR ST 439 | US Environmental Policy and Regulation |  |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History |  |
| GEOG 508 | Landscape and Settlement in the North American Past |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { SOIL SCI } 526 \end{aligned}$ | Human Transformations of Earth Surface Processes |  |
| GEOG/ <br> ENVIR ST 534 | Environmental Governance: Markets, States and Nature |  |


| GEOG/ <br> ENVIR ST 537 | Culture and Environment |  |
| :---: | :---: | :---: |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development |  |
| GEOG/ <br> ENVIR ST 557 | Development and Environment in Southeast Asia |  |
| Physical Geography (1 course) |  | 3 |
| GEOG/ <br> ENVIR ST 120 | Introduction to the Earth System |  |
| GEOG/ <br> ENVIR ST 127 | Physical Systems of the Environment |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 320 \end{aligned}$ | Geomorphology |  |
| GEOG 321 | Climatology |  |
| GEOG/ <br> ATM OCN 323 | Science of Climate Change |  |
| GEOG/ ENVIR ST 325 | Analysis of the Physical Environment |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 326 \end{aligned}$ | Landforms-Topics and Regions |  |
| GEOG 329 | Landforms and Landscapes of North America |  |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts |  |
| GEOG/ <br> BOTANY 338 | Environmental Biogeography |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG 344 | The American West |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 420 \end{aligned}$ | Glacial and Pleistocene Geology |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 523 \end{aligned}$ | Quaternary Vegetation Dynamics |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 524 \end{aligned}$ | Advanced Landform Geography |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { SOIL SCI } 525 \end{aligned}$ | Soil Geomorphology |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { SOIL SCI } 526 \end{aligned}$ | Human Transformations of Earth Surface Processes |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { GEOSCI } 527 \end{aligned}$ | The Quaternary Period |  |
| GEOG/ATM OCN/ ENVIR ST 528 | Past Climates and Climatic Change |  |

Total Credits

## CAPSTONE

| Code | Title | Credits <br> Complete one of: |
| :--- | :--- | ---: |
| GEOG 565 | Colloquium for Undergraduate <br> Majors |  |
| GEOG 681 | Senior Honors Thesis <br> and Senior Honors Thesis |  |
| \& GEOG 682 | Senior Thesis <br> and Senior Thesis |  |
| GEOG 691 |  | $3-6$ |
| Total Credits |  |  |

## NAMED OPTIONS

- Geography: Human Geography (p. 706)
- Geography: People-Environment Geography (p. 707)
- Geography: Physical Geography: Earth Systems and Environmental Processes (p. 708)


## RESIDENCE AND QUALITY OF WORK

2.000 GPA in GEOG and major courses
2.000 GPA on 15 upper-level credits, taken in residence ${ }^{1}$

15 credits in GEOG, taken on the UW-Madison campus
1 GEOG courses designated Intermediate/Advanced are upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Geography Major in consultation with the Geography undergraduate advisor.

## HONORS IN THE GEOGRAPHY MAJOR REQUIREMENTS

To earn a B.A. or B.S. with Honors in the Major in Geography students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.300 GPA in all GEOG courses and major courses
- At least 1 Advanced level major course or 6 credits in major courses numbered 300 and higher, taken for Honors
- Complete a two-semester Senior Honors Thesis
(GEOG 681 and GEOG 682) for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. A broad spectrum of geographical knowledge and skills, as well as a degree of expertise in a specific sub-field of the discipline (Human, People-Environment, Physical, Cart/GIS).
2. Skills in developing and implementing research plans.
3. Critical reasoning and analytical skills.
4. Communication skills-both written and oral.

## ADVISING AND CAREERS

## ADVISING

Students with questions about the major, courses, and careers are encouraged to contact the geography undergraduate advisor, Joel Gruley, at jgruley@wisc.edu.

## CAREERS

Geography is a remarkably interdisciplinary field that spans the natural sciences, social sciences, and humanities. The types of careers that geography can prepare students for thus reflect this diversity. Geographers work across the public, private, and nonprofit sectors, and typically work in the following fields: environmental policy, conservation, and management; geospatial analysis; urban and transportation planning; economic and community development; food security; historic preservation; environmental hazards management; demography and health; refugees and immigration; digital cartography; journalism; international conflict resolution; tourism.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Professors Burt, Cadwallader, Cronon, Downey, Kaiser, Knox, Mason, Naughton, Olds, Ostergren, Turner, Williams, Zhu

## Associate Professors Alatout, Dennis

Assistant Professors Baird, Gibbs, Marin-Spiotta, Ozdogan, Robertson, Roth, Schneider, Woodward, Young

## GEOGRAPHY: HUMAN GEOGRAPHY

## REQUIREMENTS

HUMAN GEOGRAPHY OPTION REQUIREMENTS

In addition to completing the requirements for all options, complete these requirements specific to this option

| SKILLS, TECHNIQUES \& METHODOLOGY |  |  |
| :---: | :---: | :---: |
| Code |  | Credits |
| Quantitative Methodology |  |  |
| GEOG 565 | Colloquium for Undergraduate Majors | 3 |
| Additional Method course |  | 3-4 |
| GEOG 170 | Our Digital Globe: An Overview of GIScience and its Technology |  |
| GEOG 360 | Quantitative Methods in Geographical Analysis |  |
| GEOG 500 | Qualitative Strategies in Geography |  |
| GEOG 560 | Advanced Quantitative Methods |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |
| STAT 324 | Introductory Applied Statistics for Engineers |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| Cartography/GIS (1 course) |  | 3-4 |
| GEOG 170 | Our Digital Globe: An Overview of GIScience and its Technology |  |
| GEOG 370 | Introduction to Cartography |  |
| GEOG/ENVIR ST/ <br> F\&W ECOL/ <br> G L E/GEOSCI/ <br> LAND ARC 371 | Introduction to Environmental Remote Sensing |  |
| GEOG/ENVIR ST/ F\&W ECOL/ G L E/GEOSCI/ LAND ARC 372 | Intermediate Environmental Remote Sensing |  |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems |  |
| GEOG 572 | Graphic Design in Cartography |  |
| GEOG 574 | Geospatial Database Design and Development |  |
| GEOG 575 | Interactive Cartography \& Geovisualization |  |
| GEOG 576 | Geospatial Web and Mobile Programming |  |
| GEOG 578 | GIS Applications |  |
| GEOG 579 | GIS and Spatial Analysis |  |

Total Credits

## DEPTH

| Code | Title |  |
| :---: | :---: | :---: |
| 3 courses required |  | 9-12 |
| GEOG 301 | Geography of Social Organization |  |
| GEOG 302 | Economic Geography: Locational Behavior |  |
| GEOG/ <br> URB R PL 305 | Introduction to the City |  |
| GEOG 318 | Introduction to Geopolitics |  |
| GEOG 340 | World Regions in Global Context |  |
| GEOG 342 | Geography of Wisconsin |  |
| GEOG 348 | Latin America |  |
| GEOG 349 | Europe |  |
| GEOG 353 | Russia and the NIS-Topical Analysis |  |
| GEOG 355 | Africa, South of the Sahara |  |
| GEOG 358 | Human Geography of Southeast Asia |  |
| GEOG 399 | Independent Study (maximum 3 credits may apply) |  |
| GEOG/ENVIR ST/ HISTORY 469 | The Making of the American Landscape |  |
| GEOG/ <br> URB R PL 503 | Researching the City: Qualitative Strategies |  |
| GEOG/ <br> URB R PL 505 | Urban Spatial Patterns and Theories |  |
| $\begin{aligned} & \text { GEOG/ } \\ & \text { URB R PL } 506 \end{aligned}$ | Historical Geography of European Urbanization |  |
| GEOG 508 | Landscape and Settlement in the North American Past |  |
| GEOG 510 | Economic Geography |  |
| GEOG 518 | Power, Place, Identity |  |
| GEOG 566 | History of Geographic Thought |  |
| GEOG 699 | Directed Study (maximum 3 credits may apply) |  |

## GEOGRAPHY: PEOPLEENVIRONMENT GEOGRAPHY

## REQUIREMENTS

## PEOPLE-ENVIRONMENT GEOGRAPHY OPTION REQUIREMENTS

In addition to completing the requirements for all options, complete these requirements specific to this option

## SKILLS, TECHNIQUES \& METHODOLOGY

| Code | Title | Credits |
| :--- | :--- | ---: |
| Quantitative Methodology |  |  |
| GEOG 565 | Colloquium for Undergraduate <br> Majors | 3 |


| GEOG 360 | Quantitative Methods in Geographical Analysis |  |
| :---: | :---: | :---: |
| GEOG 500 | Qualitative Strategies in Geography |  |
| GEOG 560 | Advanced Quantitative Methods |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 302 | Accelerated Introduction to Statistical Methods |  |
| STAT 324 | Introductory Applied Statistics for Engineers |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| Cartography/GIS (1 c | ourse) | 3-4 |
| GEOG 370 | Introduction to Cartography |  |
| GEOG/ENVIR ST/ <br> F\&W ECOL/ <br> G L E/GEOSCI/ <br> LAND ARC 371 | Introduction to Environmental Remote Sensing |  |
| GEOG/ENVIR ST/ <br> F\&W ECOL/ <br> G L E/GEOSCI/ <br> LAND ARC 372 | Intermediate Environmental Remote Sensing |  |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems |  |
| GEOG 572 | Graphic Design in Cartography |  |
| GEOG 574 | Geospatial Database Design and Development |  |
| GEOG 575 | Interactive Cartography \& Geovisualization |  |
| GEOG 576 | Geospatial Web and Mobile Programming |  |
| GEOG 578 | GIS Applications |  |
| GEOG 579 | GIS and Spatial Analysis |  |
| Total Credits |  | 9-11 |

## DEPTH

Code Title Credits

3 courses required

| GEOG/ <br> ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems |
| :---: | :---: |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts |
| GEOG/ <br> ENVIR ST 337 | Nature, Power and Society |
| GEOG/ <br> BOTANY 338 | Environmental Biogeography |
| GEOG/ ENVIR ST 339 | Environmental Conservation |
| GEOG 340 | World Regions in Global Context |
| GEOG 344 | The American West |
| GEOG 359 | Australia: Environment and Society |
| GEOG 399 | Independent Study (maximum 3 credits may apply) |
| GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes |


| GEOG/ <br> ENVIR ST 439 | US Environmental Policy and Regulation |
| :---: | :---: |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History |
| GEOG/ENVIR ST/ HISTORY 469 | The Making of the American Landscape |
| GEOG 508 | Landscape and Settlement in the North American Past |
| GEOG/ <br> SOIL SCI 526 | Human Transformations of Earth Surface Processes |
| GEOG/ <br> ENVIR ST 534 | Environmental Governance: Markets, States and Nature |
| GEOG/ <br> ENVIR ST 537 | Culture and Environment |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development |
| GEOG/ <br> ENVIR ST 557 | Development and Environment in Southeast Asia |
| GEOG 699 | Directed Study (maximum 3 credits may apply) |

Total Credits
9-12

## GEOGRAPHY: PHYSICAL GEOGRAPHY: EARTH SYSTEMS AND ENVIRONMENTAL PROCESSES

## REQUIREMENTS

## PHYSICAL GEOGRAPHY OPTION REQUIREMENTS

In addition to completing the requirements for all options, complete these requirements specific to this option

## SKILLS, TECHNIQUES \& METHODOLOGY

| Code | Title | Credits |
| :---: | :---: | :---: |
| Quantiatitive Methodology (1 course) |  | 3 |
| GEOG 360 | Quantitative Methods in Geographical Analysis |  |
| GEOG 560 | Advanced Quantitative Methods |  |
| STAT 324 | Introductory Applied Statistics for Engineers |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| Core Cartography/GIS |  |  |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| Second Cart/GIS or Field Methods (1 course) |  | 3 |
| GEOG/ ENVIR ST 325 | Analysis of the Physical Environment |  |
| GEOG 370 | Introduction to Cartography |  |


| GEOG/ENVIR ST/ | Introduction to Environmental |
| :--- | :--- |
| F\&W ECOL/ | Remote Sensing |
| GLE/GEOSCI/ |  |
| LAND ARC 371 |  |
| GEOG/ENVIR ST// Intermediate Environmental Remote |  |
| F\&W ECOL/ | Sensing |
| GL E/GEOSCI/ |  |
| LAND ARC 372 | Introduction to Geocomputing |
| GEOG 378 | Colloquium for Undergraduate <br> GEOG 565 |
| Majors |  |

Total Credits

## DEPTH

\(\left.$$
\begin{array}{llr}\hline \begin{array}{l}\text { Code } \\
3 \text { courses required } \\
\text { GEOG } 301\end{array}
$$ \& Title \& Credits <br>

Geography of Social Organization\end{array}\right]\)| Economic Geography: Locational |
| :--- |
| Behavior |

[^29]
## GEOSCIENCE

The complementary fields of geology and geophysics are combined in one interdisciplinary department, with graduate degrees offered in both disciplines. The undergraduate degree is in geology and geophysics.

Geology offers unusual opportunities to interweave knowledge from many disciplines in the study of natural Earth phenomena. Those who enjoy the challenge of integrating different kinds of information into a unified interpretation will find geology particularly satisfying. Most geology students enjoy travel and have a strong interest in the natural environment as it is today and as it has developed through the past 4.5 billion years. A natural capacity for historical and sequential thought, inductive reasoning, and three-dimensional perception is helpful, and these skills will be developed. Geological investigations are becoming increasingly quantitative and experimental, and thus require some computer experience and a strong foundation in chemistry, physics, and mathematics.

The student of geophysics is interested in developing a quantitative understanding of the structure and dynamics of the Earth's interior from the shallow crust to deep core. Courses in geophysics apply basic physical laws and processes, such as those governing gravity, magnetism, heat flow, and seismic wave propagation, to the study of the Earth. An undergraduate may choose to concentrate in geophysics, but professional employment in the field often requires an advanced degree. Most students who pursue advanced study and careers in geophysics major in geology, physics, mathematics, or engineering as undergraduates.

## CAREERS

More than half of all professional geologists and geophysicists work in hydrogeology or the petroleum and mining industries. Such jobs involve an unusual breadth of training and personal adaptability, and the M.S. degree is generally required. About one fifth of all geoscientists work in state and federal geological surveys, and in government research activities such as oceanographic programs. These positions largely involve problems in geologic mapping, mineral resources, groundwater, and engineering. Geophysics offers opportunities in earthquake studies, seismic verification of nuclear test bans, and crustal rock characterization techniques for waste disposal and groundwater modeling. Many geology students continue on to obtain a Ph.D. degree and become faculty members at a college or university. A geology and geophysics major is also appropriate for those interested in careers in elementary or secondary education, environmental policy, or environmental law. Faculty advisors can provide additional information on career opportunities.

## PREPARATION FOR GRADUATE STUDY

An advanced degree is normally required for professional activity in geological and geophysical sciences; the student who contemplates such a degree should satisfy both department and graduate school requirements for admission to graduate study.

Minimum requirements for admission to graduate work in geology or geophysics at most universities in the United States, including the University of Wisconsin-Madison, are:

1. A bachelor's degree in geology/geophysics or a related science
2. One year of college chemistry (one year high school plus CHEM 109 Advanced General Chemistry recommended)
3. One year of college physics (PHYSICS 207 General Physics-PHYSICS 208 General Physics recommended)
4. One year of calculus (MATH 221 Calculus and Analytic Geometry 1-MATH 222 Calculus and Analytic Geometry 2 recommended)
5. A summer field-mapping course equivalent to GEOSCI 459 Field Geology (Park City, Utah)

## DEGREES/MAJORS/CERTIFICATES

- Geology and Geophysics, B.A. (p. 715)
- Geology and Geophysics, B.S. (p. 719)


## PEOPLE

Professors Bahr, Brown, Carroll, DeMets, Feigl, Goodwin, Johnson, Kelly, Peters, Roden, Singer, Thurber, Tikoff, Tobin, Valley, Wang, Xu

Associate Professor Meyers
Assistant Professors Cardiff, Marcott, Zoet

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## HOW TO GET IN

## BACKGROUND REQUIREMENTS

(Exceptions for Geophysics and Engineering Geology Track noted below)
a. A one-year course sequence in calculus: MATH 221 Calculus and Analytic Geometry 1-MATH 222 Calculus and Analytic Geometry 2 recommended; MATH 211 Calculus-MATH 213 Calculus and Introduction to Differential Equations, or any combination of calculus courses, including transfer credits, that totals at least 8 credits at the intermediate level, is acceptable.
b. The equivalent of a one-year course sequence in general chemistry: CHEM 109 Advanced General Chemistry recommended; CHEM 103 General Chemistry I-CHEM 104 General Chemistry II, or any combination of general chemistry courses, including transfer credits, that totals at least 8 credits, is acceptable.
c. An equivalent of a one-year course sequence in general physics that totals at least 8 credits: PHYSICS 207 General Physics-PHYSICS 208 General Physics recommended; PHYSICS 103 General Physics-PHYSICS 104 General Physics, PHYSICS 201 General Physics-PHYSICS 202 General Physics, PHYSICS 247 A Modern Introduction to Physics-PHYSICS 248 A Modern Introduction to Physics, or any combination of general physics courses, including transfer credits, that totals at least 8 credits, is acceptable. Students preparing to specialize in paleontology may, with approval of the Undergraduate Studies Committee, substitute ZOOLOGY/ BIOLOGY/BOTANY 151 Introductory Biology-ZOOLOGY/BIOLOGY/ BOTANY 152 Introductory Biology or other appropriate courses in biological sciences for the physics requirement.

## DECLARING A MAJOR

To declare a major in geology and geophysics, students must have taken one of the following geoscience courses: GEOSCI 202 Introduction to Geologic Structures, GEOSCI 204 Geologic Evolution of the Earth, or GEOSCI/G LE 360 Principles of Mineralogy. Students must meet with an undergraduate advisor and complete a Major Declaration Form.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |

Minimum
GPAs
2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Prospective majors are strongly encouraged to seek assistance from a faculty advisor in order to choose courses appropriate to their interests and career plans. Advisors can also assist students in choosing a track that is appropriate for their interests and career goals.

## Background Requirements

1. The equivalent of a one-year course sequence in calculus that totals at least 8 credits:

> MATH 221 Calculus and Analytic Geometry 1-MATH 222 Calculus and Analytic Geometry 2 recommended; MATH 211 Calculus-MATH 213 Calculus and Introduction to Differential Equations, or a combination of calculus courses, including transfer credits, that totals at least 8 credits at the intermediate level, is acceptable. MATH 171 Calculus with Algebra and Trigonometry I and MATH 217 Calculus with Algebra and Trigonometry II count as a first semester course in a one-year course sequence.
2. The equivalent of a one-year course sequence in general chemistry that totals at least 8 credits:

CHEM 109 Advanced General Chemistry recommended; CHEM 103 General Chemistry I-CHEM 104 General Chemistry II, CHEM 115 Chemical Principles I-CHEM 116 Chemical Principles II, or a combination of general chemistry courses, including transfer credits, that totals at least 8 credits, is acceptable.
3. The equivalent of a one-year course sequence in general physics that totals at least 8 credits:

PHYSICS 207 General Physics-PHYSICS 208 General Physics recommended; PHYSICS 103 General Physics-PHYSICS 104 General Physics, PHYSICS 201 General Physics-PHYSICS 202 General Physics, PHYSICS 247 A Modern Introduction to Physics-PHYSICS 248 A Modern Introduction to Physics, or a combination of general physics courses, including transfer credits, that totals at least 8 credits, is acceptable. Students preparing to specialize in paleontology may, with approval of the Undergraduate Studies Committee, substitute ZOOLOGY/ BIOLOGY/BOTANY 151 Introductory Biology-ZOOLOGY/BIOLOGY/

BOTANY 152 Introductory Biology or other appropriate courses in biological sciences for the physics requirement.
(Exceptions to Background Requirements for the Geophysics and Engineering Geology Track are noted below)

| Code | Title | Credits |
| :---: | :---: | :---: |
| Core Courses (required for all tracks): |  |  |
| GEOSCI 100 | Introductory Geology: How the Earth Works | 3 |
| or GEOSCI/ ENVIR ST 106 | Environmental Geology |  |
| GEOSCI 202 | Introduction to Geologic Structures | 4 |
| GEOSCI 204 | Geologic Evolution of the Earth | 4 |
| GEOSCI/G L E 360 | Principles of Mineralogy | 3 |
| GEOSCI/G L E 370 | Elementary Petrology | 3 |
| Tracks |  |  |
| Select one of the fo | wing tracks: | 17-23 |
| Geology Track |  |  |


| Geophysics and Engineering Geology Track |
| :--- |
| Environmental Geoscience Track |
| General Geology Track |

## Total Credits

$34-40$

## TRACKS

| Geology Track |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 3 |
| GEOSCI/G L E 350 | Introduction to Geophysics: The <br> Dynamic Earth | 3 |
| GEOSCI 375 | Principles of Geochemistry | 3 |
| GEOSCI 430 | Sedimentology and Stratigraphy | 4 |
| GEOSCI/G LE 455 | Structural Geology | 4 |
| Select 4 credits of GEOSCI electives numbered 300 and <br> above | and |  |
| Total Credits | 17 |  |

1 Except GEOSCI 331 Gems: The Science Behind the Sparkle.

| Geophysics and Engineering Geology Track |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| GEOSCI/G L E 431 | Sedimentary \& Stratigraphy Lab | 1 |
| GEOSCI/G L E 455 | Structural Geology | 4 |
| GEOSCI/G L E 474 | Rock Mechanics | 3 |
| GEOSCI/G L E 594 | Introduction to Applied Geophysics | 3 |
| GEOSCI/G L E 595 | Field Methods in Applied and | 1 |
|  | Engineering Geophysics | $3-4$ |
| GEOSCI/G L E 627 | Hydrogeology | 3 |


| E M A 303 | Mechanics of Materials |
| :--- | :--- |
| M E 306 | Mechanics of Materials |
| PHYSICS 311 | Mechanics |
| PHYSICS 322 | Electromagnetic Fields |

## Select one of the following:

3-4| MATH 319 | Techniques in Ordinary Differential <br> Equations |
| :---: | :--- |
| MATH 320 | Linear Algebra and Differential <br> MATH 340 |
| Equations |  |$\quad$| Elementary Matrix and Linear |
| :--- |
| Algebra |$\quad 2$| 21-23 |
| :--- | :--- |

Students choosing this track may not take PHYSICS 103 General Physics \& PHYSICS 104 General Physics. A student may substitute E M A 201 Statics \& E M A 202 Dynamics for PHYSICS 201 General Physics, PHYSICS 207 General Physics or PHYSICS 247 A Modern Introduction to Physics, and complete the major Physics requirement with PHYSICS 202 General Physics, PHYSICS 208 General Physics or PHYSICS 248 A Modern Introduction to Physics.

Students who are not geological engineering (GLE) majors may substitute GEOSCI/G LE 350/G L E/GEOSCI 350 Introduction to Geophysics: The Dynamic Earth for either GEOSCI/G L E/M S \& E 474 Rock Mechanics or GEOSCI/G LE 627 Hydrogeology.

| Environmental Geoscience Track |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Directed Electives |  |  |
| Select one course from each of the following four categories: |  |  |
| Surface Environments: |  | 3-4 |
| $\begin{aligned} & \text { GEOSCI/GEOG } \\ & 320 \end{aligned}$ | Geomorphology |  |
| $\begin{aligned} & \text { GEOSCI/GEOG } \\ & 420 \end{aligned}$ | Glacial and Pleistocene Geology |  |
| GEOSCI 430 | Sedimentology and Stratigraphy |  |
| GEOSCI/G L E 627 | Hydrogeology |  |
| Geochemistry: |  | 3 |
| GEOSCI 375 | Principles of Geochemistry |  |
| GEOSCI 610 | Geochronology, Timescales, and Rates of Geologic Processes |  |
| GEOSCI/G LE 629 | Contaminant Hydrogeology |  |
| Geobiology: |  | 3 |
| GEOSCI 304 | Geobiology |  |
| GEOSCI/ZOOLOGY Paleobiology 541 |  |  |
| GEOSCI/ZOOLOGY 542 |  |  |
| Earth Resources: |  | 3-4 |
| GEOSCI/ENVIR ST Minerals as a Public Problem 410 |  |  |
| GEOSCI/ENVIR ST Energy Resources 411 |  |  |
| GEOSCI/G LE 455 Structural Geology |  |  |
| GEOSCI 515 P | Principles of Economic Geology |  |
| GEOSCI/G LE 594 Introduction to Applied Geophysics |  |  |
| Geoscience Electives |  |  |

MATH $234 \quad$ Calculus--Functions of Several Variables

Select 3 to 5 credits of GEOSCI electives numbered 300level and higher to reach minimum of 17 credits for the track ${ }^{1}$

## Total Credits

1 Except GEOSCI 331 Gems: The Science Behind the Sparkle.
$\quad$ General Geology Track
Code

Select 17 credits of GEOSCI electives numbered 300-level
Credits
and higher ${ }^{1}$
Total Credits
1 Except GEOSCI 331 Gems: The Science Behind the Sparkle.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all GEOSCI and major courses
2.000 on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in GEOSCI, taken on campus
${ }^{1}$ GEOSCI 300 through GEOSCI 699 count as upper level in the major, excluding GEOSCI 331

## HONORS IN THE MAJOR

Students may declare Honors in the Geology and Geophysics Major in consultation with the departmental undergraduate advisor.

## HONORS IN THE MAJOR IN GEOLOGY AND GEOPHYSICS: REQUIREMENTS

To earn Honors in the Geology and Geophysics Major, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA in all GEOSCI courses
- Complete a two-semester Senior Honors Thesis in GEOSCI 681 Senior Honors Thesis and GEOSCI 682 Senior Honors Thesis, for a total of 6 credits, with a grade of $B$ or better.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

5 Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Acquire quantitative and spatial reasoning skills and the ability to apply those skills to problems in geoscience.
2. Be able to explicate key biological, chemical and physical Earth structures, processes, the interactions between them, and the roles that they play in determining the state of the Earth system.
3. Utilize geological observations and measurements to solve problems involving the timing of geological events in Earth history.
4. Combine data and lab/field-based observations into a novel synthesis and/or description/model of how Earth systems operate.
5. Be able to critique published scientific data, results, and interpretations thereof, as well as identify and assess related work in the scientific literature.
6. Be able to effectively communicate scientific concepts, methods, and results.

## ADVISING AND CAREERS

## ADVISING

Contact the Department of Geoscience for general information about advising.

Philip Brown, undergraduate advisor in the major. economic geology, mineralogy, geochemistry
pbrown@geology.wisc.edu
608-262-5954
365 Weeks Hall
Kurt Feigl, undergraduate advisor in the major. tectonic applications of geodesy
feigl@geology.wisc.edu
608-262-0176
A248 Weeks Hall
Clay Kelly, undergraduate advisor in the major. micropaleontology and paleoceanography
ckelly@geology.wisc.edu
608-262-1698
463 Weeks Hall
Basil Tikoff, Undergraduate advisor in the major. structural geology basil@geology.wisc.edu
608-262-4678
176 Weeks Hall

Huifang Xu, Undergraduate advisor in the major. mineral science,
nanogeoscience, and electron microscopy
hfxu@geology.wisc.edu
608-265-5887

## A352 Weeks Hall

Lucas Zoet, Undergraduate advisor in the major. glaciology and glacial geomorphology
Izoet@wisc.edu
608-262-1921
256B Weeks Hall
Eric Schueffner, Undergraduate advisor
elschueffner@wisc.edu
608-890-3231
230 Weeks Hall

## CAREERS

More than half of all professional geologists and geophysicists work in hydrogeology or the petroleum and mining industries. Such jobs involve an unusual breadth of training and personal adaptability, and the M.S. degree is generally required. About one fifth of all geoscientists work in state and federal geological surveys, and in government research activities such as oceanographic programs. These positions largely involve problems in geologic mapping, mineral resources, groundwater, and engineering. Geophysics offers opportunities in earthquake studies, seismic verification of nuclear test bans, and crustal rock characterization techniques for waste disposal and groundwater modeling. Many geology students continue on to obtain a Ph.D. degree and become faculty members at a college or university. A geology and geophysics major is also appropriate for those interested in careers in elementary or secondary education, environmental policy, or environmental law. Faculty advisors can provide additional information on career opportunities.

The College of Letters \& Science encourages majors to begin working on their career exploration and preparation soon after arriving on campus. Our department partners with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important that students are career ready at the time of graduation, and we are committed to their success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Bahr, Brown, Carroll, DeMets, Feigl, Goodwin, Johnson, Kelly, Peters, Roden, Singer, Thurber, Tikoff, Tobin, Valley, Wang, Xu

Associate Professor Meyers
Assistant Professors Cardiff, Marcott, Zoet

## GEOLOGY AND GEOPHYSICS, B.S.

The complementary fields of geology and geophysics are combined in one interdisciplinary department, with graduate degrees offered in both disciplines. The undergraduate degree is in geology and geophysics.

Geology offers unusual opportunities to interweave knowledge from many disciplines in the study of natural Earth phenomena. Those who enjoy the challenge of integrating different kinds of information into a unified interpretation will find geology particularly satisfying. Most geology students enjoy travel and have a strong interest in the natural environment as it is today and as it has developed through the past 4.5 billion years. A natural capacity for historical and sequential thought, inductive reasoning, and three-dimensional perception is helpful, and these skills will be developed. Geological investigations are becoming increasingly quantitative and experimental, and thus require some computer experience and a strong foundation in chemistry, physics, and mathematics.

The student of geophysics is interested in developing a quantitative understanding of the structure and dynamics of the Earth's interior from the shallow crust to deep core. Courses in geophysics apply basic physical laws and processes, such as those governing gravity, magnetism, heat flow, and seismic wave propagation, to the study of the Earth. An undergraduate may choose to concentrate in geophysics, but professional employment in the field often requires an advanced degree. Most students who pursue advanced study and careers in geophysics major in geology, physics, mathematics, or engineering as undergraduates.

## HOW TO GET IN

## BACKGROUND REQUIREMENTS

(Exceptions for Geophysics and Engineering Geology Track noted below)
a. A one-year course sequence in calculus: MATH 221 Calculus and Analytic Geometry 1-MATH 222 Calculus and Analytic Geometry 2 recommended; MATH 211 Calculus-MATH 213 Calculus and Introduction to Differential Equations, or any combination of calculus courses, including transfer credits, that totals at least 8 credits at the intermediate level, is acceptable.
b. The equivalent of a one-year course sequence in general chemistry: CHEM 109 Advanced General Chemistry recommended; CHEM 103 General Chemistry I-CHEM 104 General Chemistry II, or any combination of general chemistry courses, including transfer credits, that totals at least 8 credits, is acceptable.
c. An equivalent of a one-year course sequence in general physics that totals at least 8 credits: PHYSICS 207 General Physics-PHYSICS 208 General Physics recommended; PHYSICS 103 General Physics-PHYSICS 104 General Physics, PHYSICS 201

General Physics-PHYSICS 202 General Physics, PHYSICS 247 A
Modern Introduction to Physics-PHYSICS 248 A Modern Introduction to Physics, or any combination of general physics courses, including transfer credits, that totals at least 8 credits, is acceptable. Students preparing to specialize in paleontology may, with approval of the Undergraduate Studies Committee, substitute ZOOLOGY/ BIOLOGY/BOTANY 151 Introductory Biology-ZOOLOGY/BIOLOGY/ BOTANY 152 Introductory Biology or other appropriate courses in biological sciences for the physics requirement.

## DECLARING A MAJOR

To declare a major in geology and geophysics, students must have taken one of the following geoscience courses: GEOSCI 202 Introduction to Geologic Structures, GEOSCI 204 Geologic Evolution of the Earth, or GEOSCI/G LE 360 Principles of Mineralogy. Students must meet with an undergraduate advisor and complete a Major Declaration Form.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General • Breadth-Humanities/Literature/Arts: 6 credits

## Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Prospective majors are strongly encouraged to seek assistance from a faculty advisor in order to choose courses appropriate to their interests and career plans. Advisors can also assist students in choosing a track that is appropriate for their interests and career goals.

## Background Requirements

1. The equivalent of a one-year course sequence in calculus that totals at least 8 credits:

MATH 221 Calculus and Analytic Geometry 1-MATH 222
Calculus and Analytic Geometry 2 recommended; MATH 211
Calculus-MATH 213 Calculus and Introduction to Differential
Equations, or a combination of calculus courses, including transfer
credits, that totals at least 8 credits at the intermediate level, is acceptable. MATH 171 Calculus with Algebra and Trigonometry I and MATH 217 Calculus with Algebra and Trigonometry II count as a first semester course in a one-year course sequence.
2. The equivalent of a one-year course sequence in general chemistry that totals at least 8 credits:

CHEM 109 Advanced General Chemistry recommended; CHEM 103 General Chemistry I-CHEM 104 General Chemistry II, CHEM 115 Chemical Principles I-CHEM 116 Chemical Principles II, or a combination of general chemistry courses, including transfer credits, that totals at least 8 credits, is acceptable.
3. The equivalent of a one-year course sequence in general physics that totals at least 8 credits:

PHYSICS 207 General Physics-PHYSICS 208 General Physics recommended; PHYSICS 103 General Physics-PHYSICS 104
General Physics, PHYSICS 201 General Physics-PHYSICS 202
General Physics, PHYSICS 247 A Modern Introduction to Physics-PHYSICS 248 A Modern Introduction to Physics, or a combination of general physics courses, including transfer credits, that totals at least 8 credits, is acceptable. Students preparing to specialize in paleontology may, with approval of the Undergraduate Studies Committee, substitute ZOOLOGY/ BIOLOGY/BOTANY 151 Introductory Biology-ZOOLOGY/BIOLOGY/ BOTANY 152 Introductory Biology or other appropriate courses in biological sciences for the physics requirement.
(Exceptions to Background Requirements for the Geophysics and Engineering Geology Track are noted below)

| Code | Title | Credits |
| :---: | :---: | :---: |
| Core Courses (required for all tracks): |  |  |
| GEOSCI 100 | Introductory Geology: How the Earth Works | 3 |
| or GEOSCI/ ENVIR ST 106 | Environmental Geology |  |
| GEOSCI 202 | Introduction to Geologic Structures | 4 |
| GEOSCI 204 | Geologic Evolution of the Earth | 4 |
| GEOSCI/G L E 360 | Principles of Mineralogy | 3 |
| GEOSCI/G L E 370 | Elementary Petrology | 3 |
| Tracks |  |  |
| Select one of the fo | wing tracks: | 17-23 |
| Geology Track |  |  |
| Geophysics and Engineering Geology Track |  |  |
| Environmental Geoscience Track |  |  |
| General Geology Track |  |  |
| Total Credits |  | 34-40 |

## TRACKS

| Geology Track |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 3 |
| GEOSCI/G L E 350 | Introduction to Geophysics: The <br> Dynamic Earth |  |
| GEOSCI 375 | Principles of Geochemistry | 3 |
| GEOSCI 430 | Sedimentology and Stratigraphy | 3 |
| GEOSCI/G L E 455 | Structural Geology | 4 |

Select 4 credits of GEOSCI electives numbered 300 and 4 above ${ }^{1}$
Total Credits
${ }^{1}$ Except GEOSCI 331 Gems: The Science Behind the Sparkle.

## Geophysics and Engineering Geology Track

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEOSCI/G L E 431 | Sedimentary \& Stratigraphy Lab | 1 |
| GEOSCI/G L E 455 | Structural Geology | 4 |
| GEOSCI/G L E 474 | Rock Mechanics | 3 |
| GEOSCI/G L E 594 | Introduction to Applied Geophysics | 3 |
| GEOSCI/G L E 595 | Field Methods in Applied and | 1 |
|  | Engineering Geophysics | $3-4$ |
| GEOSCI/G L E 627 | Hydrogeology | 3 |


| E M A 303 | Mechanics of Materials |  |
| :--- | :--- | :--- |
| M E 306 | Mechanics of Materials |  |
| PHYSICS 311 | Mechanics | $3-4$ |
| PHYSICS 322 | Electromagnetic Fields |  |
| Select one of the following: | Calculus--Functions of Several |  |
| MATH 234 | Variables |  |
| MATH 319 | Techniques in Ordinary Differential <br> Equations |  |
| MATH 320 | Linear Algebra and Differential <br> Equations <br> MATH 340 | Elementary Matrix and Linear <br> Algebra |
| Total Credits |  | $21-23$ |

Students choosing this track may not take PHYSICS 103 General Physics \& PHYSICS 104 General Physics. A student may substitute E M A 201 Statics \& E M A 202 Dynamics for PHYSICS 201 General Physics, PHYSICS 207 General Physics or PHYSICS 247 A Modern Introduction to Physics, and complete the major Physics requirement with PHYSICS 202 General Physics, PHYSICS 208 General Physics or PHYSICS 248 A Modern Introduction to Physics.

Students who are not geological engineering (GLE) majors may substitute GEOSCI/G LE 350/G LE/GEOSCI 350 Introduction to Geophysics: The Dynamic Earth for either GEOSCI/G L E/M S \& E 474 Rock Mechanics or GEOSCI/G LE 627 Hydrogeology.

| Environmental Geoscience Track |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Directed Electives |  |  |
| Select one course from each of the following four categories: |  |  |
| Surface Environments |  | 3-4 |
| $\begin{aligned} & \text { GEOSCI/GEOG } \\ & 320 \end{aligned}$ | Geomorphology |  |
| $\begin{aligned} & \text { GEOSCI/GEOG } \\ & 420 \end{aligned}$ | Glacial and Pleistocene Geology |  |
| GEOSCI 430 | Sedimentology and Stratigraphy |  |
| GEOSCI/G L E 627 | Hydrogeology |  |
| Geochemistry: |  | 3 |


| GEOSCI 375 | Principles of Geochemistry |  |
| :---: | :---: | :---: |
| GEOSCI 610 | Geochronology, Timescales, and Rates of Geologic Processes |  |
| GEOSCI/G L E 629 | Contaminant Hydrogeology |  |
| Geobiology: |  | 3 |
| GEOSCI 304 | Geobiology |  |
| GEOSCI/ZOOLOGY 541 | Paleobiology |  |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology |  |
| Earth Resources: |  | 3-4 |
| GEOSCI/ENVIR ST $410$ | Minerals as a Public Problem |  |
| GEOSCI/ENVIR ST <br> 411 | Energy Resources |  |
| GEOSCI/G L E 455 | Structural Geology |  |
| GEOSCI 515 | Principles of Economic Geology |  |
| GEOSCI/G L E 594 | Introduction to Applied Geophysics |  |
| Geoscience Electives |  |  |
| Select 3 to 5 credits of GEOSCI electives numbered 300level and higher to reach minimum of 17 credits for the track ${ }^{1}$ |  |  |
| Total Credits 17-19 |  |  |
| Except GEOSCI 331 Gems: The Science Behind the Spa |  |  |
| General Geology Track |  |  |
| Code | Title | Credits |
| Select 17 credits of GEOSCI electives numbered 300-level and higher ${ }^{1}$ |  |  |
| Total Credits 17 |  |  |
| Except GEOSCI 331 Gems: The Science Behind the Sparkle. |  |  |
| RESIDENCE AND QUALITY OF WORK |  |  |
| 2.000 GPA in all GEOSCI and major courses |  |  |
| 2.000 on 15 upper-level major credits, taken in residence ${ }^{1}$ |  |  |
| 15 credits in GEOSCI, taken on campus |  |  |
| ${ }^{1}$ GEOSCI 300 through GEOSCI 699 count as upper level in the major, excluding GEOSCI 331 |  |  |

## HONORS IN THE MAJOR

Students may declare Honors in the Geology and Geophysics Major in consultation with the departmental undergraduate advisor.

## HONORS IN THE MAJOR IN GEOLOGY AND GEOPHYSICS: REQUIREMENTS

To earn Honors in the Geology and Geophysics Major, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA in all GEOSCI courses
- Complete a two-semester Senior Honors Thesis in GEOSCI 681 Senior Honors Thesis and GEOSCI 682 Senior Honors Thesis, for a total of 6 credits, with a grade of B or better.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
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Quality of Undergraduate students must maintain the minimum Work

## LEARNING OUTCOMES

1. Acquire quantitative and spatial reasoning skills and the ability to apply those skills to problems in geoscience.
2. Be able to explicate key biological, chemical and physical Earth structures, processes, the interactions between them, and the roles that they play in determining the state of the Earth system.
3. Utilize geological observations and measurements to solve problems involving the timing of geological events in Earth history.
4. Combine data and lab/field-based observations into a novel synthesis and/or description/model of how Earth systems operate.
5. Be able to critique published scientific data, results, and interpretations thereof, as well as identify and assess related work in the scientific literature.
6. Be able to effectively communicate scientific concepts, methods, and results.

## ADVISING AND CAREERS

## ADVISING

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Philip Brown, undergraduate advisor in the major. economic geology, mineralogy, geochemistry
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608-262-5954
365 Weeks Hall
Kurt Feigl, undergraduate advisor in the major. tectonic applications of geodesy
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608-262-0176
A248 Weeks Hall
Clay Kelly, undergraduate advisor in the major. micropaleontology and paleoceanography
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463 Weeks Hall
Basil Tikoff, Undergraduate advisor in the major. structural geology basil@geology.wisc.edu
608-262-4678
176 Weeks Hall
Huifang Xu , Undergraduate advisor in the major. mineral science, nanogeoscience, and electron microscopy
hfxu@geology.wisc.edu
608-265-5887
A352 Weeks Hall
Lucas Zoet, Undergraduate advisor in the major. glaciology and glacial geomorphology
Izoet@wisc.edu
608-262-1921
256B Weeks Hall
Eric Schueffner, Undergraduate advisor
elschueffner@wisc.edu
608-890-3231
230 Weeks Hall

## CAREERS

More than half of all professional geologists and geophysicists work in hydrogeology or the petroleum and mining industries. Such jobs involve an unusual breadth of training and personal adaptability, and the M.S. degree is generally required. About one fifth of all geoscientists work in state and federal geological surveys, and in government research activities such as oceanographic programs. These positions largely involve problems in geologic mapping, mineral resources, groundwater, and engineering. Geophysics offers opportunities in earthquake studies, seismic verification of nuclear test bans, and crustal rock characterization techniques for waste disposal and groundwater modeling. Many geology students continue on to obtain a Ph.D. degree and become faculty members at a college or university. A geology and geophysics major is also appropriate for those interested in careers in elementary or secondary education, environmental policy, or environmental law. Faculty advisors can provide additional information on career opportunities.

The College of Letters \& Science encourages majors to begin working on their career exploration and preparation soon after arriving on campus. Our department partners with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important that students are career ready at the time of graduation, and we are committed to their success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school
applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Bahr, Brown, Carroll, DeMets, Feigl, Goodwin, Johnson, Kelly, Peters, Roden, Singer, Thurber, Tikoff, Tobin, Valley, Wang, Xu

Associate Professor Meyers
Assistant Professors Cardiff, Marcott, Zoet

## GERMAN, NORDIC, AND SLAVIC

The Department of German, Nordic, and Slavic is home to undergraduate and graduate programs in German (p. 723), Scandinavian studies (p. 724), and Slavic studies (p. 724). The department offers courses in the languages, linguistics, literatures, and cultures of these three areas, both in the target languages and in translation. The department provides instruction in more than a dozen languages, including Czech, Danish, Dutch, Finnish, German, Icelandic, Kazakh, Norwegian, Old Norse, Polish, Russian, Sami, Serbo-Croatian, Swedish, Turkish, and Yiddish.

## GERMAN PROGRAM

The German program affords students the opportunity to begin or to continue their study of German and/or Dutch.

Knowledge of German provides access to a culture that for more than a millennium has been central to the history, economy, arts, and sciences not just of Europe but of Western civilization as a whole. In the contemporary world, German-speaking countries have Europe's strongest economies and are playing an increasingly important role in world affairs. More Americans claim German ethnicity than any other, and Germanspeaking immigrants and their descendants have had an enduring impact on the history and culture of the United States. The UW-Madison has been a leader in the field of German studies for more than a century. The university's libraries are remarkable for the depth and breadth of their German-language holdings.

Knowledge of Dutch provides access to a culture that has been an important force in world history since the Middle Ages. The language of more than 20 million inhabitants of the Netherlands and Flanders (Dutch-speaking Belgium), Dutch is also spoken in Suriname and the Netherlands Antilles. It is also an important second language in

Indonesia. As major economic powers, Belgium and the Netherlands play a leading role in shaping the European Union. World-class research in the sciences and humanities is conducted at Dutch and Belgian universities, and both countries can boast of a cultural life in which art, music, and theater are all flourishing.

## OPPORTUNITIES FOR GERMAN AND DUTCH STUDENTS

In addition to choosing from courses in culture, literature, linguistics, and German-American studies, German students can practice the language in various settings on campus, including the Stockwerk Deutsch (http://gns.wisc.edu/stockwerk-deutsch) Language House, which is located in Adams Hall. Other opportunities include the German Club, Kaffeestunde, and Stammtisch. There is also a Dutch Table for students of Dutch. Many German and Dutch students participate on semester- or year-long study abroad programs in Germany, Austria, and the Netherlands administered through International Academic Programs (http://www.studyabroad.wisc.edu), the School of Business, the College of Engineering, and the College of Agriculture and Life Sciences. The International Internship Program (http:// internships.international.wisc.edu) also connects UW-Madison students to a wide range of internships in German- and Dutch-speaking Europe.

## SCANDINAVIAN STUDIES (NORDIC)

The Scandinavian Studies Program provides the opportunity to learn a Scandinavian language or Finnish (modern Icelandic only occasionally). The literature, folklore, and culture of the Nordic countries are taught both in the original languages and in English translation. Partly in cooperation with other departments, courses in Scandinavian area studies are offered (history, social institutions, geography, art, archaeology). Students who major in the field may continue graduate studies toward an M.A. in Scandinavian philology, literature, or area studies, and toward a Ph.D. in Scandinavian literature, philology, or folklore.

The program strongly encourages a junior-year abroad in a Nordic country; several exchange programs are available. Students who transfer to this university after a year abroad should contact the undergraduate advisor as early as possible to schedule a placement test

## SLAVIC STUDIES

Courses in Russian and Polish are designed to meet the needs of students who begin to study the language in college as well as those who began to study the language in high school. One unit (year) of high school coursework is roughly equivalent to one semester of college work; all incoming students, however, who want to continue their study of Russian or Polish are assigned to courses on the basis of placement tests. These tests may admit a student to a more advanced course, but give no credit toward graduation. Students should speak with their instructor regarding retroactive credits during the first week of class.

## RUSSIAN FLAGSHIP PROGRAM

The Russian Flagship Program offers students of any major the opportunity to achieve a professional level of competence in Russian. Students apply to the program directly. Residential and study abroad requirements, course options, and scholarship information are posted at Russian Flagship (http://www.russianflagship.wisc.edu). To obtain more information about the Russian Flagship Program, students
should make an appointment with a Russian Flagship advisor. (https:// russianflagship.wisc.edu/advising)

## DEGREES/MAJORS/CERTIFICATES

- East Central European Languages, Literatures, and Cultures, Certificate (p. 725)
- German, B.A. (p. 726)
- German, B.S. (p. 730)
- German, Certificate (p. 733)
- Polish, B.A. (p. 734)
- Polish, B.S. (p. 737)
- Russian, B.A. (p. 740)
- Russian, B.S. (p. 743)
- Scandinavian Studies, B.A. (p. 747)
- Scandinavian Studies, B.S. (p. 750)
- Scandinavian Studies, Certificate (p. 753)


## PEOPLE

## GERMAN

Professors Hans Adler, Monika Chavez, Sabine Gross, Rob Howell, Mark Louden, B. Venkat Mani, Pamela Potter, Jolanda Vanderwal Taylor

Associate Professors Salvatore Calomino, Sonja Klocke, Sabine Moedersheim

Assistant Professors Hannah V. Eldridge, Philip Hollander, Weijia Li, Sunny Yudkoff

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Lecturer Alexandra Walter

GERMAN, NORDIC, AND SLAVIC

Professor Uli Schamiloglu
Lecturer Funda Derin

## EAST CENTRAL EUROPEAN <br> LANGUAGES, LITERATURES, AND CULTURES, CERTIFICATE

Are you of Czech, Polish, or SerboCroatian heritage-or do you just have a healthy fascination with East Central Europe? Can you imagine using any of these three languages in your future career or research? Since language and culture go hand in hand, the certificate in East Central European Languages, Literatures, and Cultures (ECELLC) combines language training (intermediate to advanced proficiency) with a wide variety of courses on the life of the region. Topics include vampires, science-fiction writing, Holocaust memory, and the pre-1989 culture of dissent as well as surveys of literature and culture by historical period. UW-Madison is one of only a handful of universities in North America where these languages are offered. UW also offers study-abroad opportunities in the Czech Republic, Poland, and Croatia. Courses taken abroad may count toward fulfillment of certificate requirements. Take advantage of the opportunity to learn these languages and to learn about the literatures and cultures of the countries where they are spoken.

## HOW TO GET IN

Students can declare the certificate in consultation with the faculty advisor for the certificate. Additional information can be found under the Advising and Careers tab for this program or in the Department of German, Nordic, and Slavic Studies (http://gns.wisc.edu/undergraduate).

## REQUIREMENTS

In order to receive the certificate in East Central European languages, literature, and cultures, students are required to complete a minimum of 15 credits total.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Part 1 |  |  |
| Select one of the following options: |  | 6-8 |
| SLAVIC 217 <br> \& SLAVIC 218 | Third Semester Czech and Fourth Semester Czech |  |
| SLAVIC 207 <br> \& SLAVIC 208 | Third Semester Polish and Fourth Semester Polish ${ }^{1}$ |  |
| SLAVIC 251 <br> \& SLAVIC 252 | Third Semester Serbo-Croatian and Fourth Semester SerboCroatian |  |
| Part 2 |  |  |
| Select three course | from the following: | 9 |
| LITTRANS 207 | Slavic Science Fiction through Literature and Film |  |
| LITTRANS 208 | The Writings of Vaclav Havel: Crtitique of Modern Society |  |
| LITTRANS 215 | Polish Literature in Translation: 14th to the Mid-19th Century |  |


| LITTRANS 218 | Polish Literature in Translation: Late 19th and 20th Centuries |
| :---: | :---: |
| LITTRANS 241 | Literatures and Cultures of Eastern Europe |
| LITTRANS 247 | Topics in Slavic Literatures in Translation |
| LITTRANS 329 | The Vampire in Literature and Film |
| LITTRANS 454 | History of Serbian and Croatian Literature |
| LITTRANS 471 | Polish Literature (in Translation), <br> Middle Ages to 1863 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 |
| SLAVIC 242 | Literatures and Cultures of Eastern Europe |
| SLAVIC 245 | Topics in Slavic Literatures |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey |
| SLAVIC 302 | Zarys historii literatury polskiej |
| SLAVIC 307 | Study Abroad in Poland |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad |
| SLAVIC/ <br> FOLKLORE 444 | Slavic and East European Folklore |
| SLAVIC 449 | Istorija srpske i hrvatske literature |
| SLAVIC 454 | Moderna srpska i hrvatska literatura |
| SLAVIC 470 | Historia literatury polskiej do roku 1863 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 |

Total Credits
15-17
1 Students can satisfy this requirement by completing any two courses in Polish language beyond the second semester, including: SLAVIC 207 Third Semester Polish, SLAVIC 208 Fourth Semester Polish, SLAVIC 277 Third Year Polish I, SLAVIC 278 Third Year Polish II, SLAVIC 331 Fourth Year Polish I, and SLAVIC 332 Fourth Year Polish II.

## RESIDENCE AND QUALITY OF WORK

At least 8 credits must be earned in residence.
Students must earn a cumulative 2.000 GPA on required certificate coursework.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Minimally acquire intermediate proficiency in an East Central European Language (Czech, Polish, or SerboCroatian).
2. Develop and apply writing skills and oral communications skills appropriate to Liberal Arts education in the context of Slavic studies to the literatures and cultures of the region.
3. Develop and apply critical-thinking skills inherent in the Liberal Arts tradition to the literature and culture of the region.
4. Analyze and interpret cultural products of the region (i.e. works of literature, films, etc.) in themselves and in the context of specific historical and cultural conditions.

## ADVISING AND CAREERS

The faculty advisor for the certificate in East Central European languages, Literatures, and cultures is David S. Danaher (dsdanaher@wisc.edu).

Advisors for the three languages represented by the certificate are:

- David Danaher (dsdanaher@wisc.edu) for Czech
- Halina Filipowicz (hfilipow@wisc.edu) or Ewa Miernowska (miernows@wisc.edu) for Polish
- Tomislav Longinovic (tlongino@wisc.edu) for Serbo-Croatian

For other undergraduate concerns, please contact our undergraduate coordinator for the Department of German, Nordic, and Slavic:

Bridget Sutton, Undergraduate Coordinator
undergrad@gns.wisc.edu
608-262-2090
1306 Van Hise Hall

## PEOPLE

## GERMAN

Professors Hans Adler, Monika Chavez, Sabine Gross, Rob Howell, Mark Louden, B. Venkat Mani, Pamela Potter, Jolanda Vanderwal Taylor

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GERMAN, NORDIC, AND SLAVIC
Professor Uli Schamiloglu
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## GERMAN, B.A.

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Knowledge of Dutch provides access to a culture that has been an important force in world history since the Middle Ages. The language of more than 20 million inhabitants of the Netherlands and Flanders (Dutch-speaking Belgium), Dutch is also spoken in Suriname and the Netherlands Antilles. It is also an important second language in Indonesia. As major economic powers, Belgium and the Netherlands play a leading role in shaping the European Union. World-class research in the sciences and humanities is conducted at Dutch and Belgian universities, and both countries can boast of a cultural life in which art, music, and theater are all flourishing.

## STUDY ABROAD

The German program works closely with International Academic Programs (http://www.studyabroad.wisc.edu) to provide a range of opportunities for study in Germany and the Netherlands, for majors and nonmajors alike. The program also cooperates with the School of Business, which maintains study abroad programs in Germany and Austria open to all qualified undergraduates, not just business majors. Finally, the College of Engineering and the College of Agriculture and Life Sciences offer study abroad programs in Germany for qualified students in these colleges.

## OTHER OPPORTUNITIES FOR GERMAN STUDENTS

UW-Madison students interested in international internships should visit the website of the International Internship Program (http:// internships.international.wisc.edu).

The German-language immersion dormitory, Stockwerk Deutsch (http:// gns.wisc.edu/stockwerk-deutsch), is located in Richardson House in Adams Hall, one of the Lakeshore dorms. Undergraduate students live
and speak German together with a resident native speaker of German. Contact the German program for applications and details.

Other regular student activities include film screenings and lectures as well as informal, conversation-oriented Kaffeestunde, Stammtisch, Dutch Table, and the German Club. For additional information, contact the German program.

## OFFERINGS IN DUTCH STUDIES

Course offerings in Dutch include five semesters of language instruction as well as courses in the literature and culture of the Low Countries. Courses in Dutch language satisfy the L\&S foreign language requirement, while courses in Dutch literature and culture carry literature and humanities credits, respectively. Dutch literature is also offered under Literature in Translation.

A major in Dutch studies is not yet established at UW-Madison, but interested students are encouraged to pursue an individual major in the field. In addition to the study of language, literature, and culture, this could entail coursework in art history, geography, history, sociology, and so on. Courses taken in the study abroad program in Utrecht can also be applied to an individual major in Dutch studies.

## HOW TO GET IN

## DECLARING THE MAJOR IN GERMAN

A student may declare the major in German at any time by consulting with the German program's undergraduate advisor.

## PREREQUISITES FOR THE MAJOR IN GERMAN

A total of 9 credits of language coursework at the third-year (post-204, " $2 x x^{\prime \prime}$ ) level is required for the German major.

| Select one of the following options: |  |  |
| :--- | :--- | ---: |
| Code <br> Option 1: | Title | Credits |
| GERMAN 249 | Intermediate German - Speaking <br> and Listening | 3 |
| GERMAN 262 | Intermediate German-Writing |  |

1 Students may not receive credit for both GERMAN 258 or GERMAN 262 and GERMAN 285

Third-year German language courses (GERMAN 249, GERMAN 258, GERMAN 262, GERMAN 285) are not sequenced; they may be taken in any order and/or simultaneously.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  | | work |
| :--- | :--- |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

27 credits in the major, as follows:

| Code | Title | Credits |
| :--- | :--- | ---: |
| GERMAN 337 |  <br> Conversation | 3 |
| GERMAN 676 | Advanced Seminar in German <br> Studies 1 <br> or GERMAN 677 | Seminar in German Culture Studies |
| Electives ${ }^{1}$ |  | 2 |
| GERMAN 303 | Literatur des 19. Jahrhunderts |  |
| GERMAN 305 | Literatur des 20. und 21. <br> Jahrhunderts |  |
| GERMAN 339 | Business German Internship <br> Seminar |  |
| GERMAN 351 | Introduction to German Linguistics <br> GERMAN 352 | Topics in German Linguistics |
| GERMAN 362 | Topics in German Literature |  |
| GERMAN 367 | Study Abroad in German Literature |  |


| GERMAN 368 | Study Abroad in German Culture |
| :---: | :---: |
| GERMAN 369 | Study Abroad in German Linguistics |
| GERMAN 372 | Topics in German Culture |
| GERMAN 385 | Honors Seminar in German Literature |
| GERMAN 410 | Kultur 1648-1918 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts |
| GERMAN/ JEWISH 510 | German-Jewish Culture Since the 18th Century |
| GERMAN 560 | Topics in German Studies |
| GERMAN/ MEDIEVAL 611 | Survey of German Literature to 1700 |
| GERMAN 612 | German Literary Movements Since $1750$ |
| GERMAN 625 | Letterkunde der Lage Landen |
| GERMAN 632 | A Theme in German Literature |
| GERMAN 644 | Theory and Practice of German Drama |
| GERMAN 645 | Cultuurkunde der Lage Landen |
| GERMAN 650 | History of the German Language |
| GERMAN/ MEDIEVAL 651 | Introduction to Middle High German |
| GERMAN/ COM ARTS 655 | German Film |
| GERMAN 677 | Seminar in German Culture Studies |
| GERMAN 681 | Senior Honors Thesis-First Semester |
| GERMAN 682 | Senior Honors Thesis-Second Semester |
| GERMAN 683 | Senior Honors Seminar in German Literature |
| GERMAN 698 | Directed Study |
| GERMAN 699 | Directed Study |
| Up to 9 credits of Electives may be in Cognate courses ${ }^{2}$ |  |
| Total Credits |  |

1 At least 3 of these credits must be taken on the UW-Madison campus (not through Study Abroad).
2 Cognate courses with German-related subject matter are taught in English and an be found in many Subjects. Questions about which courses may be counted as cognate courses may be directed to the undergraduate advisor.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all GERMAN courses and courses counting toward the major
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{3}$

15 credits in GERMAN, taken on campus
3 GERMAN course numbered 300-699 are Upper Level in the major, except: GERMAN 311 , GERMAN 312, GERMAN 313, GERMAN 314, GERMAN 325, GERMAN 335, GERMAN 377, GERMAN 378,
GERMAN 379, GERMAN 391, GERMAN 392, GERMAN 401, GERMAN 402, GERMAN 403, GERMAN 404, GERMAN 445, or any Dutch topic course.

## Senior Thesis

A student who wishes to write a senior thesis may do so under the direction of a Professor in German. Students should begin planning with the major advisor or the directing professor in the student's junior year.

## HONORS IN THE MAJOR

Students may declare Honors in the German Major in consultation with the German undergraduate advisor.

## HONORS IN THE GERMAN MAJOR REQUIREMENTS

To earn Honors in the Major in German, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 in all advanced-level GERMAN courses
- Complete 29 total advanced-level credits in German, 20 of which must be taken for Honors, to include:

| Code | Title | Credits |
| :--- | :--- | ---: |
| GERMAN 337 |  <br> Conversation (for honors credit) | 3 |
| GERMAN 676 | Advanced Seminar in German <br> Studies (for honors credit) | 3 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |
| GERMAN 681 | Senior Honors Thesis-First <br> \& GERMAN 682 <br> and Senior Honors Thesis-Second <br> Semester | 6 |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## ADVISING AND CAREERS

Any questions regarding advising or placement in German or Dutch may be directed to the undergraduate advisors for these programs:

```
Jeanne M. Schueller, Undergraduate German Advisor jmschuel@wisc.edu
806 Van Hise Hall
Jolanda Vanderwal Taylor, Undergraduate Dutch Advisor jvtaylor@wisc.edu
608-262-5790
808 Van Hise Hall
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For other undergraduate concerns, please contact the undergraduate coordinator.

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Bridget Sutton, Undergraduate Coordinator
undergrad@gns.wisc.edu
608-262-2090
1306 Van Hise Hall
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For advising on careers related to German, Dutch, and other languages, contact the Language Institute (https://languageinstitute.wisc.edu).

For additional career advising, contact:
SuccessWorks at the College of Letters \& Science 711 State Street, Suite 300 (University Book Store Building) SuccessWorks@ls.wisc.edu 608-262-3921

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

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Courses in Dutch language satisfy the L\&S foreign language requirement, while courses in Dutch literature and culture carry literature and
humanities credits, respectively. Dutch literature is also offered under Literature in Translation.

A major in Dutch studies is not yet established at UW-Madison, but interested students are encouraged to pursue an individual major in the field. In addition to the study of language, literature, and culture, this could entail coursework in art history, geography, history, sociology, and so on. Courses taken in the study abroad program in Utrecht can also be applied to an individual major in Dutch studies.

## HOW TO GET IN

## DECLARING THE MAJOR IN GERMAN

A student may declare the major in German at any time by consulting with the German program's undergraduate advisor.

## PREREQUISITES FOR THE MAJOR IN GERMAN

A total of 9 credits of language coursework at the third-year (post-204, " $2 x x$ ") level is required for the German major.

Select one of the following options:

| Code | Title | Credits |
| :--- | :--- | :---: |
| Option 1: |  | 3 |
| GERMAN 249 | Intermediate German - Speaking <br> and Listening | 3 |
| GERMAN 262 | Intermediate German-Writing ${ }^{1}$ | 3 |
| Option 2: | Intermediate German - Speaking <br> and Listening | 6 |
| GERMAN 249 | Intermediate Intensive (Honors) <br> German: Language, Culture, Texts | 9 |

1 Students may not receive credit for both GERMAN 258 or GERMAN 262 and GERMAN 285

Third-year German language courses (GERMAN 249, GERMAN 258, GERMAN 262, GERMAN 285) are not sequenced; they may be taken in any order and/or simultaneously.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

27 credits in the major, as follows:

| Code | Title |
| :--- | :--- |
| GERMAN 337 |  <br> Conversation |
| GERMAN 676 | Advanced Seminar in German <br> Studies |
| or GERMAN 677 | Seminar in German Culture Studies |$\quad 3$


| GERMAN 681 | Senior Honors Thesis-First <br> Semester |
| :---: | :--- |
| GERMAN 682 | Senior Honors Thesis-Second <br> Semester |
| GERMAN 683 | Senior Honors Seminar in German <br> Literature |
| GERMAN 698 | Directed Study |
| GERMAN 699 | Directed Study |
| Up to 9 credits of Electives may be in Cognate courses ${ }^{2}$ | 27 |
| Total Credits |  |

1 At least 3 of these credits must be taken on the UW-Madison campus (not through Study Abroad).
2
Cognate courses with German-related subject matter are taught in English and an be found in many Subjects. Questions about which courses may be counted as cognate courses may be directed to the undergraduate advisor.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all GERMAN courses and courses counting toward the major
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{3}$

15 credits in GERMAN, taken on campus
3 GERMAN course numbered 300-699 are Upper Level in the major, except: GERMAN 311, GERMAN 312, GERMAN 313, GERMAN 314, GERMAN 325, GERMAN 335, GERMAN 377, GERMAN 378, GERMAN 379, GERMAN 391, GERMAN 392, GERMAN 401, GERMAN 402, GERMAN 403, GERMAN 404, GERMAN 445, or any Dutch topic course.

## Senior Thesis

A student who wishes to write a senior thesis may do so under the direction of a Professor in German. Students should begin planning with the major advisor or the directing professor in the student's junior year.

## HONORS IN THE MAJOR

Students may declare Honors in the German Major in consultation with the German undergraduate advisor.

## HONORS IN THE GERMAN MAJOR REQUIREMENTS

To earn Honors in the Major in German, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 in all advanced-level GERMAN courses
- Complete 29 total advanced-level credits in German, 20 of which must be taken for Honors, to include:

| Code | Title | Credits |
| :--- | :--- | ---: |
| GERMAN 337 |  <br> Conversation (for honors credit) | 3 |
| GERMAN 676 | Advanced Seminar in German <br> Studies (for honors credit) | 3 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |


| GERMAN 681 | Senior Honors Thesis-First | 6 |
| :--- | :--- | :--- |
| \& GERMAN 682 | Semester <br> and Senior Honors Thesis-Second <br> Semester |  |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## ADVISING AND CAREERS

Any questions regarding advising or placement in German or Dutch may be directed to the undergraduate advisors for these programs:

Jeanne M. Schueller, Undergraduate German Advisor jmschuel@wisc.edu
806 Van Hise Hall
Jolanda Vanderwal Taylor, Undergraduate Dutch Advisor jvtaylor@wisc.edu
608-262-5790
808 Van Hise Hall
For other undergraduate concerns, please contact the undergraduate coordinator:

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Bridget Sutton, Undergraduate Coordinator
undergrad@gns.wisc.edu
608-262-2090
1306 Van Hise Hall
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For advising on careers related to German, Dutch, and other languages, contact the Language Institute (https://languageinstitute.wisc.edu).

For additional career advising, contact:
SuccessWorks at the College of Letters \& Science 711 State Street, Suite 300 (University Book Store Building) SuccessWorks@ls.wisc.edu
608-262-3921

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Hans Adler, Monika Chavez, Sabine Gross, Rob Howell, Mark Louden, B. Venkat Mani, Pamela Potter, Jolanda Vanderwal Taylor

Associate Professors Salvatore Calomino, Sonja Klocke, Sabine Moedersheim

Assistant Professors Hannah V. Eldridge, Philip Hollander, Weijia Li, Sunny Yudkoff

Faculty Associate Jeanne Schueller

## GERMAN, CERTIFICATE

The certificate in German offers students the opportunity to develop proficiency in German, thereby complementing major(s) in other subjects across the university. It also strengthens the profiles of students who intend to pursue careers or graduate study in areas where knowledge of German is useful. The certificate in German is open to all undergraduate students, including Special students who may already have completed majors and earned degrees.

## REQUIREMENTS

## GERMAN CERTIFICATE REQUIREMENTS

15 credits as follows

## Code

Title
Credits
Advanced GERMAN (2 courses)

GERMAN 303
GERMAN 305

Literatur des 19. Jahrhunderts
Literatur des 20. und 21.
Jahrhunderts

| GERMAN 337 | Advanced Composition \& Conversation |  |
| :---: | :---: | :---: |
| GERMAN 339 | Business German Internship Seminar |  |
| GERMAN 351 | Introduction to German Linguistics |  |
| GERMAN 352 | Topics in German Linguistics |  |
| GERMAN 362 | Topics in German Literature |  |
| GERMAN 367 | Study Abroad in German Literature |  |
| GERMAN 368 | Study Abroad in German Culture |  |
| GERMAN 369 | Study Abroad in German Linguistics |  |
| GERMAN 372 | Topics in German Culture |  |
| GERMAN 385 | Honors Seminar in German Literature |  |
| GERMAN 410 | Kultur 1648-1918 |  |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts |  |
| GERMAN/ JEWISH 510 | German-Jewish Culture Since the 18th Century |  |
| GERMAN 560 | Topics in German Studies |  |
| Additional GERMAN |  | 9 |
| GERMAN 221 | Introduction to German Literature and Culture I |  |
| GERMAN 222 | Introduction to German Literature and Culture II |  |
| GERMAN 225 | Composition and Conversation I |  |
| GERMAN 226 | Composition and Conversation II |  |
| GERMAN 249 | Intermediate German - Speaking and Listening |  |
| GERMAN 258 | Intermediate German-Reading |  |
| GERMAN 262 | Intermediate German-Writing |  |
| Any Advanced GERMAN course from above |  |  |
| Total Credits |  | 15 |

## RESIDENCE AND QUALITY OF WORK

## 8 credits in residence

A 2.000 cumulative GPA in all courses eligible for the certificate is required

Pass/fail courses may not apply to the certificate.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. to promote German proficiency in all major skill areas: speaking, listening, reading, and writing.
2. to foster a deeper understanding of the cultures of the Germanspeaking world through courses taught in German.

## ADVISING AND CAREERS

## ADVISING AND CAREERS

For advising questions related to the certificate in German, contact the German program undergraduate advisor:

Mark L. Louden, Undergraduate German Advisor mllouden@wisc.edu
802 Van Hise
For questions regarding placement in German language courses, contact the German language program coordinator and placement advisor:

Jeanne M. Schueller, German Language Program Coordinator and Placement Advisor<br>jmschuel@wisc.edu<br>806 Van Hise

For other undergraduate concerns, please contact our undergraduate coordinator:

> Bridget Sutton, Undergraduate Coordinator undergrad@gns.wisc.edu $608-262-2090$ 1306 Van Hise  For advising on careers related to German, Dutch, and other languages, refer to: Languages at UW-Madison Language Institute Careers (https://languages.wisc.edu/beyond/careers)

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

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Associate Professors Salvatore Calomino, Sonja Klocke, Sabine
Moedersheim
Assistant Professors Hannah V. Eldridge, Philip Hollander, Weijia Li, Sunny Yudkoff

Faculty Associate Jeanne Schueller

## POLISH, B.A.

Elementary courses in Russian and Polish are designed to meet the needs of students who begin to study the language in college as well as those who began to study the language in high school. One unit (year) of high school coursework is roughly equivalent to one semester of college work; all incoming students, however, who want to continue their study of Russian or Polish are assigned to courses on the basis of placement tests. These tests may admit a student to a more advanced course, but give no credit toward graduation. Students should speak with their instructor regarding retroactive credits during the first week of class.

## HOW TO GET IN

To declare a major in Polish, students should make an appointment with the undergraduate advisor (atumarki@wisc.edu), or call 608-262-3498.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :--- | :--- |
| Language | - Complete the third unit of a foreign language and the |
|  | second unit of an additional foreign language |

Note: A unit is one year of high school work or one semester/term of college work.

| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in |
| :--- | :--- |
|  | literature |
|  | - |


| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Code Title Credits

1. The Polish major requires 9 credits in Polish-language 9
courses above Fourth Semester Polish (SLAVIC 208)
taken from:

| SLAVIC 277 | Third Year Polish I |  |
| :---: | :---: | :---: |
| SLAVIC 278 | Third Year Polish II |  |
| SLAVIC 331 | Fourth Year Polish I |  |
| SLAVIC 332 | Fourth Year Polish II |  |
| 2. 6 credits in Polish literature in translation: |  | 6 |
| LITTRANS 215 | Polish Literature in Translation: 14th to the Mid-19th Century ${ }^{1}$ |  |
| LITTRANS 473 | Polish Literature (in Translation) since $1863{ }^{2}$ |  |
| 3. 9 credits in literature in the original language and culture and area studies: ${ }^{3}$ |  | 9 |
| SLAVIC 302 | Zarys historii literatury polskiej ${ }^{4}$ |  |
| SLAVIC 245 | Topics in Slavic Literatures ${ }^{5}$ |  |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey |  |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad |  |
| SLAVIC/ <br> FOLKLORE 444 | Slavic and East European Folklore |  |
| LITTRANS 229 | Representation of the Jew in Eastern European Cultures |  |
| LITTRANS 241 | Literatures and Cultures of Eastern Europe |  |
| LITTRANS 247 | Topics in Slavic Literatures in Translation ${ }^{3}$ |  |
| HISTORY 425 | History of Poland and the Baltic Area |  |

Total Credits
24

LITTRANS 471 Polish Literature (in Translation), Middle Ages to 1863 or SLAVIC 470 Historia literatury polskiej do roku 1863 can also count toward Literature in Translation in place of LITTRANS 215 Polish Literature in Translation: 14th to the Mid-19th Century

SLAVIC 245 Topics in Slavic Literatures and LITTRANS 247 Topics in Slavic Literatures in Translation are topics courses and the topic must be approved by the advisor for the Polish major for credit toward the major.

| L\&S RESIDENCE AND QUALITY OF WORK |  |  |
| :---: | :---: | :---: |
| 2.000 GPA in all courses counting in the major |  |  |
| 2.000 GPA on 15 upper-level major credits taken in residence ${ }^{4}$ |  |  |
| 15 credits in the major taken on the UW-Madison campus |  |  |
| ${ }^{4}$ Upper-Level Courses |  |  |
| Code | Title | Credits |
| The following courses count as upper level in the major. |  |  |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC/ <br> FOLKLORE 444 | Slavic and East European Folklore | 3 |
| SLAVIC 470 | Historia literatury polskiej do roku 1863 | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| LITTRANS 215 | Polish Literature in Translation: <br> 14th to the Mid-19th Century | 3 |
| LITTRANS 471 | Polish Literature (in Translation), Middle Ages to 1863 | 3 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |

## DISTINCTION IN THE MAJOR IN POLISH

With the permission of the Polish honors advisor (atumarki@wisc.edu), students who are not in any of the honors programs may work toward Distinction in the Major in Polish. Distinction in the Major may be granted for any student who has a 3.500 grade point average in the major, and who has submitted an acceptable senior thesis.

## HONORS IN THE MAJOR

Students may declare Honors in the Polish Major in consultation with the Polish Honors Advisor (atumarki@wisc.edu).

## HONORS IN THE POLISH MAJOR: REQUIREMENTS

To earn Honors in the Major in Polish, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Complete 15 credits in SLAVIC, taken for Honors, with individual course grades of $B$ or better, to include:
- 9 credits above SLAVIC 208 Fourth Semester Polish, chosen from the following list ${ }^{1}$ :

| Code | Title | Credits |
| :--- | :--- | ---: |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |


| SLAVIC 301 | Introduction to Intensive Polish | 3 |
| :--- | :--- | ---: |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 470 | Historia literatury polskiej do roku <br> lis63 | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku <br>  <br>  <br> 1863 | 3 |

- A two-semester Senior Honors Thesis in SLAVIC 681 Senior Honors Thesis and SLAVIC 682 Senior Honors Thesis, for a total of 6 credits.

1 This requirement may be waived for students who take some of these courses while studying abroad in Poland.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Polish language proficiency) Develop speaking, listening, writing, and reading skills and integrate these skills to communicate in Polish in a variety of social situations.
2. Develop and apply writing skills and oral communication skills appropriate to liberal arts education in the context of Slavic studies.
3. Develop and apply critical thinking skills inherent in the liberal arts tradition in the context of Slavic studies.
4. Analyze and interpret works of literature in themselves and in the context of specific historical and cultural conditions.
5. Demonstrate insight into Polish culture and civilization and apply this knowledge across disciplines such as history, political science, the arts, geography, business, economics, sociology, the sciences, gender studies, philosophy, law, folklore.

## ADVISING AND CAREERS

## ADVISING AND CAREERS

For advising in Russian or Polish contact our Russian and Polish undergraduate advisor Anna Tumarkin (atumarki@wisc.edu).

For placement in Russian contact Anna Tumarkin (atumarki@wisc.edu).
For placement in Polish contact Ewa Miernowska (miernows@wisc.edu).

For information on the Russian Flagship Program contact Laura Weigel (leweigel@wisc.edu) or visit the program page (https:// russianflagship.wisc.edu).

For other undergraduate concerns, please contact our undergraduate coordinator:

Bridget Sutton, Undergraduate Coordinator
undergrad@gns.wisc.edu
608-262-2090
1306 Van Hise
For additional career advising, please contact:
SuccessWorks at the College of Letters \& Science
711 State Street, Suite 300
Madison, WI 53703
608-262-3921
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors David Danaher, Alexander Dolinin, Karen Evans-Romaine, Halina Filipowicz, Tomislav Longinovic, Irina Shevelenko, Manon van de Water

## Assistant Professor Marina Zilbergerts

Faculty Associates Jennifer Tishler, Anna Tumarkin
Senior Lecturers Galina Lapina, Ewa Miernowska
Lecturer Alexandra Walter

## POLISH, B.S.

Elementary courses in Russian and Polish are designed to meet the needs of students who begin to study the language in college as well as those who began to study the language in high school. One unit (year) of high school coursework is roughly equivalent to one semester of college work; all incoming students, however, who want to continue their study of Russian or Polish are assigned to courses on the basis of placement tests. These tests may admit a student to a more advanced course, but give no credit toward graduation. Students should speak with their instructor regarding retroactive credits during the first week of class.

## HOW TO GET IN

To declare a major in Polish, students should make an appointment with the undergraduate advisor (atumarki@wisc.edu), or call 608-262-3498.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF SCIENCE DEGREE REQUIREMENTS
Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| 1. The Polish major requires 9 credits in Polish-language courses above Fourth Semester Polish (SLAVIC 208) taken from: |  | 9 |
| SLAVIC 277 | Third Year Polish I |  |
| SLAVIC 278 | Third Year Polish II |  |
| SLAVIC 331 | Fourth Year Polish I |  |
| SLAVIC 332 | Fourth Year Polish II |  |
| 2. 6 credits in Polish literature in translation: |  | 6 |
| LITTRANS 215 | Polish Literature in Translation: 14th to the Mid-19th Century ${ }^{1}$ |  |
| LITTRANS 473 | Polish Literature (in Translation) since $1863^{2}$ |  |
| 3. 9 credits in literature in the original language and culture and area studies: ${ }^{3}$ |  | 9 |
| SLAVIC 302 | Zarys historii literatury polskiej ${ }^{4}$ |  |
| SLAVIC 245 | Topics in Slavic Literatures ${ }^{5}$ |  |
| SLAVIC/GEOG/ <br> HISTORY/ <br> POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey |  |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad |  |
| SLAVIC/ <br> FOLKLORE 444 | Slavic and East European Folklore |  |
| LITTRANS 229 | Representation of the Jew in Eastern European Cultures |  |
| LITTRANS 241 | Literatures and Cultures of Eastern Europe |  |
| LITTRANS 247 | Topics in Slavic Literatures in Translation ${ }^{3}$ |  |
| HISTORY 425 | History of Poland and the Baltic Area |  |

Total Credits
1 LITTRANS 471 Polish Literature (in Translation), Middle Ages to 1863 or SLAVIC 470 Historia literatury polskiej do roku 1863 can also count toward Literature in Translation in place of LITTRANS 215 Polish Literature in Translation: 14th to the Mid-19th Century
SLAVIC 472 Historia literatury polskiej po roku 1863 can also count toward Literature in Translation in place of LITTRANS 473 Polish Literature (in Translation) since 1863
3 Other courses related to Poland may count, with the approval of the advisor, including courses taken abroad on Polish history, society, politics, economy and so forth.
4
5
SLAVIC 245 Topics in Slavic Literatures and LITTRANS 247 Topics in Slavic Literatures in Translation are topics courses and the topic must be approved by the advisor for the Polish major for credit toward the major.

## L\&S RESIDENCE AND QUALITY OF WORK

2.000 GPA in all courses counting in the major
2.000 GPA on 15 upper-level major credits taken in residence ${ }^{4}$

| ${ }^{4}$ Upper-Level Courses |  | Credits |
| :---: | :---: | :---: |
| Code | Title |  |
| The following courses count as upper level in the major: |  |  |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC/ <br> FOLKLORE 444 | Slavic and East European Folklore | 3 |
| SLAVIC 470 | Historia literatury polskiej do roku 1863 | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| LITTRANS 215 | Polish Literature in Translation: 14th to the Mid-19th Century | 3 |
| LITTRANS 471 | Polish Literature (in Translation), Middle Ages to 1863 | 3 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |

## DISTINCTION IN THE MAJOR IN POLISH

With the permission of the Polish honors advisor (atumarki@wisc.edu), students who are not in any of the honors programs may work toward Distinction in the Major in Polish. Distinction in the Major may be granted for any student who has a 3.500 grade point average in the major, and who has submitted an acceptable senior thesis.

## HONORS IN THE MAJOR

Students may declare Honors in the Polish Major in consultation with the Polish Honors Advisor (atumarki@wisc.edu).

## HONORS IN THE POLISH MAJOR: REQUIREMENTS

To earn Honors in the Major in Polish, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Complete 15 credits in SLAVIC, taken for Honors, with individual course grades of B or better, to include:
- 9 credits above SLAVIC 208 Fourth Semester Polish, chosen from the following list ${ }^{1}$ :

| Code | Title | Credits |
| :--- | :--- | ---: |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 301 | Introduction to Intensive Polish | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |


| SLAVIC 470 | $\begin{array}{c}\text { Historia literatury polskiej do roku } \\ \text { SLAVIC } 472\end{array}$ |
| :---: | :---: |
| - Historia literatury polskiej po roku |  |
| A two-semester Senior Honors Thesis in SLAVIC 681 Senior Honors |  |$\}$

## LEARNING OUTCOMES

1. (Polish language proficiency) Develop speaking, listening, writing, and reading skills and integrate these skills to communicate in Polish in a variety of social situations.
2. Develop and apply writing skills and oral communication skills appropriate to liberal arts education in the context of Slavic studies.
3. Develop and apply critical thinking skills inherent in the liberal arts tradition in the context of Slavic studies.
4. Analyze and interpret works of literature in themselves and in the context of specific historical and cultural conditions.
5. Demonstrate insight into Polish culture and civilization and apply this knowledge across disciplines such as history, political science, the arts, geography, business, economics, sociology, the sciences, gender studies, philosophy, law, folklore.

## ADVIIING AND CAREERS

## ADVISING AND CAREERS

For advising in Russian or Polish contact our Russian and Polish undergraduate advisor Anna Tumarkin (atumarki@wisc.edu).

For placement in Russian contact Anna Tumarkin (atumarki@wisc.edu).

For placement in Polish contact Ewa Miernowska (miernows@wisc.edu).
For information on the Russian Flagship Program contact Laura Weigel (leweigel@wisc.edu) or visit the program page (https:// russianflagship.wisc.edu).

For other undergraduate concerns, please contact our undergraduate coordinator.

Bridget Sutton, Undergraduate Coordinator
undergrad@gns.wisc.edu
608-262-2090
1306 Van Hise
For additional career advising, please contact:
SuccessWorks at the College of Letters \& Science
711 State Street, Suite 300
Madison, WI 53703
608-262-3921
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors David Danaher, Alexander Dolinin, Karen Evans-Romaine, Halina Filipowicz, Tomislav Longinovic, Irina Shevelenko, Manon van de Water

Associate Professor Andrew Reynolds
Assistant Professor Marina Zilbergerts
Faculty Associates Jennifer Tishler, Anna Tumarkin
Senior Lecturers Galina Lapina, Ewa Miernowska
Lecturer Alexandra Walter

## RUSSIAN, B.A.

Elementary courses in Russian and Polish are designed to meet the needs of students who begin to study the language in college as well as those who began to study the language in high school. One unit (year) of high school coursework is roughly equivalent to one semester of college work; all incoming students, however, who want to continue their study of Russian or Polish are assigned to courses on the basis of placement tests. These tests may admit a student to a more advanced course, but give no credit toward graduation. Students should speak with their instructor regarding retroactive credits during the first week of class.

## HOW TO GET IN

To declare a major in Russian, students should make an appointment with the Russian undergraduate advisor (atumarki@wisc.edu), or call 608-262-3498.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree
requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF ARTS DEGREE REQUIREMENTS

| Mathematics | Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement. |
| :---: | :---: |
| Foreign Language | - Complete the fourth unit of a foreign language; OR <br> - Complete the third unit of a foreign language and the second unit of an additional foreign language <br> Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The Russian major requires 35 credits and completion of one of three program tracks.

## CORE LANGUAGE \& CULTURE

| Code | Title | Credits |
| :---: | :---: | :---: |
| Language |  |  |
| SLAVIC 275 <br> \& SLAVIC 276 <br> or SLAVIC 279 | Third Year Russian I and Third Year Russian II ${ }^{1}$ Intensive Third Year Russian | 8 |
| SLAVIC 315 <br> \& SLAVIC 316 | Russian Language and Culture I and Russian Language and Culture II |  |
| SLAVIC 321 <br> \& SLAVIC 322 | Fourth Year Russian I and Fourth Year Russian II | 8 |


| LITTRANS 233 | Russian Life and Culture Through <br> Literature and Art (to 1917) |
| :---: | :--- |
| or LITTRANS 23. Soviet Life and Culture Through Literature and Art |  |
| (from 1917) |  |

Total Credits

## COMPLETE A TRACK

## Language \& Literature

Note: Students majoring in Russian-Language and Literature are eligible to declare the certificate in Russian, East European, and Central Asian studies (http://guide.wisc.edu/undergraduate/letters-science/institute-regional-international-studies/russian-east-european-central-asiancertificate).

| Code | Title | Credits |
| :---: | :---: | :---: |
| Literature in translation (2 courses) |  | 8 |
| LITTRANS 203 <br> \& LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation I and Survey of 19th and 20th Century Russian Literature in Translation II |  |
| Literature in Russian (1 course) |  | 4 |
| SLAVIC 405 | Women in Russian Literature |  |
| SLAVIC 420 | Chekhov |  |
| SLAVIC 421 | Gogol |  |
| SLAVIC 422 | Dostoevsky |  |
| SLAVIC 424 | Tolstoy |  |
| SLAVIC 440 | Soviet Literature |  |
| Total Credits |  | 12 |

## 1

LITTRANS 203 and LITTRANS 204 are open to first year students. It is preferable to take these Literature in Translation courses in numerical sequence, though they may be taken out of sequence.

## Language \& Civilization

Note: Students majoring in Russian-Language and Civilization are not eligible to declare the certificate in Russian, East European, and Central Asian studies (http://guide.wisc.edu/undergraduate/letters-science/ institute-regional-international-studies/russian-east-european-central-asian-certificate).

| Code | Title |
| :--- | ---: | Credits



Eligible only when the topic focuses on Russia.
SLAVIC 433 and SLAVIC 434 are taught in Russian; enrollment requires consent of the instructor.

## Native Speaker

Note: Students majoring in Russian-Language and Literature are eligible to declare the certificate in Russian, East European, and Central Asian studies (http://guide.wisc.edu/undergraduate/letters-science/institute-regional-international-studies/russian-east-european-central-asiancertificate).
Students whose Russian language placement exempts them from taking any of the Core Language courses must take additional electives to meet the minimum credits for the major.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Literature in Translation (2 courses) |  | 8 |
| LITTRANS 203 <br> \& LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation I and Survey of 19th and 20th Century Russian Literature in Translation II |  |
| Literature in Russian |  | 4 |
| SLAVIC 405 | Women in Russian Literature |  |
| SLAVIC 420 | Chekhov |  |
| SLAVIC 421 | Gogol |  |
| SLAVIC 422 | Dostoevsky |  |
| SLAVIC 424 | Tolstoy |  |

SLAVIC 440 Soviet Literature
Total Credits

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all major courses
- 2.000 GPA on 15 upper-level credits for the major, taken in residence ${ }^{4}$
- 15 credits in the major, taken on campus
${ }^{4}$ Upper-Level Courses in the Major

| Code | Title |
| :--- | :--- |
| LITTRANS 221 | Gogol in Translation |
| LITTRANS 222 | Dostoevsky in Translation |
| SLAVIC 275 | Third Year Russian I |
| SLAVIC 276 | Third Year Russian II |
| SLAVIC 309 | Russian Area Studies on Study <br> Abroad |
| SLAVIC 310 | Topics in Russian: Study Abroad |
| SLAVIC 315 | Russian Language and Culture I |
| SLAVIC 316 | Russian Language and Culture II |
| SLAVIC 321 | Fourth Year Russian I |
| SLAVIC 322 | Fourth Year Russian II |
| SLAVIC 405 | Women in Russian Literature |
| SLAVIC 420 | Chekhov |
| SLAVIC 421 | Gogol |
| SLAVIC 422 | Dostoevsky |
| SLAVIC 424 | Tolstoy |
| SLAVIC 440 | Soviet Literature |
| SLAVIC/ | History of Russian Theatre |
| THEATRE 532 |  |
| SLAVIC 681 | Senior Honors Thesis |
| SLAVIC 682 | Senior Honors Thesis |
| SLAVIC 699 | Directed Study |

## DISTINCTION IN THE MAJOR

Students who are not pursuing Honors in the Russian major and who distinguish themselves in the quality of their work may request that Distinction in the Major be noted on their transcript. The major advisor will determine eligibility-at a minimum, a 3.500 major GPA and an acceptable Senior Thesis are required.

## HONORS IN THE MAJOR IN RUSSIAN

Students may declare Honors in the Russian Major in consultation with the Russian Honors advisor (atumarki@wisc.edu).

To earn Honors in the Major in Russian, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Minimum 3.300 University GPA
- Minimum 3.500 GPA in SLAVIC 205 through SLAVIC 699 and courses in the major
- 20 credits in the major taken for Honors, in Residence, not through Study Abroad, with grades of B or better in these courses:
- SLAVIC 275, SLAVIC 276, SLAVIC 321, SLAVIC 322
- A Senior Honor Thesis in SLAVIC 681 and SLAVIC 682 for at least 6 credits


## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes }\end{array}
$$ <br>

UW-Madison courses offered in distance or online\end{array}\right\}\)| formats and credits earned in UW-Madison Study |
| :--- |

## LEARNING OUTCOMES

1. (Russian language proficiency) Develop speaking, listening, writing, and reading skills and integrate these skills to communicate in Russian in a variety of social situations.
2. Develop and apply writing skills and oral communication skills appropriate to liberal arts education in the context of Slavic studies.
3. Develop and apply critical thinking skills inherent in the liberal arts tradition in the context of Slavic studies.
4. (Language \& Literature Track and Native Speaker Track) Analyze and interpret works of literature in themselves and in the context of specific historical and cultural conditions.
5. (Language \& Civilization Track) Demonstrate insight into Russian culture and civilization and apply this knowledge across disciplines such as history, political science, the arts, geography, business, economics, sociology, the sciences, gender studies, philosophy, law, folklore.

## ADVISING AND CAREERS

## ADVISING AND CAREERS

For advising in Russian or Polish contact our Russian and Polish undergraduate advisor Anna Tumarkin (atumarki@wisc.edu).

For placement in Russian contact Anna Tumarkin (atumarki@wisc.edu).
For placement in Polish contact Ewa Miernowska (miernows@wisc.edu).
For information on the Russian Flagship Program contact Laura
Weigel (leweigel@wisc.edu) or visit the program page (https://
russianflagship.wisc.edu).

For other undergraduate concerns, please contact our undergraduate coordinator:

```
Bridget Sutton, Undergraduate Coordinator
undergrad@gns.wisc.edu
608-262-2090
1306 Van Hise
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For additional career advising, please contact:
SuccessWorks at the College of Letters \& Science
711 State Street, Suite 300
Madison, WI 53703
608-262-3921
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors David Danaher, Alexander Dolinin, Karen Evans-Romaine, Halina Filipowicz, Tomislav Longinovic, Irina Shevelenko, Manon van de Water

## Associate Professor Andrew Reynolds

Assistant Professor Marina Zilbergerts
Faculty Associates Jennifer Tishler, Anna Tumarkin
Senior Lecturers Galina Lapina, Ewa Miernowska
Lecturer Alexandra Walter

## RUSSIAN, B.S.

Elementary courses in Russian and Polish are designed to meet the needs of students who begin to study the language in college as well as those who began to study the language in high school. One unit (year) of high school coursework is roughly equivalent to one semester of college work; all incoming students, however, who want to continue their study
of Russian or Polish are assigned to courses on the basis of placement tests. These tests may admit a student to a more advanced course, but give no credit toward graduation. Students should speak with their instructor regarding retroactive credits during the first week of class.

## HOW TO GET IN

To declare a major in Russian, students should make an appointment with the Russian undergraduate advisor (atumarki@wisc.edu), or call 608-262-3498

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign
Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The Russian major requires $\mathbf{3 5}$ credits and completion of one of three program tracks.

## CORE LANGUAGE \& CULTURE

| Code | Title | Credits |
| :---: | :---: | :---: |
| Language |  |  |
| SLAVIC 275 <br> \& SLAVIC 276 <br> or SLAVIC 279 | Third Year Russian I and Third Year Russian II ${ }^{1}$ Intensive Third Year Russian | 8 |
| SLAVIC 315 \& SLAVIC 316 | Russian Language and Culture I and Russian Language and Culture II | 4 |
| SLAVIC 321 <br> \& SLAVIC 322 | Fourth Year Russian I and Fourth Year Russian II | 8 |
| Culture through Literature |  | 3-4 |
| LITTRANS 233 | Russian Life and Culture Through Literature and Art (to 1917) |  |

or LITTRANS 23،Soviet Life and Culture Through Literature and Art (from 1917)

## Total Credits

23-24

## COMPLETE A TRACK

## Language \& Literature

Note: Students majoring in Russian-Language and Literature are eligible to declare the certificate in Russian, East European, and Central Asian studies (http://guide.wisc.edu/undergraduate/letters-science/institute-regional-international-studies/russian-east-european-central-asiancertificate).

| Code | Title | Credits |
| :---: | :---: | :---: |
| Literature in translation (2 courses) |  | 8 |
| LITTRANS 203 <br> \& LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation I and Survey of 19th and 20th Century Russian Literature in Translation II |  |
| Literature in Russian (1 course) |  | 4 |
| SLAVIC 405 | Women in Russian Literature |  |
| SLAVIC 420 | Chekhov |  |
| SLAVIC 421 | Gogol |  |
| SLAVIC 422 | Dostoevsky |  |
| SLAVIC 424 | Tolstoy |  |
| SLAVIC 440 | Soviet Literature |  |

Total Credits
1 LITTRANS 203 and LITTRANS 204 are open to first year students. It is preferable to take these Literature in Translation courses in numerical sequence, though they may be taken out of sequence.

## Language \& Civilization

Note: Students majoring in Russian-Language and Civilization are not eligible to declare the certificate in Russian, East European, and Central Asian studies (http://guide.wisc.edu/undergraduate/letters-science/ institute-regional-international-studies/russian-east-european-central-asian-certificate).

| Code <br> Civilization (1 course) <br> SLAVIC/GEOG/ <br> HISTORY/ <br> POLI SCI 253 | Russia: An Interdisciplinary Survey | Credits |
| :--- | :--- | ---: |
| Area Studies |  |  |
| LITTRANS 233 | Russian Life and Culture Through <br> Literature and Art (to 1917) (if not <br> used for the Culture requirement) |  |
| or LITTRANS 23، Soviet Life and Culture Through Literature and Art |  |  |
| (from 1917) |  |  |


| HISTORY 420 | Russian Social and Intellectual <br> History |
| :--- | :--- |
| HISTORY/CHICLA/ Latino History and Politics <br> POLI SCI 422 |  |
| HISTORY 600 | Advanced Seminar in History ${ }^{2}$ |
| POLI SCI 401 | Selected Topics in Political Science <br> 2 |
| POLI SCI 534 | Socialism and Transitions to the <br> Market |
| POLI SCI 334 | Russian Politics |
| SLAVIC 433 | History of Russian Culture ${ }^{3}$ |
| SLAVIC 434 | Contemporary Russian Culture ${ }^{3}$ |
| THEATRE/ | History of Russian Theatre |
| SLAVIC 532 |  |

## Total Credits

2 Eligible only when the topic focuses on Russia.
SLAVIC 433 and SLAVIC 434 are taught in Russian; enrollment requires consent of the instructor.

## Native Speaker

Note: Students majoring in Russian-Language and Literature are eligible to declare the certificate in Russian, East European, and Central Asian studies (http://guide.wisc.edu/undergraduate/letters-science/institute-regional-international-studies/russian-east-european-central-asiancertificate).
Students whose Russian language placement exempts them from taking any of the Core Language courses must take additional electives to meet the minimum credits for the major.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Literature in Translation (2 courses) |  | 8 |
| LITTRANS 203 <br> \& LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation I and Survey of 19th and 20th Century Russian Literature in Translation II |  |
| Literature in Russian |  | 4 |
| SLAVIC 405 | Women in Russian Literature |  |
| SLAVIC 420 | Chekhov |  |
| SLAVIC 421 | Gogol |  |
| SLAVIC 422 | Dostoevsky |  |
| SLAVIC 424 | Tolstoy |  |
| SLAVIC 440 | Soviet Literature |  |
| Total Credits |  | 12 |

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all major courses
- 2.000 GPA on 15 upper-level credits for the major, taken in residence ${ }^{4}$
- 15 credits in the major, taken on campus


## ${ }^{4}$ Upper-Level Courses in the Major

| Code | Title |
| :--- | :--- | Credits


| SLAVIC 309 | Russian Area Studies on Study <br> Abroad |
| :--- | :--- |
| SLAVIC 310 | Topics in Russian: Study Abroad |
| SLAVIC 315 | Russian Language and Culture I |
| SLAVIC 316 | Russian Language and Culture II |
| SLAVIC 321 | Fourth Year Russian I |
| SLAVIC 322 | Fourth Year Russian II |
| SLAVIC 405 | Women in Russian Literature |
| SLAVIC 420 | Chekhov |
| SLAVIC 421 | Gogol |
| SLAVIC 422 | Dostoevsky |
| SLAVIC 424 | Tolstoy |
| SLAVIC 440 | Soviet Literature |
| SLAVIC/ | History of Russian Theatre |
| THEATRE 532 |  |
| SLAVIC 681 | Senior Honors Thesis |
| SLAVIC 682 | Senior Honors Thesis |
| SLAVIC 699 | Directed Study |

## DISTINCTION IN THE MAJOR

Students who are not pursuing Honors in the Russian major and who distinguish themselves in the quality of their work may request that Distinction in the Major be noted on their transcript. The major advisor will determine eligibility-at a minimum, a 3.500 major GPA and an acceptable Senior Thesis are required.

## HONORS IN THE MAJOR IN RUSSIAN

Students may declare Honors in the Russian Major in consultation with the Russian Honors advisor (atumarki@wisc.edu).

To earn Honors in the Major in Russian, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Minimum 3.300 University GPA
- Minimum 3.500 GPA in SLAVIC 205 through SLAVIC 699 and courses in the major
- 20 credits in the major taken for Honors, in Residence, not through Study Abroad, with grades of B or better in these courses:
- SLAVIC 275, SLAVIC 276, SLAVIC 321, SLAVIC 322
- A Senior Honor Thesis in SLAVIC 681 and SLAVIC 682 for at least 6 credits


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Russian language proficiency) Develop speaking, listening, writing, and reading skills and integrate these skills to communicate in Russian in a variety of social situations.
2. Develop and apply writing skills and oral communication skills appropriate to liberal arts education in the context of Slavic studies.
3. Develop and apply critical thinking skills inherent in the liberal arts tradition in the context of Slavic studies.
4. (Language \& Literature Track and Native Speaker Track) Analyze and interpret works of literature in themselves and in the context of specific historical and cultural conditions.
5. (Language \& Civilization Track) Demonstrate insight into Russian culture and civilization and apply this knowledge across disciplines such as history, political science, the arts, geography, business, economics, sociology, the sciences, gender studies, philosophy, law, folklore.

## ADVISING AND CAREERS

## ADVISING AND CAREERS

For advising in Russian or Polish contact our Russian and Polish undergraduate advisor Anna Tumarkin (atumarki@wisc.edu).

For placement in Russian contact Anna Tumarkin (atumarki@wisc.edu).
For placement in Polish contact Ewa Miernowska (miernows@wisc.edu).
For information on the Russian Flagship Program contact Laura
Weigel (leweigel@wisc.edu) or visit the program page (https:// russianflagship.wisc.edu).

For other undergraduate concerns, please contact our undergraduate coordinator.

> Bridget Sutton, Undergraduate Coordinator undergrad@gns.wisc.edu
> $608-262-2090$
> 1306 Van Hise

For additional career advising, please contact:
SuccessWorks at the College of Letters \& Science
711 State Street, Suite 300
Madison, WI 53703

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors David Danaher, Alexander Dolinin, Karen Evans-Romaine, Halina Filipowicz, Tomislav Longinovic, Irina Shevelenko, Manon van de Water

Associate Professor Andrew Reynolds
Assistant Professor Marina Zilbergerts
Faculty Associates Jennifer Tishler, Anna Tumarkin
Senior Lecturers Galina Lapina, Ewa Miernowska
Lecturer Alexandra Walter

## SCANDINAVIAN STUDIES, B.A.

The Scandinavian studies program provides the opportunity to learn a Scandinavian language or Finnish (modern Icelandic only occasionally). The literature, folklore, and culture of the Nordic countries are taught both in the original languages and in English translation. Partly in cooperation with other departments, courses in Scandinavian area studies are offered (history, social institutions, geography, art, archaeology). Students who major in the field may continue graduate studies toward an M.A. in Scandinavian philology, literature, or area studies, and toward a Ph.D. in Scandinavian literature, philology, or folklore.

The program strongly encourages a junior-year abroad in a Nordic country; several exchange programs are available. Students who transfer to this university after a year abroad should contact the undergraduate advisor as early as possible to schedule a placement test.

Note: SCAND ST 301 Intensive Finnish I and SCAND ST 302 Intensive Finnish II each count as 2 units of foreign language for the purpose of meeting the College of Letters \& Science foreign language requirement.

Majors should see the advisor during the semester before their last semester. Prospective majors are urged to consult the undergraduate advisor about their program at the first possible opportunity.

## HOW TO GET IN

Student interested in pursuing an undergraduate major in Scandinavian studies should contact the advisor about declaring the major.

## ADVISOR

Nete Schmidt
1368 Van Hise
608-262-2090
aschmidt2@wisc.edu

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree
requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
Foreign

- Complete the fourth unit of a foreign language; OR

Language

- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

## LANGUAGE

| SCAND ST 251 | Readings in Norwegian Literature |
| :--- | :--- |
| SCAND ST 261 | Readings in Swedish Literature |
| SCAND ST 271 | Readings in Danish Literature |

## LITERATURE \& CULTURE

18 credits and at least one course from each area

| Language, Culture and History |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| SCAND ST 401 | Contemporary Scandinavian Languages |  |
| SCAND ST 405 | Nynorsk sprak og kultur |  |
| SCAND ST/ MEDIEVAL 407 | Old Norse |  |
| SCAND ST/ <br> MEDIEVAL 408 | Old Norse |  |
| SCAND ST/ MEDIEVAL 409 | Survey of Old Norse-Icelandic Literature |  |
| SCAND ST 410 | Introduction to Scandinavian Linguistics |  |
| SCAND ST 411 | Areas in Scandinavian Literature |  |
| SCAND ST 414 | History of the Scandinavian <br> Languages I: Proto- to Common Scandinavian |  |

SCAND ST 415 History of the Scandinavian Languages II: Standard Languages
SCAND ST 429 Mythology of Scandinavia
SCAND ST/ The Vikings
MEDIEVAL 430
SCAND ST/ History of Scandinavia to 1815
HISTORY 431
SCAND ST/ History of Scandinavia Since 1815
HISTORY 432
SCAND ST 433 The Scandinavian Tale and Ballad
SCAND ST 435 The Icelandic Sagas
SCAND ST/ Scandinavian American Folklore
FOLKLORE 440
SCAND ST/ Sami Culture, Yesterday and Today
FOLKLORE 443
SCAND ST/ Kalevala and Finnish Folk-Lore
MEDIEVAL 444
SCAND ST/ Celtic-Scandinavian Cultural
FOLKLORE/ Interrelations
MEDIEVAL 446
SCAND ST 476 Scandinavian Life and Civilization II
SCAND ST 496 The Scandinavian Heritage in America

SCAND ST 510 Topics in Scandinavian Linguistics
SCAND ST 511 Paleography and Philology - Old
Norse
SCAND ST/ Contemporary Scandinavia: Politics
HISTORY 577 and History
SCAND ST 630 Fundamentals of Bibliography and Research

## 1 course from

| Literature |
| :--- | :--- |
| Code |
| SCAND ST 373 | \(\left.\begin{array}{ll}Title <br>

Masterpieces of Scandinavian <br>
Literature: From the Middle Ages to <br>
1900\end{array}\right]\) Credits

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all SCAND ST and major courses
2.000 GPA on at least 15 credits of upper -level work in the major ${ }^{1}$

15 credits in SCAND ST taken on campus
1 SCAND ST 373 and above are considered upper level in the major

## HONORS IN THE MAJOR

Students may declare Honors in the Scandinavian Studies Major in consultation with the Scandinavian Studies advisor(s).

## HONORS IN THE SCANDINAVIAN STUDIES MAJOR: REQUIREMENTS

To earn Honors in the Major in Scandinavian Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.300 in all SCAND ST and major courses
- 8 Honors credits numbered SCAND ST 373 and higher
- 1 Survey of Scandinavian Literature course with a grade of B or better, from:

| Code | Title |
| :--- | :--- |
| SCAND ST 634 | Survey of Scandinavian Literature: <br> $1500-1800$ |
| SCAND ST 635 | Survey of Scandinavian Literature: <br> $1800-1890$ |
| SCAND ST 636 | Survey of Scandinavian Literature: <br> $1890-1920$ |
| • A two-semester Senior Honors Thesis |  |
| in SCAND ST 681 and SCAND ST 682, for a total of 6 credits. |  |

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of
Work
Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Reach Intermediate-High / Advanced-Low language proficiency in speaking, reading, and writing, according to ACTFL guidelines, through five semesters of a Nordic language.
2. Familiarize the students with three Nordic languages (Danish, Norwegian, and Swedish) to complement their knowledge of their chosen language via the 6th semester Scandinavian Language class (SCAND ST 401).
3. Demonstrate understanding in a global context in a field of study covering literature, history, area studies, folklore, or philology classes.
4. Select and utilize the most appropriate methods of study and inquiry within the content of the classes taken.
5. Evaluate and respond to information pertaining to the classes taken, showing clear analytical and critical thinking skills.
6. Communicate clearly in appropriate ways in the classes taken.
7. If possible, benefit from a semester or year's study abroad leading to a consolidation and enhancement of the above mentioned skills.
8. Recognize and apply principles of ethical and professional conduct.

## ADVISING AND CAREERS

For advising and placement in Scandinavian studies contact our undergraduate advisor.

Nete Schmidt, Scandinavian Studies Undergraduate Advisor aschmidt2@wisc.edu 1368 Van Hise

For other undergraduate concerns, please contact our undergraduate coordinator.

> Bridget Sutton, Undergraduate Coordinator
> undergrad@gns.wisc.edu
> 608-262-2090
> 1306 Van Hise

For additional career advising, please contact:

SuccessWorks at the College of Letters \& Science
711 State Street, Suite 300
Madison, WI 53703
608-262-3921
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Susan Brantly, Thomas DuBois, Kirsten Wolf
Assistant Professors Dean Krouk, Claus Andersen
Faculty Associates Scott A. Mellor, Nete Schmidt
Senior Lecturer Peggy Hager
Associate Lecturer Todd Michelson-Ambelang

## SCANDINAVIAN STUDIES, B.S.

The Scandinavian studies program provides the opportunity to learn a Scandinavian language or Finnish (modern Icelandic only occasionally). The literature, folklore, and culture of the Nordic countries are taught both in the original languages and in English translation. Partly in cooperation with other departments, courses in Scandinavian area studies are offered (history, social institutions, geography, art, archaeology). Students who major in the field may continue graduate studies toward an M.A. in Scandinavian philology, literature, or area studies, and toward a Ph.D. in Scandinavian literature, philology, or folklore.

The program strongly encourages a junior-year abroad in a Nordic country; several exchange programs are available. Students who transfer to this university after a year abroad should contact the undergraduate advisor as early as possible to schedule a placement test.

Note: SCAND ST 301 Intensive Finnish I and SCAND ST 302 Intensive Finnish II each count as 2 units of foreign language for the purpose of meeting the College of Letters \& Science foreign language requirement.

Majors should see the advisor during the semester before their last semester. Prospective majors are urged to consult the undergraduate advisor about their program at the first possible opportunity.

## HOW TO GET IN

Student interested in pursuing an undergraduate major in Scandinavian studies should contact the advisor about declaring the major.

## ADVISOR

Nete Schmidt
1368 Van Hise
608-262-2090
aschmidt2@wisc.edu

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world.

Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4- or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT |

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ |  |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison <br> GPAs |
|  | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

## LANGUAGE

| Code <br> 1 course from | Title | Credits |
| :---: | :---: | :---: |
| SCAND ST 251 | Readings in Norwegian Literature |  |
| SCAND ST 261 | Readings in Swedish Literature |  |
| SCAND ST 271 | Readings in Danish Literature |  |

## LITERATURE \& CULTURE

18 credits and at least one course from each area

| Language, Culture and History |  |
| :--- | :--- |
| Code <br> SCAND ST 401 | Contemporary Scandinavian <br> Languages |
| SCAND ST 405 | Credits |
| SCAND ST/ <br> MEDIEVAL 407 | Old Norse |
| SCAND ST/ <br> MEDIEVAL 408 | Old Norse |
| SCAND ST/ <br> MEDIEVAL 409 | Survey of Old Norse-Icelandic <br> Literature |
| SCAND ST 410 | Introduction to Scandinavian <br> Linguistics |
| SCAND ST 411 | Areas in Scandinavian Literature |
| SCAND ST 414 | History of the Scandinavian <br> Languages I: Proto- to Common |
| SCAND ST 415 | Scandinavian <br> Listory of the Scandinavian <br> Languages II: Standard Languages |
| SCAND ST 429 | Mythology of Scandinavia |
| SCAND ST/ | The Vikings |
| MEDIEVAL 430 | History of Scandinavia to 1815 |
| SCAND ST/ | History of Scandinavia Since 1815 |
| HISTORY 431 | The Scandinavian Tale and Ballad |
| SCAND ST/ | THSTORY 432 |


| SCAND ST/ <br> FOLKLORE 440 | Scandinavian American Folklore |  |
| :---: | :---: | :---: |
| SCAND ST/ FOLKLORE 443 | Sami Culture, Yesterday and Today |  |
| SCAND ST/ <br> MEDIEVAL 444 | Kalevala and Finnish Folk-Lore |  |
| SCAND ST/ <br> FOLKLORE/ <br> MEDIEVAL 446 | Celtic-Scandinavian Cultural Interrelations |  |
| SCAND ST 476 | Scandinavian Life and Civilization II |  |
| SCAND ST 496 | The Scandinavian Heritage in America |  |
| SCAND ST 510 | Topics in Scandinavian Linguistics |  |
| SCAND ST 511 | Paleography and Philology - Old Norse |  |
| SCAND ST/ HISTORY 577 | Contemporary Scandinavia: Politics and History |  |
| SCAND ST 630 | Fundamentals of Bibliography and Research |  |
| Literature |  |  |
| Code | Title | Credits |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 |  |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century |  |
| SCAND ST 419 | Scandinavian Children's Literature |  |
| SCAND ST 420 | The Woman in Scandinavian Literature |  |
| SCAND ST 421 | Advanced Topics in Nordic Studies <br> (1 Norwegian-American Folksong) |  |
| SCAND ST 421 | Advanced Topics in Nordic Studies (2 Finnish-American Folksong) |  |
| SCAND ST 421 | Advanced Topics in Nordic Studies (4 Hagiography in the North) |  |
| SCAND ST 422 | The Drama of Henrik Ibsen |  |
| SCAND ST 423 | The Drama of August Strindberg |  |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction |  |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel |  |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature |  |
| SCAND ST 427 | Contemporary Scandinavian Literature |  |
| SCAND ST/ <br> LITTRANS 428 | Memory and Literature from Proust to Knausgard |  |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen |  |
| SCAND ST 436 | Topics in Scandinavian Literature |  |
| SCAND ST 450 | Scandinavian Decadence in its European Context |  |
| SCAND ST 475 | The Writings of Hans Christian Andersen for Scandinavian Majors |  |
| SCAND ST 520 | Special Topics |  |


| SCAND ST 634 | Survey of Scandinavian Literature: <br> $1500-1800$ |
| :--- | :--- |
| SCAND ST 635 | Survey of Scandinavian Literature: <br>  <br> 1800-1890 |
| SCAND ST 636 | Survey of Scandinavian Literature: <br>  <br> $1890-1920$ |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all SCAND ST and major courses
2.000 GPA on at least 15 credits of upper -level work in the major ${ }^{1}$

15 credits in SCAND ST taken on campus
1 SCAND ST 373 and above are considered upper level in the major

## HONORS IN THE MAJOR

Students may declare Honors in the Scandinavian Studies Major in consultation with the Scandinavian Studies advisor(s).

## HONORS IN THE SCANDINAVIAN STUDIES MAJOR: REQUIREMENTS

To earn Honors in the Major in Scandinavian Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.300 in all SCAND ST and major courses
- 8 Honors credits numbered SCAND ST 373 and higher
- 1 Survey of Scandinavian Literature course with a grade of B or better, from:

| Code | Title | Credits |
| :---: | :--- | :--- |
| SCAND ST 634 | Survey of Scandinavian Literature: |  |
|  | 1500-1800 |  |
| SCAND ST 635 | Survey of Scandinavian Literature: <br> $1800-1890$ |  |
| SCAND ST 636 | Survey of Scandinavian Literature: <br> $1890-1920$ |  |
|  |  |  |

- A two-semester Senior Honors Thesis
in SCAND ST 681 and SCAND ST 682, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Reach Intermediate-High / Advanced-Low language proficiency in speaking, reading, and writing, according to ACTFL guidelines, through five semesters of a Nordic language.
2. Familiarize the students with three Nordic languages (Danish, Norwegian, and Swedish) to complement their knowledge of their chosen language via the 6th semester Scandinavian Language class (SCAND ST 401).
3. Demonstrate understanding in a global context in a field of study covering literature, history, area studies, folklore, or philology classes.
4. Select and utilize the most appropriate methods of study and inquiry within the content of the classes taken.
5. Evaluate and respond to information pertaining to the classes taken, showing clear analytical and critical thinking skills.
6. Communicate clearly in appropriate ways in the classes taken.
7. If possible, benefit from a semester or year's study abroad leading to a consolidation and enhancement of the above mentioned skills.
8. Recognize and apply principles of ethical and professional conduct.

## ADVISING AND CAREERS

For advising and placement in Scandinavian studies contact our undergraduate advisor.

Nete Schmidt, Scandinavian Studies Undergraduate Advisor aschmidt2@wisc.edu 1368 Van Hise

For other undergraduate concerns, please contact our undergraduate coordinator.

Bridget Sutton, Undergraduate Coordinator
undergrad@gns.wisc.edu
608-262-2090
1306 Van Hise
For additional career advising, please contact:
SuccessWorks at the College of Letters \& Science
711 State Street, Suite 300
Madison, WI 53703
608-262-3921
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate
in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Susan Brantly, Thomas DuBois, Kirsten Wolf
Assistant Professors Dean Krouk, Claus Andersen
Faculty Associates Scott A. Mellor, Nete Schmidt
Senior Lecturer Peggy Hager
Associate Lecturer Todd Michelson-Ambelang

## SCANDINAVIAN STUDIES, CERTIFICATE

The Scandinavian studies program provides the opportunity to learn a Scandinavian language or Finnish (modern Icelandic only occasionally). The literature, folklore, and culture of the Nordic countries are taught both in the original languages and in English translation. Partly in cooperation with other departments, courses in Scandinavian area studies are offered (history, social institutions, geography, art, archaeology).

## REQUIREMENTS

## CERTIFICATE REQUIREMENTS

The Scandinavian studies certificate requires 18 credits of SCAND ST, 9 credits must be taken at the 300 level or higher. Select at least one course from each of the following areas:

## A. LANGUAGES DANISH

| Code | Title | Credits |
| :--- | :--- | ---: |
| SCAND ST 121 | First Semester Danish | 4 |
| SCAND ST 122 | Second Semester Danish | 4 |
| SCAND ST 221 | Second Year Danish | 4 |
| SCAND ST 222 | Second Year Danish | 4 |
| SCAND ST 271 | Readings in Danish Literature | $3-4$ |


| FINNISH |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| SCAND ST 131 | First Semester Finnish | 4 |
| SCAND ST 132 | Second Semester Finnish | 4 |
| SCAND ST 301 | Intensive Finnish I | 7 |
| SCAND ST 302 | Intensive Finnish II | 7 |
| ICELANDIC |  |  |
| Code | Title | Credits |
| SCAND ST 520 | Special Topics (Icelandic) | 3 |
| NORWEGIAN |  |  |
| Code | Title | Credits |
| SCAND ST 101 | First Semester Norwegian | 4 |
| SCAND ST 102 | Second Semester Norwegian | 4 |
| SCAND ST 201 | Second Year Norwegian | 4 |
| SCAND ST 202 | Second Year Norwegian | 4 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SAMI |  |  |
| Code | Title | Credits |
| SCAND ST 404 | Languages of Northern Europe | 2-4 |
| SWEDISH |  |  |
| Code | Title | Credits |
| SCAND ST 111 | First Semester Swedish | 4 |
| SCAND ST 112 | Second Semester Swedish | 4 |
| SCAND ST 211 | Second Year Swedish | 4 |
| SCAND ST 212 | Second Year Swedish | 4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |


| Code | Title | Credits |
| :---: | :---: | :---: |
| SCAND ST 296 | The Scandinavian Heritage in America | 3 |
| SCAND ST 401 | Contemporary Scandinavian Languages | 3 |
| SCAND ST 405 | Nynorsk sprak og kultur | 3 |
| SCAND ST/ MEDIEVAL 407 | Old Norse | 3 |
| SCAND ST/ <br> MEDIEVAL 408 | Old Norse | 3 |
| SCAND ST/ MEDIEVAL 409 | Survey of Old Norse-Icelandic Literature | 3 |
| SCAND ST 410 | Introduction to Scandinavian Linguistics | 3 |
| SCAND ST 414 | History of the Scandinavian <br> Languages I: Proto- to Common Scandinavian | 3 |
| SCAND ST 415 | History of the Scandinavian Languages II: Standard Languages | 3 |
| SCAND ST 429 | Mythology of Scandinavia | 4 |
| SCAND ST/ <br> MEDIEVAL 430 | The Vikings | 4 |
| SCAND ST/ HISTORY 431 | History of Scandinavia to 1815 | 3 |


| SCAND ST/ HISTORY 432 | History of Scandinavia Since 1815 | 3 |
| :---: | :---: | :---: |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST/ <br> FOLKLORE 440 | Scandinavian American Folklore | 3 |
| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| SCAND ST/ MEDIEVAL 444 | Kalevala and Finnish Folk-Lore | 4 |
| SCAND ST/ <br> FOLKLORE/ <br> MEDIEVAL 446 | Celtic-Scandinavian Cultural Interrelations | 3 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SCAND ST 510 | Topics in Scandinavian Linguistics | 3 |
| SCAND ST 511 | Paleography and Philology - Old Norse | 3 |
| SCAND ST/ HISTORY 577 | Contemporary Scandinavia: Politics and History | 3-4 |
| SCAND ST 630 | Fundamentals of Bibliography and Research | 3 |

## C. SCANDINAVIAN LITERATURE COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| SCAND ST 284 | The "Scandinavian Modern" Phenomenon in Arts and Literature | 3 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 421 | Advanced Topics in Nordic Studies <br> (1 Norwegian-American Folksong) | 1-2 |
| SCAND ST 421 | Advanced Topics in Nordic Studies (2 Finnish-American Folksong) | 1-2 |
| SCAND ST 421 | Advanced Topics in Nordic Studies (4 Hagiography in the North) | 1-2 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST/ <br> LITTRANS 428 | Memory and Literature from Proust to Knausgard | 3 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |


| SCAND ST 436 | Topics in Scandinavian Literature | $3-4$ |
| :--- | :--- | :---: |
| SCAND ST 450 | Scandinavian Decadence in its <br> European Context | $3-4$ |
| SCAND ST 475 | The Writings of Hans Christian <br> Andersen for Scandinavian Majors | 4 |
| SCAND ST 520 | Special Topics | 3 |
| SCAND ST 634 | Survey of Scandinavian Literature: <br> $1500-1800$ | 3 |
| SCAND ST 635 | Survey of Scandinavian Literature: <br> $1800-1890$ | 3 |
| SCAND ST 636 | Survey of Scandinavian Literature: <br> $1890-1920$ | 3 |

## RESIDENCE AND QUALITY OF WORK

At least 9 credits must be taken in residence. A UW-Madisonsponsored study abroad program applies as in-residence credit.

A 2.000 cumulative GPA is required in all courses eligible for the certificate.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Demonstrate understanding in a global context in a field of study covering literature, history, area studies, folklore, or philology classes.
2. Select and utilize the most appropriate methods of study and inquiry within the content of the classes taken.
3. Evaluate and respond to information pertaining to the classes taken, showing clear analytical and critical thinking skills.
4. Communicate clearly in appropriate ways in the classes taken.
5. Recognize and apply principles of ethical and professional conduct.

## ADVISING AND CAREERS

For advising and placement in Scandinavian studies contact our undergraduate advisor.

Nete Schmidt, Scandinavian Studies Undergraduate Advisor aschmidt2@wisc.edu
1368 Van Hise
For other undergraduate concerns, please contact our undergraduate coordinator:

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Bridget Sutton, Undergraduate Coordinator
undergrad@gns.wisc.edu
608-262-2090
1306 Van Hise
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For additional career advising, please contact:
SuccessWorks at the College of Letters \& Science

711 State Street, Suite 300
Madison, WI 53703
608-262-3921
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Susan Brantly, Thomas DuBois, Kirsten Wolf
Assistant Professors Dean Krouk, Claus Andersen
Faculty Associates Scott A. Mellor, Nete Schmidt
Senior Lecturer Peggy Hager
Associate Lecturer Todd Michelson-Ambelang

## HISTORY

3211 Mosse Humanities Building, 455 North Park Street, Madison, WI 53706; 608-263-1800; history.wisc.edu

To study history is to study change: historians are experts in examining and interpreting human identities and transformations of societies and civilizations over time. They use a range of methods and analytical tools to answer questions about the past and to reconstruct the diversity of human experience: how profoundly people have differed in their ideas, institutions, and cultural practices; how widely their experiences have varied by time and place, and the ways they have struggled while inhabiting a shared world. Historians use a wide range of sources to weave individual lives and collective actions into narratives that bring critical perspectives on both our past and our present. Studying history helps us understand and grapple with complex questions and dilemmas by examining how the past has shaped (and continues to shape) global, national, and local relationships between societies and people.

## DEGREES/MAJORS/CERTIFICATES

- History and History of Science, Medicine, and Technology, B.A. (p. 756)
- History and History of Science, Medicine, and Technology, B.S. (p. 761)
- History of Science, Medicine, and Technology, B.A. (p. 767)
- History of Science, Medicine, and Technology, B.S. (p. 769)
- History, B.A. (p. 772)
- History, B.S. (p. 781)
- Medieval Studies, Certificate (p. 790)


## PEOPLE

Professors Boswell, Cronon, Desan, Dunlavy, Enke, Enstad, Hansen, Hirsch, Hsia, S. Johnson, Kantrowitz, Keller Kleijwegt, Koshar, Lederer, McCoy, McDonald, Michels, Mitman, Neville, Nyhart, Plummer, Reese, Roberts, Sharpless, Shoemaker, Sommerville, Sweet, Thal, Wandel, Wink, Young

Associate Professors Chan, Cheng, Dennis, Gómez, Hall, Ipsen, Kim, Kodesh, Murthy, Ratner-Rosenhagen, Taylor, Ussishkin

Assistant Professors Brown, Callaci, Chamedes, Ciancia, Haynes, Hennessy, Hicks, Iber, Jackson, Kinzley, Lapina, Nelson, Whiting

Teaching Associates Carlsson, Cullinane, Keyser

## HISTORY AND HISTORY OF SCIENCE, MEDICINE, AND TECHNOLOGY, B.A.

Admissions to the History and History of Science, Medicine, and Technology B.A. have been suspended as of fall 2017. If you have any questions, please contact the department (historydept@history.wisc.edu).

To study history is to study change: historians are experts in examining and interpreting human identities and transformations of societies and civilizations over time. They use a range of methods and analytical tools to answer questions about the past and to reconstruct the diversity of human experience: how profoundly people have differed in their ideas, institutions, and cultural practices; how widely their experiences have varied by time and place, and the ways they have struggled while inhabiting a shared world. Historians use a wide range of sources to weave individual lives and collective actions into narratives that bring critical perspectives on both our past and our present. Studying history helps us understand and grapple with complex questions and dilemmas by examining how the past has shaped (and continues to shape) global, national, and local relationships between societies and people.

## HOW TO GET IN

If you have any questions, please contact the department (historydept@history.wisc.edu).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4 - or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | Quantitative Reasoning Part A \& Part B * |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

A minimum of 30 credits in history and in history of science, medicine, and technology distributed as follows:

- At least four courses in HISTORY. Students are urged to take HISTORY 201 The Historian's Craft as one of these courses.
- At least one of these courses must be in U.S. history.
- At least one must be in European history.
- At least one must be from one of the following Breadth categories: Africa, Central or East Asia, South or Southeast Asia, Latin America, Middle East, Transnational.
- Though some courses may qualify in more than one Geographic Breadth area, a course may satisfy only one category for purposes of meeting the breadth requirement. Some topics courses in history may qualify for Geographic Breadth.
- At least four courses in HIST SCI. Students are urged to take one or more of these from the 300-599 series.
- At least 15 credits of upper-level coursework (courses that are Intermediate or Advanced count as upper-level) of which at least 6 credits must be in HISTORY and at least 6 credits must be in HIST SCI.
- At least one seminar course chosen from HISTORY 600 Advanced Seminar in History or HIST SCI 555 Undergraduate Seminar in History of Science.
- Knowledge of a science is recommended but not required for the joint major.


## COURSE LISTS

U.S. History

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 101 | Amer Hist to the Civil War Era, the Origin \& Growth of the U S | 4 |
| HISTORY 102 | American History, Civil War Era to the Present | 4 |
| HISTORY/ENVIR ST/ HIST SCI 125 | Green Screen: Environmental Perspectives through Film | 3 |
| HISTORY 136 | Sport, Recreation, \& Society in the United States | 3-4 |
| HISTORY 150 | American Histories: The Nineteenth Century | 4 |
| HISTORY/ <br> ASIAN AM 160 | Asian American History: Movement and Dislocation | 3-4 |
| HISTORY/ ASIAN AM 161 | Asian American History: Settlement and National Belonging | 3-4 |
| HISTORY/ RELIG ST 212 | The History of Western Christianity to 1750 | 4 |
| HISTORY/ JEWISH 213 | Jews and American Pop. Culture | 3-4 |
| HISTORY/ JEWISH 219 | The American Jewish Experience: From Shtetl to Suburb | 4 |
| HISTORY 221 | Explorations in American History (H) | 3-4 |
| HISTORY/ LEGAL ST 261 | American Legal History to 1860 | 3-4 |
| HISTORY/ LEGAL ST 262 | American Legal History, 1860 to the Present | 3-4 |
| HISTORY 272 | History Study Abroad: United States History | 1-4 |
| HISTORY 302 | History of American Thought, 1859 to the Present | 3-4 |
| HISTORY 304 | United States, 1877-1914 | 3-4 |
| HISTORY 305 | United States 1914-1945 | 3-4 |
| HISTORY 306 | The United States Since 1945 | 3-4 |
| HISTORY/ <br> AFROAMER 321 | Afro-American History Since 1900 | 3-4 |
| HISTORY/ <br> AFROAMER 322 | Afro-American History to 1900 | 3-4 |
| HISTORY 329 | History of American Capitalism | 4 |
| HISTORY 343 | Colonial British North America | 3-4 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| HISTORY/ GEN\&WS 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| HISTORY/ GEN\&WS 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| HISTORY/CHICLA/ LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |


| HISTORY/ | Slavery, Civil War, and | 3-4 | HISTORY 115 | Medieval Europe 410-1500 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AFROAMER 393 | Reconstruction, 1848-1877 |  | HISTORY 119 | The Making of Modern Europe | 4 |
| HISTORY/HIST SCI/ | Science in America | 3 |  | 1500-1815 |  |
| MED HIST 394 |  |  | HISTORY 120 | Europe and the Modern World 1815 | 4 |
| HISTORY 403 | Immigration and Assimilation in | 3-4 |  | to the Present |  |
|  | American History |  | HISTORY 123 | English History: England to 1688 | 3-4 |
| HISTORY 408 | American Labor History: 1900- | 3-4 | HISTORY 124 | British History: 1688 to the Present | 4 |
|  | Present |  | HISTORY/ | Western Intellectual and Religious | 3-4 |
| HISTORY/ | History of American Education | 3 | RELIG ST 208 | History to 1500 |  |
| ED POL 412 |  |  | HISTORY/ | Life in the Middle Ages: An Inter- | 3-4 |
| HISTORY/ | Eastern European Jews in the | 3-4 | MEDIEVAL 215 | Departmental Course |  |
| JEWISH 416 | United States, 1880s-1930s |  | HISTORY 223 | Explorations in European History | 3-4 |
| HISTORY/CHICLA/ | Latino History and Politics | 3 |  | (H) |  |
| POLI SCI 422 |  |  | HISTORY 224 | Explorations in European History (S) | 3 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 | HISTORY/ GEOG/POLI SCI/ | Russia: An Interdisciplinary Survey | 4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 | SLAVIC 253 |  |  |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 | HISTORY/ GEOG/POLI SCI/ SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 |
| HISTORY/ENVIR ST/ | American Environmental History | 4 | HISTORY 303 | A History of Greek Civilization | 3-4 |
| GEOG 460 |  |  | HISTORY 304 | United States, 1877-1914 | 3-4 |
| HISTORY/ CHICLA 461 | The American West to1850 | 3-4 | HISTORY 305 | United States 1914-1945 | 3-4 |
|  |  |  | HISTORY 307 | A History of Rome | 3-4 |
| HISTORY/ <br> CHICLA 462 | The American West Since 1850 | 3-4 | HISTORY/E ASIAN/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| HISTORY 465 | Global Environmental History,The American Economy to 1865 | 3-4 | HISTORY/ MEDIEVAL/ | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ECON 466 | The American Economy Since 1865 | 3-4 | RELIG ST 309 |  |  |
| HISTORY/ <br> CHICLA 468 | Popular Culture in the Multi-racial United States | 3-4 | HISTORY/ MEDIEVAL/ | The Medieval Church | 3-4 |
| HISTORY/ENVIR ST/ | The Making of the American | 4 | RELIG ST 312 |  |  |
| GEOG 469 | Landscape |  | HISTORY/ | Introduction to Byzantine History | 3-4 |
| HISTORY/ | American Indian History | 3-4 | MEDIEVAL 313 | and Civilization |  |
| AMER IND 490 |  |  | HISTORY/ | Problems in Byzantine History and | 3-4 |
| HISTORY/HIST SCI/ | Society and Health Care in | 3 | MEDIEVAL 314 | Civilization |  |
| MED HIST 504 | American History |  | HISTORY/ | Medieval Social and Intellectual | 3-4 |
| HISTORY/ JOURN 560 | History of Mass Communication | 4 | MEDIEVAL/ <br> RELIG ST 318 | History, 1200-1450 |  |
| HISTORY/LIS 569 | History of American Librarianship | 3 | HISTORY 320 | Early Modern France, 1500-1715 | 3-4 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 | HISTORY/ AFROAMER 321 | Afro-American History Since 1900 | 3-4 |
| HISTORY/ <br> AFROAMER 628 | History of the Civil Rights Movement in the United States | 3 | HISTORY/ <br> HIST SCI 323 | The Scientific Revolution: From Copernicus to Newton | 3 |
| HISTORY 201 | The Historian's Craft (Wisconsin) | 3-4 | HISTORY/ | Science in the Enlightenment | 3 |
| HISTORY 200 | Historical Studies (American | 1-4 | HIST SCI 324 |  |  |
|  | Families) |  | HISTORY 333 | The Renaissance | 3-4 |
| European Histo |  |  | HISTORY/ RELIG ST 334 | The Reformation | 3-4 |
| Code | Title | Credits | HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY/ CLASSICS 110 | The Ancient Mediterranean | 4 | HISTORY 340 | Cultural History of Korea | 3-4 |
| HISTORY 111 | Culture \& Society in the Ancient Mediterranean | 3-4 | HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY/ MEDIEVAL/ | The World of Late Antiquity (200-900 C.E.) | 4 | HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |


| HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| :---: | :---: | :---: |
| HISTORY 351 | Seventeenth-Century Europe | 3-4 |
| HISTORY 352 | Eighteenth Century Europe | 3-4 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 358 | French Revolution and Napoleon | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 | 3-4 |
| HISTORY/ <br> EASTDS 363 | China and World War II in Asia | 3-4 |
| HISTORY 367 | Society and Ideas in Shakespeare's England | 3-4 |
| HISTORY/JEWISH/ <br> MEDIEVAL/ <br> RELIG ST 368 | The Bible in the Middle Ages | 3 |
| HISTORY/ ENVIR ST 369 | Thinking through History with Animals | 3-4 |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY/ RELIG ST 411 | The Enlightenment and Its Critics | 3 |
| HISTORY 417 | History of Russia | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ <br> LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 |
| HISTORY/ENVIR ST/ LEGALST 430 | Law and Environment: Historical and Contemporary Perspectives | 3 |
| HISTORY/ SCAND ST 431 | History of Scandinavia to 1815 | 3 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/ RELIG ST 437 | Western Christianity from Augustine to Darwin | 4 |
| HISTORY 467 | Economic and Social History of Europe 1500-1750 | 3-4 |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |


| HISTORY/ <br> RELIG ST 470 | Religious Thought in Modern Europe | 3-4 |
| :---: | :---: | :---: |
| HISTORY 474 | European Social History, 1830-1914 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY/ LEGAL ST 477 | History of Forensic Science | 3 |
| HISTORY/ <br> ED POL 478 | Comparative History of Childhood and Adolescence | 3 |
| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
| HISTORY/HIST SCI/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HISTORY 514 | European Cultural History Since $1870$ | 3-4 |
| HISTORY/CURRIC/ JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY/ JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| HISTORY 525 | The World and the West from 1492 | 3-4 |
| HISTORY/JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| HISTORY/CLASSICS/ <br> FRENCH/ITALIAN/ <br> MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| HISTORY/CLASSICS/ <br> HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |
| HISTORY/HIST SCI/ <br> MED HIST/ <br> MEDIEVAL/ <br> S\&A PHM 562 | Byzantine Medicine and Pharmacy | 3 |
| HISTORY/ SCAND ST 577 | Contemporary Scandinavia: Politics and History | 3-4 |

## Geographic Breadth Courses

Code Title Credits
HISTORY/ Introduction to East Asian History: 3-4

E A STDS 103 China
HISTORY/ Introduction to East Asian History: 3-4
E A STDS 104 Japan

| HISTORY 105 | Introduction to the History of Africa | $3-4$ |
| :--- | :---: | :---: |
| HISTORY/ASIAN | 108 | Introduction to East Asian History - |


|  | Korea |
| :--- | :--- |
| HISTORY 139 | The Middle East in the 20th Century 3-4 |

HISTORY 142 History of South Asia to the Present 3-4

HISTORY/ The Making of the Islamic World: 3-4

| RELIG ST 205 | The Middle East, 500-1500 |  |
| :--- | :--- | :--- |
| HISTORY 225 | Explorations in Third World History |  |

HISTORY 241 Latin America from 1780 to 19404

| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| :---: | :---: | :---: |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| HISTORY/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/AFRICAN/ <br> AFROAMER/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones | 3-4 |
| HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY 377 | History of Africa, 1500 to 1870 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY/LCA/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| HISTORY/ RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 444 | History of East Africa | 3-4 |
| HISTORY 445 | History of Equatorial Africa | 3-4 |


| HISTORY/ <br> EASTDS 454 | Samurai: History and Image | 3-4 |
| :---: | :---: | :---: |
| HISTORY/ <br> E A STDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| HISTORY 463 | Topics in South Asian History | 3 |
| HISTORY/GEN\&WS/ LCA 472 | Women in Turkish Society | 3 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 555 | History of Brazil | 3-4 |

## L\&S RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all HISTORY and HIST SCI courses and courses that count toward the major
- 2.000 GPA on 15 upper-level major credits in residence. ${ }^{1}$
- 15 credits in HISTORY and/or HIST SCI, taken on campus
${ }^{1}$ Courses that have the Intermediate or Advanced level designation are considered upper-level in the major.


## HONORS IN THE MAJOR

Students may declare Honors in the History and History of Science, Medicine and Technology Major in consultation with the History undergraduate advisor.

## HONORS IN THE HISTORY AND HISTORY OF SCIENCE, MEDICINE AND TECHNOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in History and History of Science, Medicine and Technology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all HISTORY and HIST SCI courses
- Complete a minimum of 36 total credits, to include five courses in HISTORY (with the same breadth requirements and recommendation for HISTORY 201 The Historian's Craft as the standard joint major above) and five courses in HIST SCI, of which three must be from the 300-599 series.
- Complete at least 21 credits of upper-level work ${ }^{1}$ in the major while in residence ${ }^{2}$
- Complete HISTORY 600 Advanced Seminar in History and HIST SCI/ MED HIST 284 Physician in History (Honors) (in conjunction with HIST SCI/MED HIST 212 Bodies, Diseases, and Healers: An Introduction to the History of Medicine).
- Complete a two-semester Senior Honors Thesis in HISTORY 681 Senior Honors Thesis and HISTORY 682 Senior Honors Thesis, for a total of 6 or more credits or History of Science Senior Honors Thesis HIST SCI 681 Senior Honors Thesis and HIST SCI 682 Senior Honors Thesis, for a total of 6 or more credits. Students choosing HISTORY 681-HISTORY 682 must take HISTORY 680 Honors Thesis Colloquium both semesters in conjunction with the thesis. Students choosing HIST SCI 681 -HIST SCI 682 must take HIST SCI 555 Undergraduate Seminar in History of Science before embarking on
the thesis; in exceptional cases, it may be taken in conjunction with HIST SCI 681.

1
2 In residence does include affiliated University of Wisconsin-Madison study abroad programs.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (Define important historical questions) Pose a historical question and explain its academic and public implications.
2. (Define important historical questions) Using appropriate research procedures and aids, find the secondary resources in history and other disciplines available to answer a historical question.
3. (Define important historical questions) Evaluate the evidentiary and theoretical bases of pertinent historical conversations in order to highlight opportunities for further investigation.
4. (Collect and analyze evidence) Identify the range and limitations of sources available to engage the historical problem under investigation.
5. (Collect and analyze evidence) Examine the context in which sources were created, search for chronological and other relationships among them, and assess the sources in light of that knowledge.
6. (Collect and analyze evidence) Employ and, if necessary, modify appropriate theoretical frameworks to examine sources and develop arguments.
7. (Present original conclusions) Present original and coherent findings through clearly written, persuasive arguments and narratives.
8. (Present original conclusions) Orally convey persuasive arguments, whether in formal presentations or informal discussions.
9. (Present original conclusions) Use appropriate presentation formats and platforms to share information with academic and public audiences.
10. (Contribute to ongoing discussions) Extend insights from research to analysis of other historical problems.
11. (Contribute to ongoing discussions) Demonstrate the relevance of a historical perspective to contemporary issues.
12. (Contribute to ongoing discussions) Recognize, challenge, and avoid false analogies, overgeneralizations, anachronisms, and other logical fallacies.

## PEOPLE

Professors Boswell, Cronon, Desan, Dunlavy, Enke, Enstad, Hansen, Hirsch, Hsia, S. Johnson, Kantrowitz, Keller Kleijwegt, Koshar, Lederer, McCoy, McDonald, Michels, Mitman, Neville, Nyhart, Plummer, Reese, Roberts, Sharpless, Shoemaker, Sommerville, Sweet, Thal, Wandel, Wink, Young

Associate Professors Chan, Cheng, Dennis, Gómez, Hall, Ipsen, Kim, Kodesh, Murthy, Ratner-Rosenhagen, Taylor, Ussishkin

Assistant Professors Brown, Callaci, Chamedes, Ciancia, Haynes, Hennessy, Hicks, Iber, Jackson, Kinzley, Lapina, Nelson, Whiting

Teaching Associates Carlsson, Cullinane, Keyser

## HISTORY AND HISTORY OF SCIENCE, MEDICINE, AND TECHNOLOGY, B.S.

Admissions to the History and History of Science, Medicine, and Technology B.S. have been suspended as of fall 2017. If you have any questions, please contact the department (historydept@history.wisc.edu).

To study history is to study change: historians are experts in examining and interpreting human identities and transformations of societies and civilizations over time. They use a range of methods and analytical tools to answer questions about the past and to reconstruct the diversity of human experience: how profoundly people have differed in their ideas, institutions, and cultural practices; how widely their experiences have varied by time and place, and the ways they have struggled while inhabiting a shared world. Historians use a wide range of sources to weave individual lives and collective actions into narratives that bring critical perspectives on both our past and our present. Studying history helps us understand and grapple with complex questions and dilemmas by examining how the past has shaped (and continues to shape) global, national, and local relationships between societies and people.

## HOW TO GET IN

Admissions to the History and History of Science, Medicine, and Technology B.S. have been suspended as of fall 2017. If you have any questions, please contact the department (historydept@history.wisc.edu).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics
Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign
Language
Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits
and Science
Coursework

Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

A minimum of 30 credits in history and in history of science, medicine, and technology distributed as follows:

- At least four courses in HISTORY. Students are urged to take HISTORY 201 The Historian's Craft as one of these courses.
- At least one of these courses must be in U.S. history.
- At least one must be in European history.
- At least one must be from one of the following Breadth categories: Africa, Central or East Asia, South or Southeast Asia, Latin America, Middle East, Transnational.
- Though some courses may qualify in more than one Geographic Breadth area, a course may satisfy only one category for purposes of meeting the breadth requirement. Some topics courses in history may qualify for Geographic Breadth.
- At least four courses in HIST SCI. Students are urged to take one or more of these from the 300-599 series.
- At least 15 credits of upper-level coursework (courses that are Intermediate or Advanced count as upper-level) of which at least 6 credits must be in HISTORY and at least 6 credits must be in HIST SCI.
- At least one seminar course chosen from HISTORY 600 Advanced Seminar in History or HIST SCI 555 Undergraduate Seminar in History of Science.
- Knowledge of a science is recommended but not required for the joint major.

| COURSE LISTS |  |  |
| :---: | :---: | :---: |
| U.S. History |  |  |
| Code | Title | Credits |
| HISTORY 101 | Amer Hist to the Civil War Era, the Origin \& Growth of the U S | 4 |
| HISTORY 102 | American History, Civil War Era to the Present | 4 |
| HISTORY/ENVIR ST/ HIST SCI 125 | Green Screen: Environmental Perspectives through Film | 3 |
| HISTORY 136 | Sport, Recreation, \& Society in the United States | 3-4 |
| HISTORY 150 | American Histories: The Nineteenth Century | 4 |
| HISTORY/ <br> ASIAN AM 160 | Asian American History: Movement and Dislocation | 3-4 |
| HISTORY/ ASIAN AM 161 | Asian American History: Settlement and National Belonging | 3-4 |
| HISTORY/ RELIG ST 212 | The History of Western Christianity to 1750 | 4 |
| HISTORY/ JEWISH 213 | Jews and American Pop. Culture | 3-4 |
| HISTORY/ JEWISH 219 | The American Jewish Experience: From Shtetl to Suburb | 4 |
| HISTORY 221 | Explorations in American History (H) | 3-4 |
| HISTORY/ LEGAL ST 261 | American Legal History to 1860 | 3-4 |
| HISTORY/ LEGAL ST 262 | American Legal History, 1860 to the Present | 3-4 |
| HISTORY 272 | History Study Abroad: United States History | 1-4 |
| HISTORY 302 | History of American Thought, 1859 to the Present | 3-4 |
| HISTORY 304 | United States, 1877-1914 | 3-4 |
| HISTORY 305 | United States 1914-1945 | 3-4 |
| HISTORY 306 | The United States Since 1945 | 3-4 |
| HISTORY/ <br> AFROAMER 321 | Afro-American History Since 1900 | 3-4 |
| HISTORY/ AFROAMER 322 | Afro-American History to 1900 | 3-4 |
| HISTORY 329 | History of American Capitalism | 4 |
| HISTORY 343 | Colonial British North America | 3-4 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| HISTORY/ GEN\&WS 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| HISTORY/ GEN\&WS 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| HISTORY/CHICLA/ LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| HISTORY/ <br> AFROAMER 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| HISTORY/HIST SCI/ MED HIST 394 | Science in America | 3 |


| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| :---: | :---: | :---: |
| HISTORY 408 | American Labor History: 1900Present | 3-4 |
| HISTORY/ <br> ED POL 412 | History of American Education | 3 |
| HISTORY/ JEWISH 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ENVIR ST/ GEOG 460 | American Environmental History | 4 |
| HISTORY/ <br> CHICLA 461 | The American West to1850 | 3-4 |
| HISTORY/ CHICLA 462 | The American West Since 1850 | 3-4 |
| HISTORY 465 | Global Environmental History,The American Economy to 1865 | 3-4 |
| HISTORY/ECON 466 | The American Economy Since 1865 | 3-4 |
| HISTORY/ CHICLA 468 | Popular Culture in the Multi-racial United States | 3-4 |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |
| HISTORY/ <br> AMER IND 490 | American Indian History | 3-4 |
| HISTORY/HIST SCI/ MED HIST 504 | Society and Health Care in American History | 3 |
| HISTORY/ JOURN 560 | History of Mass Communication | 4 |
| HISTORY/L I S 569 | History of American Librarianship | 3 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| HISTORY/ <br> AFROAMER 628 | History of the Civil Rights Movement in the United States | 3 |
| HISTORY 201 | The Historian's Craft (Wisconsin) | 3-4 |
| HISTORY 200 | Historical Studies (American Families) | 1-4 |

## European History

| Code | Title | Credits |
| :--- | :--- | ---: |
| HISTORY/ | The Ancient Mediterranean | 4 |
| CLASSICS 110 |  | $3-4$ |
| HISTORY 111 | Culture \& Society in the Ancient <br> Mediterranean | 4 |
| HISTORY/ | The World of Late Antiquity |  |
| MEDIEVAL/ | (200-900 C.E.) |  |
| RELIG ST 112 | Medieval Europe 410-1500 | 4 |
| HISTORY 115 | The Making of Modern Europe <br> HISTORY 119 | 4 |


| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| :---: | :---: | :---: |
| HISTORY 123 | English History: England to 1688 | 3-4 |
| HISTORY 124 | British History: 1688 to the Present | 4 |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 | 3-4 |
| HISTORY/ MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course | 3-4 |
| HISTORY 223 | Explorations in European History (H) | 3-4 |
| HISTORY 224 | Explorations in European History (S) | 3 |
| HISTORY/ <br> GEOG/POLI SCI/ <br> SLAVIC 253 | Russia: An Interdisciplinary Survey | 4 |
| HISTORY/ <br> GEOG/POLI SCI/ <br> SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 |
| HISTORY 303 | A History of Greek Civilization | 3-4 |
| HISTORY 304 | United States, 1877-1914 | 3-4 |
| HISTORY 305 | United States 1914-1945 | 3-4 |
| HISTORY 307 | A History of Rome | 3-4 |
| HISTORY/E ASIAN/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 312 | The Medieval Church | 3-4 |
| HISTORY/ MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| HISTORY 320 | Early Modern France, 1500-1715 | 3-4 |
| HISTORY/ <br> AFROAMER 321 | Afro-American History Since 1900 | 3-4 |
| HISTORY/ HIST SCI 323 | The Scientific Revolution: From Copernicus to Newton | 3 |
| HISTORY/ HIST SCI 324 | Science in the Enlightenment | 3 |
| HISTORY 333 | The Renaissance | 3-4 |
| HISTORY/ RELIG ST 334 | The Reformation | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY 340 | Cultural History of Korea | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| HISTORY 351 | Seventeenth-Century Europe | 3-4 |


| HISTORY 352 | Eighteenth Century Europe | 3-4 |
| :---: | :---: | :---: |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 358 | French Revolution and Napoleon | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 | 3-4 |
| HISTORY/ <br> E A STDS 363 | China and World War II in Asia | 3-4 |
| HISTORY 367 | Society and Ideas in Shakespeare's England | 3-4 |
| HISTORY/JEWISH/ <br> MEDIEVAL/ <br> RELIG ST 368 | The Bible in the Middle Ages | 3 |
| HISTORY/ <br> ENVIR ST 369 | Thinking through History with Animals | 3-4 |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY/ <br> RELIG ST 411 | The Enlightenment and Its Critics | 3 |
| HISTORY 417 | History of Russia | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 |
| HISTORY/ENVIR ST/ LEGAL ST 430 | Law and Environment: Historical and Contemporary Perspectives | 3 |
| HISTORY/ SCAND ST 431 | History of Scandinavia to 1815 | 3 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/ RELIG ST 437 | Western Christianity from Augustine to Darwin | 4 |
| HISTORY 467 | Economic and Social History of Europe 1500-1750 | 3-4 |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |
| HISTORY/ <br> RELIG ST 470 | Religious Thought in Modern Europe | 3-4 |
| HISTORY 474 | European Social History, 1830-1914 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |


| HISTORY/ <br> LEGAL ST 477 | History of Forensic Science | 3 |
| :---: | :---: | :---: |
| HISTORY/ <br> ED POL 478 | Comparative History of Childhood and Adolescence | 3 |
| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
| HISTORY/HIST SCI/ <br> MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HISTORY 514 | European Cultural History Since $1870$ | 3-4 |
| HISTORY/CURRIC/ <br> JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| HISTORY/CLASSICS/ <br> RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY/ <br> JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| HISTORY 525 | The World and the West from 1492 | 3-4 |
| HISTORY/JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| HISTORY/CLASSICS/ <br> FRENCH/ITALIAN/ <br> MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| HISTORY/CLASSICS/ HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |
| HISTORY/HIST SCI/ <br> MED HIST/ <br> MEDIEVAL/ <br> S\&A PHM 562 | Byzantine Medicine and Pharmacy | 3 |
| HISTORY/ SCAND ST 577 | Contemporary Scandinavia: Politics and History | 3-4 |


| Geographic Breadth Courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| HISTORY/ <br> EASTDS 103 | Introduction to East Asian History. China | 3-4 |
| HISTORY/ <br> EASTDS 104 | Introduction to East Asian History. Japan | 3-4 |
| HISTORY 105 | Introduction to the History of Africa | 3-4 |
| HISTORY/ASIAN | 108 Introduction to East Asian History Korea | 3-4 |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY/ <br> RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| HISTORY 225 | Explorations in Third World History (H) | 3-4 |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |


| HISTORY/ASIAN AM LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| :---: | :---: | :---: |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| HISTORY/AFRICAN/ AFROAMER/ <br> ANTHRO/GEOG/ <br> POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/AFRICAN/ <br> AFROAMER/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones | 3-4 |
| HISTORY/ <br> E A STDS 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY 377 | History of Africa, 1500 to 1870 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY/LCA/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| HISTORY/ <br> RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 444 | History of East Africa | 3-4 |
| HISTORY 445 | History of Equatorial Africa | 3-4 |
| HISTORY/ <br> E A STDS 454 | Samurai: History and Image | 3-4 |
| HISTORY/ <br> E A STDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 |


| HISTORY 540 | Balkans and Middle East, <br> $1700-1918:$ The Rise of National <br> States | $3-4$ |
| :--- | :--- | ---: |
| HISTORY/LCA 458 | History of Southeast Asia Since <br> 1800 | $3-4$ |
| HISTORY 463 | Topics in South Asian History | 3 |
| HISTORY/GEN\&WS/ <br> LCA 472 | Women in Turkish Society |  |
| HISTORY 533 | Multi-Racial Societies in Latin <br> America | 3 |
| HISTORY 555 | History of Brazil | $3-4$ |

## L\&S RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all HISTORY and HIST SCI courses and courses that count toward the major
- 2.000 GPA on 15 upper-level major credits in residence. ${ }^{1}$
- 15 credits in HISTORY and/or HIST SCI, taken on campus
${ }^{1}$ Courses that have the Intermediate or Advanced level designation are considered upper-level in the major.


## HONORS IN THE MAJOR

Students may declare Honors in the History and History of Science, Medicine and Technology Major in consultation with the History undergraduate advisor.

## HONORS IN THE HISTORY AND HISTORY OF SCIENCE, MEDICINE AND TECHNOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in History and History of Science, Medicine and Technology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all HISTORY and HIST SCI courses
- Complete a minimum of 36 total credits, to include five courses in HISTORY (with the same breadth requirements and recommendation for HISTORY 201 The Historian's Craft as the standard joint major above) and five courses in HIST SCI, of which three must be from the 300-599 series.
- Complete at least 21 credits of upper-level work ${ }^{1}$ in the major while in residence ${ }^{2}$
- Complete HISTORY 600 Advanced Seminar in History and HIST SCI/ MED HIST 284 Physician in History (Honors) (in conjunction with HIST SCI/MED HIST 212 Bodies, Diseases, and Healers: An Introduction to the History of Medicine).
- Complete a two-semester Senior Honors Thesis in HISTORY 681 Senior Honors Thesis and HISTORY 682 Senior Honors Thesis, for a total of 6 or more credits or History of Science Senior Honors Thesis HIST SCI 681 Senior Honors Thesis and HIST SCI 682 Senior Honors Thesis, for a total of 6 or more credits. Students choosing HISTORY 681-HISTORY 682 must take HISTORY 680 Honors Thesis Colloquium both semesters in conjunction with the thesis. Students choosing HIST SCI 681 -HIST SCI 682 must take HIST SCI 555 Undergraduate Seminar in History of Science before embarking on the thesis; in exceptional cases, it may be taken in conjunction with HIST SCI 681.

1 Upper level is defined as as courses numbered 300-699.

2 In residence does include affiliated University of Wisconsin-Madison study abroad programs.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (Define important historical questions) Pose a historical question and explain its academic and public implications.
2. (Define important historical questions) Using appropriate research procedures and aids, find the secondary resources in history and other disciplines available to answer a historical question.
3. (Define important historical questions) Evaluate the evidentiary and theoretical bases of pertinent historical conversations in order to highlight opportunities for further investigation.
4. (Collect and analyze evidence) Identify the range and limitations of sources available to engage the historical problem under investigation.
5. (Collect and analyze evidence) Examine the context in which sources were created, search for chronological and other relationships among them, and assess the sources in light of that knowledge.
6. (Collect and analyze evidence) Employ and, if necessary, modify appropriate theoretical frameworks to examine sources and develop arguments.
7. (Present original conclusions) Present original and coherent findings through clearly written, persuasive arguments and narratives.
8. (Present original conclusions) Orally convey persuasive arguments, whether in formal presentations or informal discussions.
9. (Present original conclusions) Use appropriate presentation formats and platforms to share information with academic and public audiences.
10. (Contribute to ongoing discussions) Extend insights from research to analysis of other historical problems.
11. (Contribute to ongoing discussions) Demonstrate the relevance of a historical perspective to contemporary issues.
12. (Contribute to ongoing discussions) Recognize, challenge, and avoid false analogies, overgeneralizations, anachronisms, and other logical fallacies.

## PEOPLE

Professors Boswell, Cronon, Desan, Dunlavy, Enke, Enstad, Hansen, Hirsch, Hsia, S. Johnson, Kantrowitz, Keller Kleijwegt, Koshar, Lederer, McCoy, McDonald, Michels, Mitman, Neville, Nyhart, Plummer, Reese, Roberts, Sharpless, Shoemaker, Sommerville, Sweet, Thal, Wandel, Wink, Young

Associate Professors Chan, Cheng, Dennis, Gómez, Hall, Ipsen, Kim, Kodesh, Murthy, Ratner-Rosenhagen, Taylor, Ussishkin

Assistant Professors Brown, Callaci, Chamedes, Ciancia, Haynes, Hennessy, Hicks, Iber, Jackson, Kinzley, Lapina, Nelson, Whiting

Teaching Associates Carlsson, Cullinane, Keyser

## HISTORY OF SCIENCE, MEDICINE, AND TECHNOLOGY, B.A.

Admissions to the History of Science, Medicine, and Technology B.A. have been suspended as of fall 2017. If you have any questions, please contact the department (historydept@history.wisc.edu).

To study history is to study change: historians are experts in examining and interpreting human identities and transformations of societies and civilizations over time. They use a range of methods and analytical tools to answer questions about the past and to reconstruct the diversity of human experience: how profoundly people have differed in their ideas, institutions, and cultural practices; how widely their experiences have varied by time and place, and the ways they have struggled while inhabiting a shared world. Historians use a wide range of sources to weave individual lives and collective actions into narratives that bring critical perspectives on both our past and our present. Studying history helps us understand and grapple with complex questions and dilemmas by examining how the past has shaped (and continues to shape) global, national, and local relationships between societies and people.

## HOW TO GET IN

Admissions to the History of Science, Medicine, and Technology B.A. have been suspended as of fall 2017. If you have any questions, please contact the department (historydept@history.wisc.edu).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to
the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR

Foreign
Language

L\&S Breadth

Liberal Arts and Science

## Coursework

Depth of Intermediate/
Advanced
work
Major Declare and complete at least one (1) major
Total Credits 120 credits

| UW-Madison | 30 credits in residence, overall |
| :--- | :--- |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- <br>  <br>  <br> Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major requires a minimum of 30 credits.

| Code | Title | Credits |
| :--- | :---: | ---: |
| Select at least 24 credits in history of science ${ }^{1}$ | 24 |  |

Select 6 credits in science or mathematics above the 6 elementary level (not to include mathematics courses numbered 223 and below)

## Total Credits

1 All majors are required to take HIST SCI 555, the department's capstone seminar, in the junior or senior year.

One 3-credit course toward the 24-credit minimum may be chosen from approved courses in related disciplines. These courses include:

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS 520 | Philosophy of the Natural Sciences | 3 |
| PHILOS 521 | Philosophy of the Social Sciences | 3 |
| PHILOS/ | Philosophical Problems of the | 3 |
| ENVIR ST 523 | Biological Sciences |  |
| PHILOS/ | Ethical Issues in Health Care | 3 |
| MED HIST 558 |  | $3-4$ |
| MED HIST/ | The Ethics of Modern |  |
| AGRONOMY/ <br> C\&E SOC/ | Biotechnology |  |
| PHILOS 565 |  | 3 |
| SOC 531 | Sociology of Medicine |  |

Other substitutions may be allowed at the discretion of the undergraduate advisor. ILS 201 Western Culture: Science, Technology, Philosophy I or ILS 202 Western Culture: Science, Technology, Philosophy II may be used in place of HIST SCI 201 The Origins of Scientific Thought or HIST SCI 202 The Making of Modern Science to count toward the major requirements; ILS 271 Pre-Copernican Astronomy and Cosmology in Crosscultural Perspective may be used as a regular course in the major.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all courses that count toward the major
2.000 GPA on 15 upper-level credits that count toward the major, completed in residence. ${ }^{1}$

15 credits in courses that count toward the major, taken at UW-Madison
${ }^{1}$ Courses that count toward the major that are intermediate or advanced level count as upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the History of Science, Medicine and Technology Major in consultation with the departmental undergraduate advisor.

## HONORS IN THE HISTORY OF SCIENCE, MEDICINE AND TECHNOLOGY MAJOR REQUIREMENTS <br> To earn Honors in the Major in History of Science, Medicine and Technology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all upper-level ${ }^{1}$ HIST SCI courses
- Of the 24 departmental credits required, at least 15 must come from courses numbers 300-599 or HIST SCI 615 The History of Evolutionary Thought
- Complete one of the following: HIST SCI 180 Freshman Honors Seminar: History of Science, Technology and Medicine, HIST SCI 280 Honors Seminar: Studies in Science, Technology, Medicine, HIST SCI/ MED HIST 284 Physician in History (Honors) (in conjunction with HIST SCI/MED HIST 212 Bodies, Diseases, and Healers: An Introduction to the History of Medicine), or one seminar (minimum of 3 credits) offered by the department at the upper-division level.
- HIST SCI 555 Undergraduate Seminar in History of Science should be taken before embarking on the Senior Honors Thesis; in exceptional cases, HIST SCI 555 Undergraduate Seminar in History of Science may be taken concurrently with HIST SCI 681 Senior Honors Thesis.
- Complete a two-semester Senior Honors Thesis in HIST SCI 681 Senior Honors Thesis and HIST SCI 682 Senior Honors Thesis, for a total of 6 credits.

1 Upper level includes all intermediate- and advanced-level courses.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Define important historical questions) Pose a historical question and explain its academic and public implications.
2. (Define important historical questions) Using appropriate research procedures and aids, find the secondary resources in history and other disciplines available to answer a historical question.
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# HISTORY OF SCIENCE, MEDICINE, AND TECHNOLOGY, B.S. 

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## HOW TO GET IN

Admissions to the History of Science, Medicine, and Technology B.S. have been suspended as of fall 2017. If you have any questions, please contact the department (historydept@history.wisc.edu).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits
and Science
Coursework
Depth of
60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major requires a minimum of 30 credits.

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Select at least 24 credits in history of science ${ }^{1}$ | 24 |
| Select 6 credits in science or mathematics above the $_{\text {elementary level (not to include mathematics courses }}$ | 6 |
| numbered 223 and below) |  |
| Total Credits | 30 |

1 All majors are required to take HIST SCI 555, the department's capstone seminar, in the junior or senior year.

One 3-credit course toward the 24-credit minimum may be chosen from approved courses in related disciplines. These courses include:

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS 520 | Philosophy of the Natural Sciences | 3 |
| PHILOS 521 | Philosophy of the Social Sciences | 3 |
| PHILOS/ | Philosophical Problems of the | 3 |
| ENVIR ST 523 | Biological Sciences |  |
| PHILOS/ | Ethical Issues in Health Care | 3 |
| MED HIST 558 |  | $3-4$ |
| MED HIST/ | The Ethics of Modern |  |
| AGRONOMY/ | Biotechnology |  |
| C\&E SOC/ |  | 3 |
| PHILOS 565 |  |  |
| SOC 531 | Sociology of Medicine |  |

Other substitutions may be allowed at the discretion of the undergraduate advisor. ILS 201 Western Culture: Science, Technology, Philosophy I or ILS 202 Western Culture: Science, Technology, Philosophy II may be used in place of HIST SCI 201 The Origins of Scientific Thought or HIST SCI 202 The Making of Modern Science to count toward the major requirements; ILS 271 Pre-Copernican Astronomy and Cosmology in Crosscultural Perspective may be used as a regular course in the major.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all courses that count toward the major
2.000 GPA on 15 upper-level credits that count toward the major, completed in residence. ${ }^{1}$

15 credits in courses that count toward the major, taken at UW-Madison
${ }^{1}$ Courses that count toward the major that are intermediate or advanced level count as upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the History of Science, Medicine and Technology Major in consultation with the departmental undergraduate advisor.

## HONORS IN THE HISTORY OF SCIENCE, MEDICINE AND TECHNOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in History of Science, Medicine and Technology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all upper-level ${ }^{1}$ HIST SCI courses
- Of the 24 departmental credits required, at least 15 must come from courses numbers 300-599 or HIST SCI 615 The History of Evolutionary Thought
- Complete one of the following: HIST SCI 180 Freshman Honors Seminar. History of Science, Technology and Medicine, HIST SCI 280 Honors Seminar. Studies in Science, Technology, Medicine, HIST SCI/ MED HIST 284 Physician in History (Honors) (in conjunction with HIST SCI/MED HIST 212 Bodies, Diseases, and Healers: An Introduction to the History of Medicine), or one seminar (minimum of 3 credits) offered by the department at the upper-division level.
- HIST SCI 555 Undergraduate Seminar in History of Science should be taken before embarking on the Senior Honors Thesis; in exceptional cases, HIST SCI 555 Undergraduate Seminar in History of Science may be taken concurrently with HIST SCI 681 Senior Honors Thesis.
- Complete a two-semester Senior Honors Thesis in HIST SCI 681 Senior Honors Thesis and HIST SCI 682 Senior Honors Thesis, for a total of 6 credits.

1 Upper level includes all intermediate- and advanced-level courses.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (Define important historical questions) Pose a historical question and explain its academic and public implications.
2. (Define important historical questions) Using appropriate research procedures and aids, find the secondary resources in history and other disciplines available to answer a historical question.
3. (Define important historical questions) Evaluate the evidentiary and theoretical bases of pertinent historical conversations in order to highlight opportunities for further investigation.
4. (Collect and analyze evidence) Identify the range and limitations of sources available to engage the historical problem under investigation.
5. (Collect and analyze evidence) Examine the context in which sources were created, search for chronological and other relationships among them, and assess the sources in light of that knowledge.
6. (Collect and analyze evidence) Employ and, if necessary, modify appropriate theoretical frameworks to examine sources and develop arguments.
7. (Present original conclusions) Present original and coherent findings through clearly written, persuasive arguments and narratives.
8. (Present original conclusions) Orally convey persuasive arguments, whether in formal presentations or informal discussions.
9. (Present original conclusions) Use appropriate presentation formats and platforms to share information with academic and public audiences.
10. (Contribute to ongoing discussions) Extend insights from research to analysis of other historical problems.
11. (Contribute to ongoing discussions) Demonstrate the relevance of a historical perspective to contemporary issues.
12. (Contribute to ongoing discussions) Recognize, challenge, and avoid false analogies, overgeneralizations, anachronisms, and other logical fallacies.

## PEOPLE

Professors Boswell, Cronon, Desan, Dunlavy, Enke, Enstad, Hansen, Hirsch, Hsia, S. Johnson, Kantrowitz, Keller Kleijwegt, Koshar, Lederer, McCoy, McDonald, Michels, Mitman, Neville, Nyhart, Plummer, Reese, Roberts, Sharpless, Shoemaker, Sommerville, Sweet, Thal, Wandel, Wink, Young

Associate Professors Chan, Cheng, Dennis, Gómez, Hall, Ipsen, Kim, Kodesh, Murthy, Ratner-Rosenhagen, Taylor, Ussishkin

Assistant Professors Brown, Callaci, Chamedes, Ciancia, Haynes, Hennessy, Hicks, Iber, Jackson, Kinzley, Lapina, Nelson, Whiting

Teaching Associates Carlsson, Cullinane, Keyser

## HISTORY, B.A.

3211 Mosse Humanities Building, 455 North Park Street, Madison, WI 53706; 608-263-1800; history.wisc.edu

To study history is to study change: historians are experts in examining and interpreting human identities and transformations of societies and civilizations over time. They use a range of methods and analytical tools to answer questions about the past and to reconstruct the diversity of human experience: how profoundly people have differed in their ideas, institutions, and cultural practices; how widely their experiences have varied by time and place, and the ways they have struggled while inhabiting a shared world. Historians use a wide range of sources to weave individual lives and collective actions into narratives that bring critical perspectives on both our past and our present. Studying history helps us understand and grapple with complex questions and dilemmas by examining how the past has shaped (and continues to shape) global, national, and local relationships between societies and people.

## HOW TO GET IN

Students interested in declaring a history major should meet with an advisor in the history department. Information about advising and declaring the major is available on the undergraduate section (https:// history.wisc.edu/undergraduate-program) of the department website. There are no prerequisites for declaring the history major, and students are encouraged to declare as soon as they feel comfortable doing so.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

[^30]
# - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work) 

## REQUIREMENTS OF THE MAJOR

A minimum of 30 credits in HISTORY is required to complete the major, including:

## CHRONOLOGICAL BREADTH:

History majors must complete at least one course that deals with the history of Europe and/or the Mediterranean before C.E. 1500 or with the history of Africa or Asia before these areas fell heavily under European influence.

## CHRONOLOGICAL BREADTH COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY/ <br> CLASSICS 110 | The Ancient Mediterranean | 4 |
| HISTORY/ MEDIEVAL/ RELIG ST 112 | The World of Late Antiquity (200-900 C.E.) | 4 |
| HISTORY 115 | Medieval Europe 410-1500 | 4 |
| HISTORY 123 | English History: England to 1688 | 3-4 |
| HISTORY/ RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 | 3-4 |
| HISTORY/ <br> MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course | 3-4 |
| HISTORY 303 | A History of Greek Civilization | 3-4 |
| HISTORY 307 | A History of Rome | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 312 | The Medieval Church | 3-4 |
| HISTORY/ <br> MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| HISTORY 333 | The Renaissance | 3-4 |
| HISTORY/ <br> E A STDS 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
| HISTORY/ENGL/ <br> RELIG ST 360 | The Anglo-Saxons | 3 |
| HISTORY/JEWISH/ <br> MEDIEVAL/ <br> RELIG ST 368 | The Bible in the Middle Ages | 3 |
| HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/ <br> LEGAL ST 426 | The History of Punishment | 3-4 |


| HISTORY/ RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| :---: | :---: | :---: |
| HISTORY/ E A STDS 454 | Samurai: History and Image | 3-4 |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 |
| HISTORY/ LEGAL ST 459 | Rule of Law: Philosophical and Historical Models | 3-4 |
| HISTORY/ LEGAL ST 476 | Medieval Law and Society | 3 |
| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY/CLASSICS/ FRENCH/ITALIAN/ MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| HISTORY/CLASSICS/ HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |
| HISTORY/HIST SCI/ <br> MED HIST/ <br> MEDIEVAL/ <br> S\&A PHM 562 | Byzantine Medicine and Pharmacy | 3 |

## GEOGRAPHIC BREADTH:

At minimum, history majors must complete one course from four of the eight geographic breadth categories.

## GEOGRAPHIC BREADTH: EUROPEAN HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY/ CLASSICS 110 | The Ancient Mediterranean | 4 |
| HISTORY 115 | Medieval Europe 410-1500 | 4 |
| HISTORY 119 | The Making of Modern Europe 1500-1815 | 4 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 123 | English History: England to 1688 | 3-4 |
| HISTORY 124 | British History: 1688 to the Present | 4 |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 | 3-4 |
| HISTORY/ <br> RELIG ST 209 | Western Intellectual and Religious History since 1500 | 3-4 |
| HISTORY/ <br> RELIG ST 212 | The History of Western Christianity to 1750 | 4 |
| HISTORY/ MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course | 3-4 |
| HISTORY 223 | Explorations in European History (H) | 3-4 |
| HISTORY 224 | Explorations in European History (S) | 3 |
| HISTORY/ GEOG/POLI SCI/ SLAVIC 253 | Russia: An Interdisciplinary Survey | 4 |
| HISTORY/ GEOG/POLI SCI/ SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 |


| HISTORY 270 | Eastern Europe since 1900 | 3-4 |
| :---: | :---: | :---: |
| HISTORY 271 | History Study Abroad: European History | 1-4 |
| HISTORY 303 | A History of Greek Civilization | 3-4 |
| HISTORY 307 | A History of Rome | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 312 | The Medieval Church | 3-4 |
| HISTORY/ MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| HISTORY/ MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| HISTORY 320 | Early Modern France, 1500-1715 | 3-4 |
| HISTORY/ HIST SCI 323 | The Scientific Revolution: From Copernicus to Newton | 3 |
| HISTORY/ <br> HIST SCI 324 | Science in the Enlightenment | 3 |
| HISTORY/ <br> ENVIR ST 328 | Environmental History of Europe | 3 |
| HISTORY 333 | The Renaissance | 3-4 |
| HISTORY/ <br> RELIG ST 334 | The Reformation | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| HISTORY 351 | Seventeenth-Century Europe | 3-4 |
| HISTORY 352 | Eighteenth Century Europe | 3-4 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 358 | French Revolution and Napoleon | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 | 3-4 |
| HISTORY 367 | Society and Ideas in Shakespeare's England | 3-4 |
| HISTORY/JEWISH/ MEDIEVAL/ RELIG ST 368 | The Bible in the Middle Ages | 3 |
| HISTORY/ JEWISH 373 | Modern Political History of the Jews: 1655-1919 | 4 |
| HISTORY/ <br> JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY/ GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |


| HISTORY/ <br> RELIG ST 411 | The Enlightenment and Its Critics | 3 |
| :---: | :---: | :---: |
| HISTORY 417 | History of Russia | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | -4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ LEGALST 426 | The History of Punishment | 3-4 |
| HISTORY/ SCAND ST 431 | History of Scandinavia to 1815 | 3 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/ RELIG ST 437 | Western Christianity from Augustine to Darwin | 4 |
| HISTORY 467 | Economic and Social History of Europe 1500-1750 | 3-4 |
| HISTORY/ RELIG ST 470 | Religious Thought in Modern Europe | 3-4 |
| HISTORY 474 | European Social History, 1830-1914 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY/ <br> LEGALST 476 | Medieval Law and Society | 3 |
| HISTORY/ <br> ED POL 478 | Comparative History of Childhood and Adolescence | 3 |
| HISTORY/ <br> LEGALST 502 | Law and Colonialism | 3 |
| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
| HISTORY/HIST SCI/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HISTORY 514 | European Cultural History Since 1870 | 3-4 |
| HISTORY/CURRIC/ JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY/ JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| HISTORY/JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| HISTORY/CLASSICS/ FRENCH/ITALIAN/ MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| HISTORY/CLASSICS/ HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |


| HISTORY/ SCAND ST 577 | Contemporary Scandinavia: Politics and History | 3-4 |
| :---: | :---: | :---: |
| GEOGRAPHIC BREADTH: AFRICAN HISTORY COURSES |  |  |
| Code | Title | Credits |
| HISTORY 105 | Introduction to the History of Africa | 3-4 |
| HISTORY/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/AFRICAN/ AFROAMER/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| HISTORY 377 | History of Africa, 1500 to 1870 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY 444 | History of East Africa | 3-4 |
| HISTORY 445 | History of Equatorial Africa | 3-4 |

## GEOGRAPHIC BREADTH: CENTRAL OR EAST ASIAN HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY/ <br> EASTDS 103 | Introduction to East Asian History. China | 3-4 |
| HISTORY/ <br> EASTDS 104 | Introduction to East Asian History: Japan | 3-4 |
| HISTORY/ASIAN 108 | Introduction to East Asian History Korea | 3-4 |
| HISTORY/E A STDS/ <br> POLI SCI 255 | Introduction to East Asian Civilizations | 3-4 |
| HISTORY/LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| HISTORY/ASIAN AM/ EA STDS 276 | Chinese Migrations since 1500 | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones | 3-4 |
| HISTORY/ EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
| HISTORY/ <br> E A STDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY/ <br> EASTDS 363 | China and World War II in Asia | 3-4 |
| HISTORY/ <br> EASTDS 454 | Samurai: History and Image | 3-4 |
| HISTORY/ <br> EASTDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |

## GEOGRAPHIC BREADTH: SOUTH OR SOUTHEAST ASIAN HISTORY COURSES

[^31]| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| :---: | :---: | :---: |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/E ASIAN/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY/LCA/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since $1800$ | 3-4 |
| HISTORY 463 | Topics in South Asian History | 3 |
| HISTORY/LCA/ RELIG ST 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |

## GEOGRAPHIC BREADTH: LATIN AMERICAN HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| HISTORY/CHICLA/ GEN\&WS 245 | Chicana and Latina History | 3 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY/ CHICLA 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 555 | History of Brazil | 3-4 |
| HISTORY/HIST SCI/ MED HIST 564 | Disease, Medicine and Public Health in the History of Latin America and the Caribbean | 3 |

## GEOGRAPHIC BREADTH: MIDDLE EASTERN HISTORY COURSES

[^32]HISTORY 139

| HISTORY/ <br> RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| :---: | :---: | :---: |
| HISTORY/ MEDIEVAL/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ <br> RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/ <br> RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| HISTORY/GEN\&WS/ LCA 472 | Women in Turkish Society | 3 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |

## GEOGRAPHIC BREADTH: TRANSNATIONAL HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 130 | An Introduction to World History | 3-4 |
| HISTORY/ GEN\&WS 134 | Women and Gender in World History | 3-4 |
| HISTORY 135 | Colloquium in Comparative World History | 4 |
| HISTORY 144 | Traveling the World: South Asians in Diaspora | 4 |
| HISTORY 228 | Explorations in Transnational/ Comparative History (Social Science) | 3 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) | 3 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY 274 | History Study Abroad: Transnational/Global History | 1-4 |
| HISTORY/ASIAN AM/ EASTDS 276 | Chinese Migrations since 1500 | 3-4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/ GEN\&WS 315 | Gender, Race and Colonialism | 3 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ENVIR ST/ F\&W ECOL 452 | World Forest History | 3 |
| HISTORY/ CHICLA 461 | The American West to 1850 | 3-4 |


| HISTORY/ | Law and Colonialism | 3 |
| :--- | :--- | ---: |
| LEGAL ST 502 |  |  |
| HISTORY 503 | Irish and Scottish Migrations | 3 |
| HISTORY 525 | The World and the West from 1492 | $3-4$ |
| HISTORY 607 | The American Impact Abroad: The | 3 |

## GEOGRAPHIC BREADTH: U.S. HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 101 | Amer Hist to the Civil War Era, the Origin \& Growth of the U S | 4 |
| HISTORY 102 | American History, Civil War Era to the Present | 4 |
| HISTORY 109 | Introduction to U.S. History | 3-4 |
| HISTORY 150 | American Histories: The Nineteenth Century | 4 |
| HISTORY/ ASIAN AM 160 | Asian American History: Movement and Dislocation | 3-4 |
| HISTORY/ ASIAN AM 161 | Asian American History: Settlement and National Belonging | 3-4 |
| HISTORY/ JEWISH 213 | Jews and American Pop. Culture | 3-4 |
| HISTORY/ JEWISH 219 | The American Jewish Experience: From Shtetl to Suburb | 4 |
| HISTORY 221 | Explorations in American History $(H)$ | 3-4 |
| HISTORY/ LEGAL ST 261 | American Legal History to 1860 | 3 |
| HISTORY/ LEGAL ST 262 | American Legal History, 1860 to the Present | 3 |
| HISTORY 272 | History Study Abroad: United States History | 1-4 |
| HISTORY 302 | History of American Thought, 1859 to the Present | 3-4 |
| HISTORY 304 | United States, 1877-1914 | 3-4 |
| HISTORY 305 | United States 1914-1945 | 3-4 |
| HISTORY 306 | The United States Since 1945 | 3-4 |
| HISTORY/ <br> AFROAMER 321 | Afro-American History Since 1900 | 3-4 |
| HISTORY/ <br> AFROAMER 322 | Afro-American History to 1900 | 3-4 |
| HISTORY 329 | History of American Capitalism | 4 |
| HISTORY 343 | Colonial British North America | 3-4 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| HISTORY/ GEN\&WS 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| HISTORY/ GEN\&WS 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| HISTORY/CHICLA/ LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| HISTORY/ <br> AFROAMER 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |


| HISTORY/HIST SCI/ MED HIST 394 | Science in America | 3 |
| :---: | :---: | :---: |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY 408 | American Labor History: 1900Present | 3-4 |
| HISTORY/ <br> ED POL 412 | History of American Education | 3 |
| HISTORY/ JEWISH 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ENVIR ST/ GEOG 460 | American Environmental History | 4 |
| HISTORY/ CHICLA 461 | The American West to1850 | 3-4 |
| HISTORY/ CHICLA 462 | The American West Since 1850 | 3-4 |
| HISTORY/ECON 466 | The American Economy Since 1865 | 3-4 |
| HISTORY/ <br> CHICLA 468 | Popular Culture in the Multi-racial United States | 3-4 |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |
| HISTORY/ <br> AMER IND 490 | American Indian History | 3-4 |
| HISTORY/HIST SCI/ MED HIST 504 | Society and Health Care in American History | 3 |
| HISTORY/ JOURN 560 | History of Mass Communication | 4 |
| HISTORY/LIS 569 | History of American Librarianship | 3 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| HISTORY/ <br> AFROAMER 628 | History of the Civil Rights Movement in the United States | 3 |

## NOTES ON HISTORY BREADTH REQUIREMENTS

- Breadth courses may be taken in any order.
- Chronological Breadth courses may also count toward a Geographic Breadth category.
- Some courses qualify for more than one Geographic Breadth area, but a course may only count for one Geographic Breadth category for the purposes of meeting the requirement.
- Topics courses in history (HISTORY 200, HISTORY 201, HISTORY 221, HISTORY 223, HISTORY 225, HISTORY 227, HISTORY 229, HISTORY 271, HISTORY 272, HISTORY 273, HISTORY 274, HISTORY 275, HISTORY 283, \& HISTORY 500) may count for Geographic and/or Chronological Breadth. For topics courses, see the course notes for current breadth information.
- The following courses may not be used for breadth in the major. HISTORY 199, HISTORY 600, HISTORY 680, HISTORY 681,

HISTORY 682, HISTORY 690, HISTORY 691, HISTORY 692, HISTORY 698, \& HISTORY 699.

## HISTORY WRITING AND RESEARCH SEQUENCE:

History majors must complete both of the following:

- Students are encouraged to complete HISTORY 201 The Historian's Craft as early as possible.
- HISTORY 600 Advanced Seminar in History, to be taken after satisfactory completion of HISTORY 201. Enrolling in a HISTORY 600 seminar requires instructor consent. Available seminars can be found on the history department website (https://history.wisc.edu/ history600-seminars).


## L\&S REQUIREMENTS FOR QUALITY AND RESIDENCE IN THE MAJOR:

- 2.000 GPA in HISTORY and required courses in the major
- 2.000 GPA on 15 upper-level major credits in residence. HISTORY courses designated as intermediate or advanced are upper level in the major.
- 15 credits HISTORY taken on campus


## GLOBAL HISTORY TRACK

Any undergraduate history major may choose to pursue the Global Track by completing all requirements for the history major above, and these additional requirements:

- Geographic Breadth: one additional course, in a fifth breadth area; at least one of the five breadth courses must be from the Transnational category
- Foreign Language or Experience Requirement: one of the following options:
- Completion of the 5 th unit of a single foreign language, defined as the 5th semester of college instruction or the 5th year of high school instruction
- ESL 118 Academic Writing II
- 3 credits of coursework from a UW-Madison Study Abroad Program

Note: The Global History Track is unofficial and will not be recorded on a student's final transcript. For purposes of graduation auditing, DARS will display the track as an informational section only.

## DISTINCTION IN THE MAJOR

To be awarded Distinction in the Major, students must:

- Achieve a GPA of at least 3.700 out of 4.000 in HISTORY courses
- Complete a minimum of 21 upper-level credits in major coursework. HISTORY courses designated as intermediate or advanced are upper level in the major.
- Complete all requirements of the major

Students should consult the undergraduate advisor in history regarding current requirements for the major.

## HONORS IN THE MAJOR

Students may declare Honors in the History Major in consultation with the History undergraduate advisor.

## HONORS IN HISTORY MAJOR REQUIREMENTS

To earn Honors in the Major in History, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in all HISTORY courses
- Complete at least 36 total credits in HISTORY coursework, 21 of which must be upper-level ${ }^{1}$ credits in residence
- Complete at least 15 Honors credits in HISTORY coursework
- Complete a two-semester Senior Honors Thesis, a piece of original work of approximately forty pages, in HISTORY 681 Senior Honors Thesis-HISTORY 682 Senior Honors Thesis, taken in conjunction with the HISTORY 680 Honors Thesis Colloquium both semesters. The thesis must be approved by instructors in both the thesis and colloquium courses.

1 Courses with intermediate or advanced level are upper level in the history major.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |  |
|  | probation. |

## LEARNING OUTCOMES

1. (Define important historical questions) Pose a historical question and explain its academic and public implications.
2. (Define important historical questions) Using appropriate research procedures and aids, find the secondary resources in history and other disciplines available to answer a historical question.
3. (Define important historical questions) Evaluate the evidentiary and theoretical bases of pertinent historical conversations in order to highlight opportunities for further investigation.
4. (Collect and analyze evidence) Identify the range and limitations of sources available to engage the historical problem under investigation.
5. (Collect and analyze evidence) Examine the context in which sources were created, search for chronological and other relationships among them, and assess the sources in light of that knowledge.
6. (Collect and analyze evidence) Employ and, if necessary, modify appropriate theoretical frameworks to examine sources and develop arguments.
7. (Present original conclusions) Present original and coherent findings through clearly written, persuasive arguments and narratives.
8. (Present original conclusions) Orally convey persuasive arguments, whether in formal presentations or informal discussions.
9. (Present original conclusions) Use appropriate presentation formats and platforms to share information with academic and public audiences.
10. (Contribute to ongoing discussions) Extend insights from research to analysis of other historical problems.
11. (Contribute to ongoing discussions) Demonstrate the relevance of a historical perspective to contemporary issues.
12. (Contribute to ongoing discussions) Recognize, challenge, and avoid false analogies, overgeneralizations, anachronisms, and other logical fallacies.

## ADVISING AND CAREERS

Students who are declared or interested in the history major have numerous advising resources available to them. The history advising team is comprised of professional and peer advisors who are excited to talk with students about everything from academic planning to professional development for future careers. Information on the History advising team, how to contact an advisor, how to schedule an appointment, and drop-in advising hours can be found on our website (https://history.wisc.edu/undergraduate-program/undergraduateadvising).

The Honors in the Major track in history is intended for students who are eager to experience the excitement of original historical research and who wish to graduate with the best possible undergraduate training in this discipline. Honors in the Major is especially appropriate for students who are considering graduate work in history or who want an especially advanced training in research, reasoning, and writing skills useful to a wide range of career choices.

Information on upcoming career events and internship opportunities for history majors are available on the History Advising Blog (http:// uwhistoryadvising.blogspot.com). Alumni of the history department have enjoyed careers in medical research and practice; broadcast and print media; sports management; museums, archives, and libraries; finance and business, and community service and nonprofit organizations-as well as law, academia, and many other fields. Want to see what some of our alumni have done with their history majors? Check out our "featured alumni" profiles on the department website.

History is a rigorous but flexible major, and history majors are known for being excellent communicators and savvy researchers. Historians are experts in synthesizing disparate pieces of evidence into coherent, persuasive arguments. The real world is filled with disparate facts and incomplete sets of data, so this is a real-world skill that history alumni utilize throughout their entire careers.

The history major provides excellent preparation for the study of law, but our students also go on to study medicine and many other graduate fields. The centers for Pre-Law Advising (https://prelaw.wisc.edu) and

Pre-Health Advising (https://prehealth.wisc.edu) are especially helpful resources on campus for students interested in those areas of study.

History can also be combined with any other major in the college of Letters \& Science (L\&S), anything from astronomy (http://guide.wisc.edu/ undergraduate/letters-science/astronomy) to zoology (http:// guide.wisc.edu/undergraduate/letters-science/integrative-biology). Majors that students most frequently pair with history are: economics (http://guide.wisc.edu/undergraduate/letters-science/economics), English (http://guide.wisc.edu/undergraduate/letters-science/english), environmental studies (http://guide.wisc.edu/undergraduate/letters-science/environmental-studies/environmental-studies-major), journalism (http://guide.wisc.edu/undergraduate/letters-science/journalism-mass-communication), and political science (http://guide.wisc.edu/ undergraduate/letters-science/political-science). History majors can also choose to add certificates in L\&S or from outside the college, such as the certificates in business (http://guide.wisc.edu/undergraduate/ business/school-wide/business-certificate) or education and educational services (http://guide.wisc.edu/undergraduate/education/educational-psychology/education-educational-services-certificate). In addition to these, some of the most common certificates for history majors are currently: criminal justice (http://guide.wisc.edu/undergraduate/ letters-science/center-law-society-justice/criminal-justice-certificate), global health (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/nutritional-sciences/global-health-certificate), European studies (http://guide.wisc.edu/undergraduate/letters-science/institute-regional-international-studies/european-certificate), and digital studies (http:// guide.wisc.edu/undergraduate/letters-science/communication-arts/ digital-studies-certificate). The history advising team is happy to discuss ways for you to make your intellectual and career goals work as part of a four-year plan.

## HISTORY CAREERS COURSE: "HISTORY AT WORK"

HISTORY 505 History at Work: Professional Skills of the Major is a course intended to help history majors understand how their history degree applies to the world of work. Students explore how their history skills relate to the needs of professional employers and are guided in the process of finding and obtaining professional internships and jobs. In this course, history majors can polish their written and oral communication skills in forms appropriate for professional situations and learn from the experiences of guest speakers from a variety of fields.

## INTERNSHIPS

The Department of History recognizes the importance of internships in helping students develop professional skills and explore potential career paths. Positions can vary depending on availability and students' interests, but recent sponsors have included the Wisconsin State Historical Museum, the University of Wisconsin Archives, offices of elected officials in the Wisconsin State Legislature and United States Congress, the Milwaukee Brewers, and Community Shares of Wisconsinjust to name a few!

## ALUMNI MENTORING

Like internships, networking can be a valuable tool in opening professional doors and learning more about the professional value of the history major. The department often matches students with alumni mentors drawn from our Board of Visitors (https://history.wisc.edu/ alumni-and-friends/board-of-visitors) and other graduates who can help them get started building a professional network, answer questions about a specific field, provide guidance in applying for jobs or preparing for interviews, and providing general career advice.

Students interested in participating in an internship or talking with an alumni mentor should meet with Christina Matta, the department's undergraduate career advisor, to discuss their interests and possible career goals.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Boswell, Cronon, Desan, Dunlavy, Enke, Enstad, Hansen, Hirsch, Hsia, S. Johnson, Kantrowitz, Keller Kleijwegt, Koshar, Lederer, McCoy, McDonald, Michels, Mitman, Neville, Nyhart, Plummer, Reese, Roberts, Sharpless, Shoemaker, Sommerville, Sweet, Thal, Wandel, Wink, Young

Associate Professors Chan, Cheng, Dennis, Gómez, Hall, Ipsen, Kim, Kodesh, Murthy, Ratner-Rosenhagen, Taylor, Ussishkin

Assistant Professors Brown, Callaci, Chamedes, Ciancia, Haynes, Hennessy, Hicks, Iber, Jackson, Kinzley, Lapina, Nelson, Whiting

Teaching Associates Carlsson, Cullinane, Keyser

## WISCONSIN EXPERIENCE

## HISTORY: THE WISCONSIN EXPERIENCE

The history department is committed to integrating undergraduate historical study into the Wisconsin Experience (https://provost.wisc.edu/ wisconsin-experience), UW-Madison's vision for students' growth inside and outside the classroom. History majors at UW-Madison have a wide range of opportunities available to help them make the most of their major and carry the study of the past beyond the boundaries of the classroom. The history Wisconsin Experience fosters:

## Cross-Cultural Literacy across Time and Space

1. Learn about the histories of multiple geographic areas across a wide stretch of time
2. Develop the ability to communicate effectively and appropriately with people of different backgrounds

## Engagement in Society

1. Take advantage of mentoring, internship, and career resources
2. Engage in public service for secondary education, public history, and community organizations
3. Expand understanding of important public issues from a variety of perspectives

## Critical Inquiry

1. Develop analytical abilities for local, national, and global citizenship and leadership
2. Understand the perspectives of people from different backgrounds
3. Analyze how ideas and institutions change over time

## Transferable Skills for Careers

1. Hone both oral and written communicational skills
2. Synthesize information from multiple perspectives and disparate forms of evidence
3. Conduct original research using a variety of methods and sources
4. Present original conclusions in a variety of media

History majors engage in these areas in ways that are particular to history, developing skills that are transferable to a wide range of careers as well as a lifelong love of learning.

## HISTORY RESOURCES FOR PROFESSIONAL AND INTELLECTUAL GROWTH

## ARCHIVE

ARCHIVE (https://uwarchive.wordpress.com) is an award-winning journal of historical work published annually by the UW-Madison chapter of Phi Alpha Theta. See ARCHIVE's website (https://uwarchive.wordpress.com) to view past volumes and find out how you could be published.

## Phi Alpha Theta

Phi Alpha Theta (https://win.wisc.edu/organization/pat) is a national history honors society whose purpose is to promote the study of history and to bring students, teachers and writers of history together in intellectual and social ways. See the UW-Madison chapter's page for more information.

## Language and Regional/International Studies

History classes and faculty are at the center of UW-Madison's remarkable collection of resource centers for area studies. IRIS (https://iris.wisc.edu) is the umbrella organization for UW-Madison's eight area studies programs. Students interested in these areas can combine their history major with a major in international studies (http://www.ismajor.wisc.edu) or any of the area studies majors and/ or certificates. UW-Madison also has one of the largest selections of language instruction (https://languages.wisc.edu) in the United States.

## Study Abroad

History is a great major for students interested in studying abroad (https://www.studyabroad.wisc.edu/map_history.asp) due to its flexibility
and because study abroad experience counts toward the history major's Global Track. Find out more on our major advising page.

## Wisconsin Historical Society

Scholars and researchers from all over the country (and world) come to the Wisconsin Historical Society (https://www.wisconsinhistory.org) (WHS) to do historical research. History majors at UW-Madison simply walk across the street to make use of this world-class institution. The collections of the WHS are an amazing resource for history majors and are utilized by a wide range of our courses. History majors can also develop internships related to the WHS collections and programs. Students who are interested in the history of film and television often double major in communication arts (http://guide.wisc.edu/ undergraduate/letters-science/communication-arts) and get involved with the Wisconsin Center for Film and Theater Research (http:// wcftr.commarts.wisc.edu).

## RESOURCES AND SCHOLARSHIPS

## THE HISTORY LAB

The History Lab is a resource center for undergraduate students studying, researching, and writing about the past. It is staffed by talented and experienced graduate students from the Department of History.

Through individual and group tutoring, the Lab focuses on honing students' abilities to form suitable topics, conduct research, develop arguments and thesis statements, cite evidence properly, and write using an effective process. The lab is equipped also to support challenges faced by English-language learners.

For more information or to make an appointment, see the History Lab website. (https://history.wisc.edu/undergraduate-program/the-historylab)

## RESEARCH FELLOWSHIPS AND SCHOLARSHIPS

The Department of History is committed to supporting undergraduate achievement and encourages applications for the various scholarships and research fellowships made possible by the generosity of its donors. Scholarships are designed to reward outstanding History majors and are awarded annually. Research fellowships allow undergraduates to pursue in-depth historical research under the guidance of Department of History faculty. These awards help defray research costs such as supplies and travel expenses or pay for living expenses to allow students time to craft their papers and conduct research in UW Libraries.

Detailed instructions on how to apply can be found on the Department of History website (https://history.wisc.edu/undergraduate-program/ history-the-wisconsin-experience/undergraduate-scholarships). Applications need to be submitted online, via Scholarships@UW-Madison (http://scholarships.wisc.edu/Scholarships).

## UNDERGRADUATE WRITING PRIZES

The history department offers an assortment of essay prizes designed to reward a broad range of undergraduate writing-from Senior Theses to term papers to specialized essays in German-Jewish history. The prizes are made possible thanks to the tremendous generosity of our alumni and former members of our faculty. The history department expresses
its gratitude for their support in recognizing the achievements of our undergraduates.

Detailed instructions on how to apply can be found on the Department of History website (https://history.wisc.edu/undergraduate-program/ history-the-wisconsin-experience/undergraduate-scholarships). Applications need to be submitted online, via Scholarships@UW-Madison (http://scholarships.wisc.edu/Scholarships).

## HISTORY, B.S.

3211 Mosse Humanities Building, 455 North Park Street, Madison, WI 53706; 608-263-1800; history.wisc.edu

To study history is to study change: historians are experts in examining and interpreting human identities and transformations of societies and civilizations over time. They use a range of methods and analytical tools to answer questions about the past and to reconstruct the diversity of human experience: how profoundly people have differed in their ideas, institutions, and cultural practices; how widely their experiences have varied by time and place, and the ways they have struggled while inhabiting a shared world. Historians use a wide range of sources to weave individual lives and collective actions into narratives that bring critical perspectives on both our past and our present. Studying history helps us understand and grapple with complex questions and dilemmas by examining how the past has shaped (and continues to shape) global, national, and local relationships between societies and people.

## HOW TO GET IN

Students interested in declaring a history major should meet with an advisor in the history department. Information about advising and declaring the major is available on the undergraduate section (https:// history.wisc.edu/undergraduate-program) of the department website. There are no prerequisites for declaring the history major, and students are encouraged to declare as soon as they feel comfortable doing so.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General •Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign <br> Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UW- <br> Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS OF THE MAJOR

A minimum of 30 credits in HISTORY is required to complete the major, including:

## CHRONOLOGICAL BREADTH:

History majors must complete at least one course that deals with the history of Europe and/or the Mediterranean before C.E. 1500 or with the history of Africa or Asia before these areas fell heavily under European influence.

## CHRONOLOGICAL BREADTH COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY/ <br> CLASSICS 110 | The Ancient Mediterranean | 4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 112 | The World of Late Antiquity (200-900 C.E.) | 4 |
| HISTORY 115 | Medieval Europe 410-1500 | 4 |
| HISTORY 123 | English History: England to 1688 | 3-4 |
| HISTORY/ RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 | 3-4 |
| HISTORY/ <br> MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course | 3-4 |
| HISTORY 303 | A History of Greek Civilization | 3-4 |
| HISTORY 307 | A History of Rome | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 312 | The Medieval Church | 3-4 |
| HISTORY/ <br> MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| HISTORY 333 | The Renaissance | 3-4 |
| HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
| HISTORY/ENGL/ <br> RELIG ST 360 | The Anglo-Saxons | 3 |


| HISTORY/JEWISH/ <br> MEDIEVAL/ <br> RELIG ST 368 | The Bible in the Middle Ages | 3 |
| :---: | :---: | :---: |
| HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY/ <br> RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| HISTORY/ <br> E A STDS 454 | Samurai: History and Image | 3-4 |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 |
| HISTORY/ <br> LEGAL ST 459 | Rule of Law: Philosophical and Historical Models | 3-4 |
| HISTORY/ LEGAL ST 476 | Medieval Law and Society | 3 |
| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY/CLASSICS/ FRENCH/ITALIAN/ MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| HISTORY/CLASSICS/ HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |
| HISTORY/HIST SCI/ <br> MED HIST/ <br> MEDIEVAL/ <br> S\&A PHM 562 | Byzantine Medicine and Pharmacy | 3 |

## GEOGRAPHIC BREADTH:

At minimum, history majors must complete one course from four of the eight geographic breadth categories.

## GEOGRAPHIC BREADTH: EUROPEAN HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY/ | The Ancient Mediterranean | 4 |
| CLASSICS 110 |  |  |
| HISTORY 115 | Medieval Europe 410-1500 | 4 |
| HISTORY 119 | The Making of Modern Europe 1500-1815 | 4 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 123 | English History: England to 1688 | 3-4 |
| HISTORY 124 | British History: 1688 to the Present | 4 |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 | 3-4 |
| HISTORY/ RELIG ST 209 | Western Intellectual and Religious History since 1500 | 3-4 |
| HISTORY/ RELIG ST 212 | The History of Western Christianity to 1750 | 4 |
| HISTORY/ <br> MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course | 3-4 |
| HISTORY 223 | Explorations in European History (H) | 3-4 |


| HISTORY 224 | Explorations in European History (S) | 3 | HISTORY/ | Modern Political History of the | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HISTORY/ GEOG/POLI SCI/ | Russia: An Interdisciplinary Survey | 4 | JEWISH 374 | Jews: Era of Mass Movements, 1870-1970 |  |
| SLAVIC 253 |  |  | HISTORY/ | Women and Gender in Modern | 3-4 |
| HISTORY/ | Eastern Europe: An Interdisciplinary | 4 | GEN\&WS 392 | Europe |  |
| GEOG/POLI SCI/ <br> SLAVIC 254 | Survey |  | HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY 270 | Eastern Europe since 1900 | 3-4 | HISTORY/ | The Enlightenment and Its Critics | 3 |
| HISTORY 271 | History Study Abroad: European | 1-4 | RELIG ST 411 |  |  |
|  | History |  | HISTORY 417 | History of Russia | 3-4 |
| HISTORY 303 | A History of Greek Civilization | 3-4 | HISTORY 418 | History of Russia | 3-4 |
| HISTORY 307 | A History of Rome | 3-4 | HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY/ MEDIEVAL/ | The Crusades: Christianity and Islam | 3-4 | HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| RELIG ST 309 |  |  | HISTORY 424 | The Soviet Union and the World, | 3-4 |
| HISTORY/ | The Medieval Church | 3-4 |  | 1917-1991 |  |
| MEDIEVAL/ RELIG ST 312 |  |  | HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ <br> MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 | HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY/ <br> MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 | HISTORY/ SCAND ST 431 | History of Scandinavia to 1815 | 3 |
| HISTORY/ MEDIEVAL/ | Medieval Social and Intellectual History, 1200-1450 | 3-4 | HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| RELIG ST 318 HISTORY 320 | Early Modern France, 1500-1715 | 3-4 | HISTORY/ RELIG ST 437 | Western Christianity from Augustine to Darwin | 4 |
| HISTORY/ <br> HIST SCI 323 | The Scientific Revolution: From Copernicus to Newton | 3 | HISTORY 467 | Economic and Social History of Europe 1500-1750 | 3-4 |
| HISTORY/ <br> HIST SCI 324 | Science in the Enlightenment | 3 | HISTORY/ RELIG ST 470 | Religious Thought in Modern Europe | 3-4 |
| HISTORY/ | Environmental History of Europe | 3 | HISTORY 474 | European Social History, 1830-1914 | 3-4 |
| ENVIR ST 328 |  |  | HISTORY 475 | European Social History, 1914- | 3-4 |
| HISTORY 333 | The Renaissance | 3-4 |  | Present |  |
| HISTORY/ <br> RELIG ST 334 | The Reformation | 3-4 | HISTORY/ <br> LEGAL ST 476 | Medieval Law and Society | 3 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 | HISTORY/ <br> ED POL 478 | Comparative History of Childhood and Adolescence | 3 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 | HISTORY/ LEGALST 502 | Law and Colonialism | 3 |
| HISTORY 350 | The First World War and the Shaping of Twentieth-Century | 3-4 | HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
|  | Europe |  | HISTORY/HIST SCI/ | Health, Disease and Healing II | 3-4 |
| HISTORY 351 | Seventeenth-Century Europe | 3-4 | MED HIST 508 |  |  |
| HISTORY 352 | Eighteenth Century Europe | 3-4 | HISTORY 514 | European Cultural History Since | 3-4 |
| HISTORY 357 | The Second World War | 3-4 |  | 1870 |  |
| HISTORY 358 | French Revolution and Napoleon | 3-4 | HISTORY/CURRIC/ | Holocaust: History, Memory and | 3 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 | JEWISH 515 | Education |  |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 | 3-4 | HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY 367 | Society and Ideas in Shakespeare's England | 3-4 | HISTORY/ <br> JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| HISTORY/JEWISH/ MEDIEVAL/ | The Bible in the Middle Ages | 3 | HISTORY/JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| RELIG ST 368 |  |  | HISTORY 540 | Balkans and Middle East, | 3-4 |
| HISTORY/ JEWISH 373 | Modern Political History of the Jews: 1655-1919 | 4 |  | 1700-1918: The Rise of National States |  |


| HISTORY/CLASSICS/ <br> FRENCH/ITALIAN/ <br> MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| :---: | :---: | :---: |
| HISTORY/CLASSICS/ HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |
| HISTORY/ SCAND ST 577 | Contemporary Scandinavia: Politics and History | 3-4 |

## GEOGRAPHIC BREADTH: AFRICAN HISTORY COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| HISTORY 105 | Introduction to the History of Africa | $3-4$ |
| HISTORY/AFRICAN/ | Africa: An Introductory Survey | 4 |
| AFROAMER/ |  | $3-4$ |
| ANTHRO/GEOG/ |  | $3-4$ |
| POLI SCI/SOC 277 | Africans in the Americas, 1492-1808 |  |
| HISTORY 278 | Afro-Atlantic History, 1808-Present | 4 |
| HISTORY 279 | African and African-American |  |
| HISTORY/AFRICAN/ |  |  |
| AFROAMER/ | Linkages: An Introduction | $3-4$ |
| POLI SCI 297 | History of Africa, 1500 to 1870 | $3-4$ |
| HISTORY 377 | History of Africa Since 1870 | $3-4$ |
| HISTORY 378 | History of East Africa | $3-4$ |

## GEOGRAPHIC BREADTH: CENTRAL OR EAST ASIAN HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY/ <br> EASTDS 103 | Introduction to East Asian History: China | 3-4 |
| HISTORY/ EA STDS 104 | Introduction to East Asian History: Japan | 3-4 |
| HISTORY/ASIAN 108 | Introduction to East Asian History Korea | 3-4 |
| HISTORY/E A STDS/ POLI SCI 255 | Introduction to East Asian Civilizations | 3-4 |
| HISTORY/LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| HISTORY/ASIAN AM/ EASTDS 276 | Chinese Migrations since 1500 | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones | 3-4 |
| HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY/ <br> EASTDS 363 | China and World War II in Asia | 3-4 |
| HISTORY/ <br> E A STDS 454 | Samurai: History and Image | 3-4 |


| HISTORY/ | Pearl Harbor \& Hiroshima: Japan, | 3-4 |
| :--- | :--- | :--- |
| E A STDS 456 | the US \& The Crisis in Asia |  |

## GEOGRAPHIC BREADTH: SOUTH OR SOUTHEAST ASIAN HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/E ASIAN/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY/LCA/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| HISTORY 463 | Topics in South Asian History | 3 |
| HISTORY/LCA/ RELIG ST 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |

## GEOGRAPHIC BREADTH: LATIN AMERICAN HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| HISTORY/CHICLA/ GEN\&WS 245 | Chicana and Latina History | 3 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY/ CHICLA 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 555 | History of Brazil | 3-4 |


| HISTORY/HIST SCI/ MED HIST 564 | Disease, Medicine and Public | 3 |
| :---: | :---: | :---: |
|  | Health in the History of Latin |  |
|  | America and the Caribbean |  |
| GEOGRAPHIC BREADTH: MIDDLE EASTERN |  |  |
| Code | Title | Credits |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY/ | The Making of the Islamic World: | 3-4 |
| RELIG ST 205 | The Middle East, 500-1500 |  |
| HISTORY/ | The Crusades: Christianity and | 3-4 |
| MEDIEVAL/ | Islam |  |
| RELIG ST 309 |  |  |
| HISTORY/ | Islam in Iran | 3 |
| RELIG ST 379 |  |  |
| HISTORY/ | Islamic History From the Origin of | 3-4 |
| RELIG ST 439 | Islam to the Ottoman Empire |  |
| HISTORY/GEN\&WS/ | Women in Turkish Society | 3 |
| LCA 472 |  |  |
| HISTORY 540 | Balkans and Middle East, | 3-4 |
|  | 1700-1918: The Rise of National |  |
|  | States |  |

## GEOGRAPHIC BREADTH: TRANSNATIONAL HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 130 | An Introduction to World History | 3-4 |
| HISTORY/ GEN\&WS 134 | Women and Gender in World History | 3-4 |
| HISTORY 135 | Colloquium in Comparative World History | 4 |
| HISTORY 144 | Traveling the World: South Asians in Diaspora | 4 |
| HISTORY 228 | Explorations in Transnational/ Comparative History (Social Science) | 3 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) | 3 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY 274 | History Study Abroad: <br> Transnational/Global History | 1-4 |
| HISTORY/ASIAN AM/ EASTDS 276 | Chinese Migrations since 1500 | 3-4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/ GEN\&WS 315 | Gender, Race and Colonialism | 3 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |


| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| :---: | :---: | :---: |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ENVIR ST/ F\&W ECOL 452 | World Forest History | 3 |
| HISTORY/ <br> CHICLA 461 | The American West to1850 | 3-4 |
| HISTORY/ LEGAL ST 502 | Law and Colonialism | 3 |
| HISTORY 503 | Irish and Scottish Migrations | 3 |
| HISTORY 525 | The World and the West from 1492 | 3-4 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |

## GEOGRAPHIC BREADTH: U.S. HISTORY COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 101 | Amer Hist to the Civil War Era, the Origin \& Growth of the U S | 4 |
| HISTORY 102 | American History, Civil War Era to the Present | 4 |
| HISTORY 109 | Introduction to U.S. History | 3-4 |
| HISTORY 150 | American Histories: The Nineteenth Century | 4 |
| HISTORY/ <br> ASIAN AM 160 | Asian American History: Movement and Dislocation | 3-4 |
| HISTORY/ ASIAN AM 161 | Asian American History: Settlement and National Belonging | 3-4 |
| HISTORY/ JEWISH 213 | Jews and American Pop. Culture | 3-4 |
| HISTORY/ JEWISH 219 | The American Jewish Experience: From Shtetl to Suburb | 4 |
| HISTORY 221 | Explorations in American History (H) | 3-4 |
| HISTORY/ LEGAL ST 261 | American Legal History to 1860 | 3 |
| HISTORY/ LEGAL ST 262 | American Legal History, 1860 to the Present | 3 |
| HISTORY 272 | History Study Abroad: United States History | 1-4 |
| HISTORY 302 | History of American Thought, 1859 to the Present | 3-4 |
| HISTORY 304 | United States, 1877-1914 | 3-4 |
| HISTORY 305 | United States 1914-1945 | 3-4 |
| HISTORY 306 | The United States Since 1945 | 3-4 |
| HISTORY/ <br> AFROAMER 321 | Afro-American History Since 1900 | 3-4 |
| HISTORY/ <br> AFROAMER 322 | Afro-American History to 1900 | 3-4 |
| HISTORY 329 | History of American Capitalism | 4 |
| HISTORY 343 | Colonial British North America | 3-4 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| HISTORY/ GEN\&WS 353 | Women and Gender in the U.S. to 1870 | 3-4 |


| HISTORY/ GEN\&WS 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| :---: | :---: | :---: |
| HISTORY/CHICLA/ LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| HISTORY/ <br> AFROAMER 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| HISTORY/HIST SCI/ MED HIST 394 | Science in America | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY 408 | American Labor History: 1900Present | 3-4 |
| HISTORY/ <br> ED POL 412 | History of American Education | 3 |
| HISTORY/ JEWISH 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ENVIR ST/ GEOG 460 | American Environmental History | 4 |
| HISTORY/ <br> CHICLA 461 | The American West to1850 | 3-4 |
| HISTORY/ CHICLA 462 | The American West Since 1850 | 3-4 |
| HISTORY/ECON 466 | The American Economy Since 1865 | 3-4 |
| HISTORY/ <br> CHICLA 468 | Popular Culture in the Multi-racial United States | 3-4 |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |
| HISTORY/ <br> AMER IND 490 | American Indian History | 3-4 |
| HISTORY/HIST SCI/ MED HIST 504 | Society and Health Care in American History | 3 |
| HISTORY/ JOURN 560 | History of Mass Communication | 4 |
| HISTORY/LIS 569 | History of American Librarianship | 3 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| HISTORY/ <br> AFROAMER 628 | History of the Civil Rights Movement in the United States | 3 |

## NOTES ON HISTORY BREADTH REQUIREMENTS

- Breadth courses may be taken in any order.
- Chronological Breadth courses may also count toward a Geographic Breadth category.
- Some courses qualify for more than one Geographic Breadth area, but a course may only count for one Geographic Breadth category for the purposes of meeting the requirement.
- Topics courses in history (HISTORY 200, HISTORY 201, HISTORY 221, HISTORY 223, HISTORY 225, HISTORY 227, HISTORY 229,

HISTORY 271, HISTORY 272, HISTORY 273, HISTORY 274, HISTORY 275, HISTORY 283, \& HISTORY 500) may count for Geographic and/or Chronological Breadth. For topics courses, see the course notes for current breadth information.

- The following courses may not be used for breadth in the major. HISTORY 199, HISTORY 600, HISTORY 680, HISTORY 681, HISTORY 682, HISTORY 690, HISTORY 691, HISTORY 692, HISTORY 698, \& HISTORY 699.


## HISTORY WRITING AND RESEARCH SEQUENCE:

History majors must complete both of the following:

- Students are encouraged to complete HISTORY 201 The Historian's Craft as early as possible.
- HISTORY 600 Advanced Seminar in History, to be taken after satisfactory completion of HISTORY 201. Enrolling in a HISTORY 600 seminar requires instructor consent. Available seminars can be found on the history department website (https://history.wisc.edu/ history600-seminars).


## L\&S REQUIREMENTS FOR QUALITY AND RESIDENCE IN THE MAJOR:

- 2.000 GPA in HISTORY and required courses in the major
- 2.000 GPA on 15 upper-level major credits in residence. HISTORY courses designated as intermediate or advanced are upper level in the major.
- 15 credits HISTORY taken on campus


## GLOBAL HISTORY TRACK

Any undergraduate history major may choose to pursue the Global Track by completing all requirements for the history major above, and these additional requirements:

- Geographic Breadth: one additional course, in a fifth breadth area; at least one of the five breadth courses must be from the Transnational category
- Foreign Language or Experience Requirement: one of the following options:
- Completion of the 5 th unit of a single foreign language, defined as the 5th semester of college instruction or the 5th year of high school instruction
- ESL 118 Academic Writing II
- 3 credits of coursework from a UW-Madison Study Abroad Program

Note: The Global History Track is unofficial and will not be recorded on a student's final transcript. For purposes of graduation auditing, DARS will display the track as an informational section only.

## DISTINCTION IN THE MAJOR

To be awarded Distinction in the Major, students must:

- Achieve a GPA of at least 3.700 out of 4.000 in HISTORY courses
- Complete a minimum of 21 upper-level credits in major coursework. HISTORY courses designated as intermediate or advanced are upper level in the major.
- Complete all requirements of the major

Students should consult the undergraduate advisor in history regarding current requirements for the major.

## HONORS IN THE MAJOR

Students may declare Honors in the History Major in consultation with the History undergraduate advisor.

## HONORS IN HISTORY MAJOR REQUIREMENTS

To earn Honors in the Major in History, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in all HISTORY courses
- Complete at least 36 total credits in HISTORY coursework, 21 of which must be upper-level ${ }^{1}$ credits in residence
- Complete at least 15 Honors credits in HISTORY coursework
- Complete a two-semester Senior Honors Thesis, a piece of original work of approximately forty pages, in HISTORY 681 Senior Honors Thesis-HISTORY 682 Senior Honors Thesis, taken in conjunction with the HISTORY 680 Honors Thesis Colloquium both semesters. The thesis must be approved by instructors in both the thesis and colloquium courses.

1 Courses with intermediate or advanced level are upper level in the history major.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (Define important historical questions) Pose a historical question and explain its academic and public implications.
2. (Define important historical questions) Using appropriate research procedures and aids, find the secondary resources in history and other disciplines available to answer a historical question.
3. (Define important historical questions) Evaluate the evidentiary and theoretical bases of pertinent historical conversations in order to highlight opportunities for further investigation.
4. (Collect and analyze evidence) Identify the range and limitations of sources available to engage the historical problem under investigation.
5. (Collect and analyze evidence) Examine the context in which sources were created, search for chronological and other relationships among them, and assess the sources in light of that knowledge.
6. (Collect and analyze evidence) Employ and, if necessary, modify appropriate theoretical frameworks to examine sources and develop arguments.
7. (Present original conclusions) Present original and coherent findings through clearly written, persuasive arguments and narratives.
8. (Present original conclusions) Orally convey persuasive arguments, whether in formal presentations or informal discussions.
9. (Present original conclusions) Use appropriate presentation formats and platforms to share information with academic and public audiences.
10. (Contribute to ongoing discussions) Extend insights from research to analysis of other historical problems.
11. (Contribute to ongoing discussions) Demonstrate the relevance of a historical perspective to contemporary issues.
12. (Contribute to ongoing discussions) Recognize, challenge, and avoid false analogies, overgeneralizations, anachronisms, and other logical fallacies.

## ADVISING AND CAREERS

Students who are declared or interested in the history major have numerous advising resources available to them. The history advising team is comprised of professional and peer advisors who are excited to talk with students about everything from academic planning to professional development for future careers. Information on the History advising team, how to contact an advisor, how to schedule an appointment, and drop-in advising hours can be found on our website (https://history.wisc.edu/undergraduate-program/undergraduateadvising).

The Honors in the Major track in history is intended for students who are eager to experience the excitement of original historical research and who wish to graduate with the best possible undergraduate training in this discipline. Honors in the Major is especially appropriate for students who are considering graduate work in history or who want an especially advanced training in research, reasoning, and writing skills useful to a wide range of career choices.

Information on upcoming career events and internship opportunities for history majors are available on the History Advising Blog (http:// uwhistoryadvising.blogspot.com). Alumni of the history department have enjoyed careers in medical research and practice; broadcast and print media; sports management; museums, archives, and libraries; finance and business, and community service and nonprofit organizations-as well as law, academia, and many other fields. Want to see what some of our alumni have done with their history majors? Check out our "featured alumni" profiles on the department website.

History is a rigorous but flexible major, and history majors are known for being excellent communicators and savvy researchers. Historians are experts in synthesizing disparate pieces of evidence into coherent, persuasive arguments. The real world is filled with disparate facts and
incomplete sets of data, so this is a real-world skill that history alumni utilize throughout their entire careers.

The history major provides excellent preparation for the study of law, but our students also go on to study medicine and many other graduate fields. The centers for Pre-Law Advising (https://prelaw.wisc.edu) and Pre-Health Advising (https://prehealth.wisc.edu) are especially helpful resources on campus for students interested in those areas of study.

History can also be combined with any other major in the college of Letters \& Science (L\&S), anything from astronomy (http://guide.wisc.edu/ undergraduate/letters-science/astronomy) to zoology (http:// guide.wisc.edu/undergraduate/letters-science/integrative-biology). Majors that students most frequently pair with history are: economics (http://guide.wisc.edu/undergraduate/letters-science/economics), English (http://guide.wisc.edu/undergraduate/letters-science/english), environmental studies (http://guide.wisc.edu/undergraduate/letters-science/environmental-studies/environmental-studies-major), journalism (http://guide.wisc.edu/undergraduate/letters-science/journalism-mass-communication), and political science (http://guide.wisc.edu/ undergraduate/letters-science/political-science). History majors can also choose to add certificates in L\&S or from outside the college, such as the certificates in business (http://guide.wisc.edu/undergraduate/ business/school-wide/business-certificate) or education and educational services (http://guide.wisc.edu/undergraduate/education/educational-psychology/education-educational-services-certificate). In addition to these, some of the most common certificates for history majors are currently: criminal justice (http://guide.wisc.edu/undergraduate/ letters-science/center-law-society-justice/criminal-justice-certificate), global health (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/nutritional-sciences/global-health-certificate), European studies (http://guide.wisc.edu/undergraduate/letters-science/institute-regional-international-studies/european-certificate), and digital studies (http:// guide.wisc.edu/undergraduate/letters-science/communication-arts/ digital-studies-certificate). The history advising team is happy to discuss ways for you to make your intellectual and career goals work as part of a four-year plan.

## HISTORY CAREERS COURSE: "HISTORY AT WORK"

HISTORY 505 History at Work: Professional Skills of the Major is a course intended to help history majors understand how their history degree applies to the world of work. Students explore how their history skills relate to the needs of professional employers and are guided in the process of finding and obtaining professional internships and jobs. In this course, history majors can polish their written and oral communication skills in forms appropriate for professional situations and learn from the experiences of guest speakers from a variety of fields.

## INTERNSHIPS

The Department of History recognizes the importance of internships in helping students develop professional skills and explore potential career paths. Positions can vary depending on availability and students' interests, but recent sponsors have included the Wisconsin State Historical Museum, the University of Wisconsin Archives, offices of elected officials in the Wisconsin State Legislature and United States Congress, the Milwaukee Brewers, and Community Shares of Wisconsinjust to name a few!

## ALUMNI MENTORING

Like internships, networking can be a valuable tool in opening professional doors and learning more about the professional value of the history major. The department often matches students with alumni
mentors drawn from our Board of Visitors (https://history.wisc.edu/ alumni-and-friends/board-of-visitors) and other graduates who can help them get started building a professional network, answer questions about a specific field, provide guidance in applying for jobs or preparing for interviews, and providing general career advice.

Students interested in participating in an internship or talking with an alumni mentor should meet with Christina Matta, the department's undergraduate career advisor, to discuss their interests and possible career goals.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Boswell, Cronon, Desan, Dunlavy, Enke, Enstad, Hansen, Hirsch, Hsia, S. Johnson, Kantrowitz, Keller Kleijwegt, Koshar, Lederer, McCoy, McDonald, Michels, Mitman, Neville, Nyhart, Plummer, Reese, Roberts, Sharpless, Shoemaker, Sommerville, Sweet, Thal, Wandel, Wink, Young

Associate Professors Chan, Cheng, Dennis, Gómez, Hall, Ipsen, Kim, Kodesh, Murthy, Ratner-Rosenhagen, Taylor, Ussishkin

Assistant Professors Brown, Callaci, Chamedes, Ciancia, Haynes, Hennessy, Hicks, Iber, Jackson, Kinzley, Lapina, Nelson, Whiting

Teaching Associates Carlsson, Cullinane, Keyser

## WISCONSIN EXPERIENCE

## HISTORY: THE WISCONSIN EXPERIENCE

The history department is committed to integrating undergraduate historical study into the Wisconsin Experience (https://provost.wisc.edu/ wisconsin-experience), UW-Madison's vision for students' growth inside and outside the classroom. History majors at UW-Madison have a wide range of opportunities available to help them make the most of their major and carry the study of the past beyond the boundaries of the classroom. The history Wisconsin Experience fosters:

## Cross-Cultural Literacy across Time and Space

1. Learn about the histories of multiple geographic areas across a wide stretch of time
2. Develop the ability to communicate effectively and appropriately with people of different backgrounds

## Engagement in Society

1. Take advantage of mentoring, internship, and career resources
2. Engage in public service for secondary education, public history, and community organizations
3. Expand understanding of important public issues from a variety of perspectives

## Critical Inquiry

1. Develop analytical abilities for local, national, and global citizenship and leadership
2. Understand the perspectives of people from different backgrounds
3. Analyze how ideas and institutions change over time

## Transferable Skills for Careers

1. Hone both oral and written communicational skills
2. Synthesize information from multiple perspectives and disparate forms of evidence
3. Conduct original research using a variety of methods and sources
4. Present original conclusions in a variety of media

History majors engage in these areas in ways that are particular to history, developing skills that are transferable to a wide range of careers as well as a lifelong love of learning.

## HISTORY RESOURCES FOR PROFESSIONAL AND INTELLECTUAL GROWTH

## archive

ARCHIVE (https://uwarchive.wordpress.com) is an award-winning journal of historical work published annually by the UW-Madison chapter of Phi Alpha Theta. See ARCHIVE's website (https://uwarchive.wordpress.com) to view past volumes and find out how you could be published.

## Phi Alpha Theta

Phi Alpha Theta (https://win.wisc.edu/organization/pat) is a national history honors society whose purpose is to promote the study of history and to bring students, teachers and writers of history together in intellectual and social ways. See the UW-Madison chapter's page for more information.

## Language and Regional/International Studies

History classes and faculty are at the center of UW-Madison's remarkable collection of resource centers for area studies. IRIS (https://iris.wisc.edu) is the umbrella organization for UW-Madison's eight area studies programs. Students interested in these areas can combine their history major with a major in international studies (http://www.ismajor.wisc.edu) or any of the area studies majors and/
or certificates. UW-Madison also has one of the largest selections of language instruction (https://languages.wisc.edu) in the United States.

## Study Abroad

History is a great major for students interested in studying abroad (https://www.studyabroad.wisc.edu/map_history.asp) due to its flexibility and because study abroad experience counts toward the history major's Global Track. Find out more on our major advising page.

## Wisconsin Historical Society

Scholars and researchers from all over the country (and world) come to the Wisconsin Historical Society (https://www.wisconsinhistory.org) (WHS) to do historical research. History majors at UW-Madison simply walk across the street to make use of this world-class institution. The collections of the WHS are an amazing resource for history majors and are utilized by a wide range of our courses. History majors can also develop internships related to the WHS collections and programs. Students who are interested in the history of film and television often double major in communication arts (http://guide.wisc.edu/ undergraduate/letters-science/communication-arts) and get involved with the Wisconsin Center for Film and Theater Research (http:// wcftr.commarts.wisc.edu).

## RESOURCES AND SCHOLARSHIPS

## THE HISTORY LAB

The History Lab is a resource center for undergraduate students studying, researching, and writing about the past. It is staffed by talented and experienced graduate students from the Department of History.

Through individual and group tutoring, the Lab focuses on honing students' abilities to form suitable topics, conduct research, develop arguments and thesis statements, cite evidence properly, and write using an effective process. The lab is equipped also to support challenges faced by English-language learners.

For more information or to make an appointment, see the History Lab website. (https://history.wisc.edu/undergraduate-program/the-historylab)

## RESEARCH FELLOWSHIPS AND SCHOLARSHIPS

The Department of History is committed to supporting undergraduate achievement and encourages applications for the various scholarships and research fellowships made possible by the generosity of its donors. Scholarships are designed to reward outstanding History majors and are awarded annually. Research fellowships allow undergraduates to pursue in-depth historical research under the guidance of Department of History faculty. These awards help defray research costs such as supplies and travel expenses or pay for living expenses to allow students time to craft their papers and conduct research in UW Libraries.

Detailed instructions on how to apply can be found on the Department of History website (https://history.wisc.edu/undergraduate-program/ history-the-wisconsin-experience/undergraduate-scholarships). Applications need to be submitted online, via Scholarships@UW-Madison (http://scholarships.wisc.edu/Scholarships).

## UNDERGRADUATE WRITING PRIZES

The history department offers an assortment of essay prizes designed to reward a broad range of undergraduate writing-from Senior Theses to term papers to specialized essays in German-Jewish history. The prizes are made possible thanks to the tremendous generosity of our alumni and former members of our faculty. The history department expresses its gratitude for their support in recognizing the achievements of our undergraduates.

Detailed instructions on how to apply can be found on the Department of History website (https://history.wisc.edu/undergraduate-program/ history-the-wisconsin-experience/undergraduate-scholarships).
Applications need to be submitted online, via Scholarships@UW-Madison (http://scholarships.wisc.edu/Scholarships).

## MEDIEVAL STUDIES, CERTIFICATE

Medieval studies offers students interdisciplinary perspectives on the history of Europe and the Mediterranean rim between ca. 300-1500. Courses spanning 18 departments allow students to explore the medieval world from the standpoints of art, visual and material culture, history, law, languages and literature, music, philosophy, religious studies and the history of science and medicine. The certificate in medieval studies is designed to encourage pursuit of interdisciplinary work among several departments.

The Middle Ages was a dynamic period of trans-continental trade and travel that fostered cultural, technological and scientific interactions among the kingdoms and city states of Western Europe, the Byzantine (East Roman) Empire and the Islamic caliphates that eventually encompassed much of Spain, north Africa and the Middle East. It is also known that the Norse (Vikings) established settlements in North America as early as ca.1000, some 500 years before Columbus.

In Western Europe, the Middle Ages laid the foundations of constitutional government and modern nation-states, instituted a system of trial by jury, and developed the first universities along with the concept of a liberal arts curriculum (encompassing both arts and sciences). The period also saw the development of English, Germanic, Scandinavian and romance languages and literature, which came to eclipse Latin by the end of the fourteenth century as vehicles for secular poetry and prose. Further east, Greek dominated the territory of the Byzantine Empire, while the foundation of the Kievan Rus coincided with the development of Cyrillic script used by Russian and other Slavic languages. The Islamic world saw the wide diffusion of Arabic languages and literature, including scientific works which served to mediate knowledge of Greek natural philosophy and medical science to Western Europe.

Other significant cultural developments include the development of the codex or book often with elaborate programs of visual imagery and diagrams, the innovation of musical notation and early forms of polyphony in Europe, the application of optical science to urban planning and of one-point perspective to painting especially in Italy, and the refinement of structural engineering that led to the soaring light-filled architecture of Gothic cathedrals in Western Europe and expansive centralized domed spaces in the Byzantine Empire and related Orthodox states, as well as in the Islamic world.

The program's focus is embodied in the interdisciplinary courses offered under the auspices of medieval studies. For example, MEDIEVAL/ HISTORY 215 Life in the Middle Ages: An Inter-Departmental Course
provides a survey of civilization and culture in medieval times.
The program cross-lists a number of courses on particular aspects of medieval history and culture that are offered by participating departments, helps to publicize courses with medieval subject matter that are not permanently cross-listed, and offers opportunities for students to undertake independent-study projects with participating faculty members. It also regularly organizes public programming on specific themes under the auspices of the Borghesi-Mellon Workshops administered by the Center for the Humanities.

In addition to departments and programs that cross-list courses with Medieval Studies-Art History, CANES (Classical and Near Eastern Studies), English, French and Italian, German, History, History of Medicine, History of Science, Religious Studies, Scandinavian Studies, Spanish and Portuguese, Women's Studies-the following departments and programs occasionally offer courses and seminars in the medieval area: African Languages and Literature, Comparative Literature, Folklore, Languages and Cultures of Asia, Music, Philosophy, and Political Science.

Like a minor, the certificate documents a rigorous course of study in addition to the major(s). It attests ambitious intellectual goals as well as the ability to imagine historical problems in transnational and transcultural perspectives As a credential, it demonstrates a capacity for comparative critical thinking and analysis, skills that appeal to a wide range of potential employers.

## HOW TO GET IN

Students interested in working toward the certificate should contact the director of medieval studies as early in their degree program as possible. The director serves as the undergaduate advisor for all students pursuing the certificate. For further information see the Medieval Studies website (http://www.medievalstudies.wisc.edu).

## REQUIREMENTS

The certificate requires the completion of five courses ( 15 credits) in the medieval area, according to the following distributional requirements.

Students interested in working toward the certificate should contact the director of medieval studies as early in their degree program as possible. The director serves as the undergraduate advisor for all students pursuing the certificate. For further information see the Medieval Studies website (http://www.medievalstudies.wisc.edu).

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | $3-4$ |  |
| HISTORY 115 | Medieval Europe 410-1500 |  |
| HISTORY/ | Life in the Middle Ages: An Inter- |  |
| MEDIEVAL 215 | Departmental Course |  |
| ILS 201 | Western Culture: Science, |  |
|  | Technology, Philosophy I |  |

Select two courses focused on the medieval period from
Category A (history, history of science, philosophy, and political science) ${ }^{1}$
Select two courses focused on the medieval period from
Category B (language, literature, visual arts, and music) ${ }^{1}$
Total Credits
15-16

1 For a list of which individual courses count toward Category A and which toward Category B, see the course lists below.

## Category A Course List Code Title

## Category A Courses

| HISTORY 115 | Medieval Europe 410-1500 | 4 |
| :---: | :---: | :---: |
| HISTORY 200 | Historical Studies | 3 |
| HISTORY/ <br> RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | -4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| HISTORY/ MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| STORY/ | Afro-American History Since 1900 | 3-4 |

AFROAMER 321

| HISTORY 333 | The Renaissance | $3-4$ |
| :--- | :--- | :---: |
| HISTORY 417 | History of Russia | $3-4$ |
| HISTORY/ | The History of Punishment | $3-4$ |
| LEGAL ST 426 |  |  |
| HISTORY/ | History of Scandinavia to 1815 |  |

SCAND ST 431
HISTORY/ Islamic History From the Origin of 3-4
$\begin{array}{ll}\text { RELIG ST } 439 & \text { Islam to the Ottoman Empire } \\ \text { HISTORY } 600 & \text { Advanced Seminar in History }\end{array}$
HIST SCI/ Ancient and Medieval Science 3
MEDIEVAL 322
HIST SCI/ History of Pharmacy 2
S\&A PHM 401
HIST SCI/HISTORY/ Byzantine Medicine and Pharmacy 3
MED HIST/
MEDIEVAL/
S\&A PHM 562

| HIST SCI 622 | Studies in Ancient and Medieval <br> Science | 1 |
| :--- | :--- | ---: |
| ILS 201 | Western Culture: Science, <br> Technology, Philosophy I | 3 |
| ILS 205 | Western Culture: Political, <br> Economic, and Social Thought I | 3 |
|  | Pre-Copernican Astronomy and <br> Cosmology in Crosscultural | 3 |
| JEWISH/ | Perspective |  |
| Jewish Cultural History (in English) | 4 |  |

RELIG ST 377
JEWISH 490 Topics in Jewish Studies 3
MEDIEVAL/ Life in the Middle Ages: An Inter- 3-4
HISTORY 215
MEDIEVAL/ Advanced Interdisciplinary Studies 3
CLASSICS/ in Medieval Civilization
FRENCH/HISTORY/
ITALIAN 550

| PHILOS/JEWISH/ | Jewish Philosophy from Antiquity to <br> the Seventeenth Century | 3 |
| :--- | :--- | ---: |
| RELIG ST 435 | Development of Ancient and <br> Medieval Western Political Thought | $3-4$ |

## Category B Course List

## Code Title

## Category B Courses

| ART HIST 201 | History of Western Art I: From <br> Pyramids to Cathedrals |
| :--- | :--- |

ART HIST 310 Early Christian and Byzantine Art 3-4
ART HIST 318 Romanesque and Gothic Art and 3-4 Architecture
ART HIST 320 Italian Renaissance Art 3-4
ART HIST 321 Italian Art: 1250-1400 3-4
ART HIST 322 Italian Art from Donatello to 3-4
Leonardo da Vinci, 1400-1500
The Painting \& Graphic Arts of 3-4

Germany 1350-1530
ART HIST 331 Angels, Demons, and Nudes: Early 3-4
Netherlandish Painting from Bosch to Bruegel

| ART HIST/ | Topics in Medieval Art | 3 |
| :--- | :--- | :--- |
| MEDIEVAL 415 |  |  |

ART HIST 515 Proseminar in Medieval Art 3
ART HIST 525 Proseminar in Italian Renaissance 3

Art
ART HIST 535 Proseminar in Northern European 3
Painting
ART HIST 600 Special Topics in Art History 3
("Medieval" topic only)
Old English 3

Advanced Old English Literature 3

| ENGL/ | Advanced Old English Literature | 3 |
| :--- | :--- | ---: |
| MEDIEVAL 521 |  | 3 |
| ENGL 314 | Structure of English | 3 |
| ENGL 417 | History of the English Language | 3 |


| ENGL/ | Advanced Old English Literature | 3 |
| :--- | :--- | :--- |
| MEDIEVAL 521 |  | 3 |
| ENGL 314 | Structure of English | 3 |
| ENGL 417 | History of the English Language | 3 |

ENGL $422 \quad$ Outstanding Figure(s) in Literature 3
before 1800

| ENGL/ | Topic in Medieval Literature and | 3 |
| :--- | :--- | ---: |
| MEDIEVAL 423 | Culture |  |
| ENGL/ | Chaucer's Canterbury Tales | 3 |

MEDIEVAL 427 RRENCH 430

|  | Readings in Medieval and <br> Renaissance Literature | 3 |
| :--- | :--- | :--- |
| GERMAN/ | Survey of German Literature to 1700 | 3 |


| MEDIEVAL 611 |  |
| :--- | :--- |
| GERMAN 650 | History of the German Language |

GERMAN/ Introduction to Middle High German 3

MEDIEVAL 651
ILS 203 Western Culture: Literature and the 3
ITALIAN $321 \quad 3$
ITALIAN/ Dante's Divina Commedia 3

3 3-4

Credits 4 3-4 4 4 4

[^33]3

3
3
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MEDIEVAL 520

Topic in Medieval Literature and 3

3

3

3

3
3

3

3

| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| :---: | :---: | :---: |
| ITALIAN/ MEDIEVAL 671 | II Duecento | 3 |
| JEWISH/ RELIG ST 377 | Jewish Cultural History (in English) | 4 |
| JEWISH 490 | Topics in Jewish Studies ("Medieval" topic only) | 3 |
| LATIN/ MEDIEVAL 563 | Mediaeval Latin | 3 |
| LITTRANS/ MEDIEVAL 235 | The World of Sagas | 3 |
| LITTRANS/ MEDIEVAL/ RELIG ST 253 | Of Demons and Angels. Dante's Divine Comedy | 3 |
| LITTRANS 255 | Literature in Translation: <br> Boccaccio's Decameron-The Human Comedy | 3 |
| LITTRANS 256 | Lit in Translation: Images of the Individual in the Italian Renaissance | 3 |
| LITTRANS 271 | In Translation:Masterpieces of Scandinavian Literature, Middle Ages-1900 | 3-4 |
| LITTRANS/ FOLKLORE/ MEDIEVAL/ RELIG ST 342 | In Translation: Mythology of Scandinavia | 3-4 |
| LITTRANS/ FOLKLORE/ MEDIEVAL 345 | In Translation: The Scandinavian Tale and Ballad | 3-4 |
| LITTRANS/ FOLKLORE/ MEDIEVAL 346 | In Translation: The Icelandic Sagas | 3-4 |
| LITTRANS/ FOLKLORE 347 | In Translation: Kalevala and Finnish Folk-Lore | 3-4 |
| MEDIEVAL/ HISTORY/JEWISH/ RELIG ST 368 | The Bible in the Middle Ages | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST/ MEDIEVAL 407 | Old Norse | 3 |
| SCAND ST/ MEDIEVAL 409 | Survey of Old Norse-Icelandic Literature | 3 |
| SCAND ST/ MEDIEVAL 430 | The Vikings | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST/ MEDIEVAL 444 | Kalevala and Finnish Folk-Lore | 4 |
| SCAND ST 414 | History of the Scandinavian Languages I: Proto- to Common Scandinavian | 3 |


| SPANISH/ | Literatura de la Edad Media | 3 |
| :--- | :--- | :---: |
| MEDIEVAL 414 | Castellana (ss. XII-XV) |  |
| SPANISH/ | Survey of Medieval Literature |  |
| MEDIEVAL 503 | Survey of Medieval Literature | 3 |
| SPANISH/ <br> MEDIEVAL 504 <br> SPANISH/ | Old Spanish | 3 |

## RESIDENCE AND QUALITY OF WORK

8 credits counting toward the certificate, taken in residence
A cumulative 3.000 GPA in all courses counting toward the certificate

## ADDITIONAL NOTES

In addition to the required courses, all certificate candidates are encouraged to enhance their work in medieval studies by acquiring a reading knowledge of a modern European language as early as possible. Studying Latin in addition is strongly recommended for those who plan to graduate work in the field.

In consultation with the director, students may choose to work beyond the certificate to a self-designed major in medieval studies. For further information, contact the director of medieval studies.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate is intended to be completed in the context of an undergraduate degree and for those seeking this certificate that is preferred. For students who have substantially completed this certificate at UW-Madison (at least 12 credits) and may need one or two courses to complete the certificate, they may do so immediately after completion of the bachelor's degree by enrolling in the course as a University Special (nondegree) student. The certificate must be completed within a year of completion of the bachelor's degree. Students should keep in mind that University Special students have the last registration priority and that may limit availability of desired courses. Financial aid is not available when enrolled as a University Special student to complete an undergraduate certificate.

## LEARNING OUTCOMES

1. to provide opportunities for students and faculty to pool their interests and knowledge and explore the interrelationships among the medieval studies disciplines in ways usually not feasible within conventional academic compartmentalization.
2. to help interested undergraduates develop skills in historical languages, critical reading of primary sources of all kinds (texts, visual and material culture, music and oral culture), historiography and current methodologies necessary to prepare them for graduate studies in medieval areas.
3. to provide opportunities for students and faculty to pool their interests and knowledge and explore the interrelationships among the medieval disciplines in ways usually not feasible within conventional academic compartmentalization.
4. to offer the non-specialist critical analytical skills and historical perspectives on current issues such as religious conflict and the concept of "holy war", colonialism and cultural globalism, gender and sexual identity, scientific and technological innovation.
5. to foster appreciation of all aspects of medieval culture and its manifestations in contemporary popular culture.

## ADVISING AND CAREERS

Students can obtain advising for the certificate by contacting the director of medieval studies. The director serves as the undergaduate advisor for all students pursuing the certificate. For further information see the Medieval Studies website (http://www.medievalstudies.wisc.edu).

## INSTITUTE FOR REGIONAL AND <br> INTERNATIONAL STUDIES

## DEGREES/MAJORS/CERTIFICATES

- African Studies, Certificate (p. 793)
- Asian Studies, B.A. (p. 797)
- Asian Studies, B.S. (p. 802)
- East Asian Studies, Certificate (p. 807)
- European Studies, Certificate (p. 810)
- International Studies, B.A. (p. 822)
- International Studies, B.S. (p. 879)
- Latin American, Caribbean, and Iberian Studies, B.A. (p. 936)
- Latin American, Caribbean, and Iberian Studies, B.S. (p. 943)
- Middle East Studies, Certificate (p. 950)
- Russian, East European, and Central Asian Studies, Certificate (p. 954)
- South Asian Studies, Certificate (p. 958)
- Southeast Asian Studies, Certificate (p. 962)


## AFRICAN STUDIES, CERTIFICATE

The African Studies Program supports research, teaching, and outreach at the University of Wisconsin-Madison, bringing together scholars in multiple disciplines, students, teachers, and community partners to consider all aspects of land and life in Africa. The African Studies Program is a U. S. Department of Education Title VI National Resource Center for Africa, a unit in The International Division, and a member of the campus consortium of internationally oriented programs known as the Institute for Regional and International Studies (http://iris.wisc.edu).

The program was established in 1961 by an interdisciplinary team of internationally respected scholars including Jan Vasina, Philip Curtin, Frederick Simoons, and Aristride Zolberg. The center continues to enjoy a reputation for excellence, having awarded more degrees to Africa specialists than any other American university. No other university boasts such a depth and range of expertise in Africanist scholarship. Over 70 affiliated faculty offer more than 100 courses in 35 departments around campus. The department of African Cultural Studies offers students an opportunity to study a number of African languages including Arabic, Hausa, Swahili, Yoruba, Wolof, and Zulu, as well as options for selfdirected study of less-commonly taught languages.

Undergraduates from any department can benefit from access to our programs and top ranked faculty by completing a certificate in African
studies. The certificate is highly interdisciplinary and welcomes students with backgrounds in the humanities, social sciences, business, health, agriculture, or the environment. What unites certificate students is a shared interest in the people, places, and stories of the continent of Africa.

A certificate in African Studies indicates that a student has acquired an interdisciplinary knowledge about the African continent, its histories, its stories, and its people. African studies alumni serve in a number of important leadership positions in both the private and public sector. Former students have gone on to serve as ambassadors, presidential advisors, and leaders of investment firms and Washington think tanks. Many undergraduate certificate holders launch their internationallyoriented careers by joining the Peace Corps after graduation.

## HOW TO GET IN

Students interested in declaring the undergraduate certificate should contact the African Studies Program office (asp@africa.wisc.edu) or the undergraduate advisor (advising@africa.wisc.edu).

## REQUIREMENTS

## CERTIFICATE REQUIREMENTS

 15 CREDITS IN AFRICAN STUDIES APPROVED COURSESAt least two SUBJECTs represented: ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN 100 | Introduction to African Cultural Expression | 3 |
| AFRICAN/ HISTORY 129 | Africa on the Global Stage | 3-4 |
| AFRICAN 201 | Introduction to African Literature | 3 |
| AFRICAN/ <br> FOLKLORE 210 | The African Storyteller | 3 |
| AFRICAN 211 | The African Autobiography | 3 |
| AFRICAN 212 | Introduction to African Popular Culture | 3-4 |
| AFRICAN/ <br> AFROAMER 220 | HipHop, Youth Culture, and Politics in Senegal | 3 |
| AFRICAN 230 | Introduction to Yoruba Life and Culture | 3 |
| AFRICAN 231 | Introduction to Arabic Literary Culture | 3 |
| AFRICAN 232 | Introduction to Swahili Cultures | 3 |
| AFRICAN/ <br> AFROAMER 233 | Global HipHop and Social Justice | 3 |
| AFRICAN/ <br> FOLKLORE 270 | The Hero and Trickster in African Oral Traditions | 3 |
| AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey | 4 |



| AFRICAN/ <br> FRENCH 440 | African/Francophone Film | 3 |
| :---: | :---: | :---: |
| AFRICAN/ <br> LCA LANG 445 | Readings in Advanced Arabic Texts | 3 |
| AFRICAN/ <br> LCA LANG 446 | Readings in Advanced Arabic Texts | 3 |
| AFRICAN/ PORTUG 451 | Lusophone African Literature | 3 |
| AFRICAN 453 | Modern African Literature in English | 3-4 |
| AFRICAN/ LCA LANG 427 | Intermediate Summer Immersion Arabic | 8 |
| AFRICAN/ <br> FOLKLORE 471 | Oral Traditions and the Written Word | 3-4 |
| AFRICAN 475 | Fifth Semester Yoruba | 3 |
| AFRICAN 476 | Sixth Semester Yoruba | 3 |
| AFRICAN 493 | Fifth Semester, A Language of Southern Africa | 3 |
| AFRICAN 494 | Sixth Semester, A Language of Southern Africa | 3 |
| AFRICAN 495 | Fifth Semester, A Language of Northern Africa | 3 |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa | 3 |
| AFRICAN 497 | Fifth Semester, A Language of West Africa | 3 |
| AFRICAN 498 | Sixth Semester, A Language of West Africa | 3 |
| AFRICAN 500 | Language and Society in Africa | 3-4 |
| AFRICAN 501 | Structure and Analysis of African Languages | 3-4 |
| AFRICAN 503 | African Linguistic StructuresMorphology and Syntax | 3-4 |
| AFRICAN 605 | Advanced Topics in African Cultural Studies | 3 |
| AFRICAN 609 | Advanced Topics in Global Black Music Studies | 3 |
| AFRICAN 669 | Special Topics | 3 |
| AFRICAN 670 | Theories and Methods of Learning a Less Commonly Taught Language | 2 |
| AFRICAN 671 | Multilanguage Seminar | 4 |
| AFRICAN 697 | Directed Study of a Less Commonly Taught Language | 3-5 |
| AFRICAN 698 | Directed Study | 1-6 |
| AFRICAN 699 | Directed Study | 1-6 |
| AFROAMER/ <br> ART HIST 241 | Introduction to African Art and Architecture | 3 |
| AFROAMER/ ART HIST 242 | Introduction to Afro-American Art | 3 |
| AFROAMER/ <br> AFRICAN/ANTHRO/ <br> GEOG/HISTORY/ <br> POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| AFROAMER/ <br> AFRICAN/HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |


| AFROAMER/ <br> AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |
| :---: | :---: | :---: |
| AFROAMER/ <br> ART 674 | Selected Topics on Afro-American Artists | 3 |
| AFROAMER 675 | Selected Topics in Afro-American Culture | 3 |
| A A E/INTL ST 374 | The Growth and Development of Nations in the Global Economy | 3 |
| A A E/ECON 474 | Economic Problems of Developing Areas | 3 |
| A A E/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| ANTHRO 120 | Freshman/Sophomore Seminar in Anthropology | 3 |
| ANTHRO/AFRICAN/ AFROAMER/GEOG/ HISTORY/POLI SCI/ SOC 277 | Africa: An Introductory Survey | 4 |
| ANTHRO 333 | Prehistory of Africa | 3 |
| ANTHRO 345 | Family, Kin and Community in Anthropological Perspective | 3 |
| ANTHRO 348 | Economic Anthropology | 3-4 |
| ANTHRO 391 | Bones for the Archaeologist | 3 |
| ANTHRO 490 | Undergraduate Seminar | 3 |
| ART HIST/ <br> AFROAMER 241 | Introduction to African Art and Architecture | 3 |
| ART HIST 579 | Proseminar in African Art | 3 |
| DANCE 118 | African Dance | 1 |
| DANCE 165 | World Dance Cultures: Traditional to Contemporary | 3 |
| DANCE/ <br> THEATRE 218 | African Dance Performance | 2 |
| DANCE/AFROAMER/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| ECON/A A E 474 | Economic Problems of Developing Areas | 3 |
| ED POL 150 | Education and Public Policy | 3 |
| ENVIR ST/GEOG 339 | Environmental Conservation | 4 |
| ECON/A A E 477 | Agricultural and Economic Development in Africa | 3 |
| FOLKLORE/ AFRICAN 210 | The African Storyteller | 3 |
| FOLKLORE/ AFRICAN 270 | The Hero and Trickster in African Oral Traditions | 3 |
| FOLKLORE/ AFRICAN 471 | Oral Traditions and the Written Word | 3-4 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 665 | Introduction aux etudes francophones | 3 |


| GEOG/AFRICAN/ | Africa: An Introductory Survey | 4 |
| :---: | :---: | :---: |
| AFROAMER/ |  |  |
| ANTHRO/HISTORY/ |  |  |
| POLI SCI/SOC 277 |  |  |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| HISTORY 105 | Introduction to the History of Africa | 3-4 |
| HISTORY/ RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| HISTORY 225 | Explorations in Third World History $(H)$ | 3-4 |
| HISTORY/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY 283 | Intermediate Honors SeminarStudies in History | 3 |
| HISTORY/AFRICAN/ <br> AFROAMER/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 377 | History of Africa, 1500 to 1870 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY 444 | History of East Africa | 3-4 |
| HISTORY 445 | History of Equatorial Africa | 3-4 |
| HISTORY 600 | Advanced Seminar in History (When topic is Africa-related) | 3 |
| JOURN 620 | International Communication | 4 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |
| INTLST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTLST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| INTL ST/ GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| LCA LANG/ AFRICAN 445 | Readings in Advanced Arabic Texts | 3 |
| LCA LANG/ AFRICAN 446 | Readings in Advanced Arabic Texts | 3 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| POLI SCI/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ HISTORY/SOC 277 | Africa: An Introductory Survey | 4 |


| POLI SCI/AFRICAN/ | African and African-American | 4 |
| :---: | :---: | :---: |
| AFROAMER/ <br> HISTORY 297 | Linkages: An Introduction |  |
| POLI SCI 329 | African Politics | 3-4 |
| POLI SCI 330 | Political Economy of Development | 3 |
| POLI SCI 345 | Conflict Resolution | 3-4 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 437 | Nationalism and Ethnic Conflict | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| Journ 621 | Mass Communication in Developing Nations | 4 |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature | 3 |
| RELIG ST/ HISTORY 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| RELIG ST/CLASSICS/ HISTORY 517 | Religions of the Ancient Mediterranean | 3 |
| SOC/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ HISTORY/ POLI SCI 277 | Africa: An Introductory Survey | 4 |
| FOLKLORE/ MUSIC 401 | Musical Cultures of the World | 3 |
| RELIG ST/ <br> POLI SCI 618 | Political Islam | 3-4 |

1 No more than two courses from any one SUBJECT may count toward the certificate. A cross-listed course may count in either-but not both-SUBJECTs in which it is cross-listed.

## RESIDENCE \& QUALITY OF WORK

2.000 GPA on all certificate-approved courses

8 credits in the certificate must be taken in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Historical Grounding) understanding the historical, political, and cultural forces and conditions that have given rise to the unity and diversity in the region today.
2. (Multi-disciplinarity) analyzing contemporary political, economic, and cultural realities in the region from at least two disciplinary perspectives, ideally including humanities, social sciences and sometimes natural science approaches.
3. (Depth of knowledge) mastering at the undergraduate generalist level a particular facet of life in the region by taking courses on a particular subregion or country, or by studying a regional language, or by taking at least two courses on the region in one discipline.

## ADVISING AND CAREERS

We require that students visit with the advisor at least once per semester. Advising for the certificate is run by the African Studies Program advisor, who can assist you in developing your plan of study for the certificate, track progress toward the certificate, explore study abroad and international internship options, and begin the career exploration process. We offer walk-in advising, advising workshops, and scheduled appointments.

We strongly encourage students to enroll in Africa: An Introductory Survey (AFRICAN/AFROAMER/ANTHRO/GEOG/HISTORY/POLI SCI/ SOC 277), to study an African language, and to study abroad on the continent.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

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africa.wisc.edu/ (http://africa.wisc.edu)
advising@africa.wisc.edu
Neil Kodesh, Faculty Director, kodesh@wisc.edu
Aleia McCord, Associate Director, aleia.mccord@wisc.edu
Faculty members specializing on Africa are based in more than 40 departments throughout the university's schools and colleges.

African Studies Program Steering Committee: Kodesh (History), Fair (African Cultural Studies), Olaniyan (African Cultural Studies), Turner (Geography), Conway (School of Medicine and Public Health)

## WISCONSIN EXPERIENCE

As a regional center within the Institute for Regional and International Studies, we support and enhance international and global awareness in our student communities and inspire informed thinking about the complexities of our world. We encourage our students to connect to international networks and our regional communities through our program's lecture series, film screenings, and varied outreach events and activities. We encourage our students to study abroad, do international internships, learn foreign languages, and expect them to gain an interdisciplinary grounding in global and regional affairs. We provide resources and expertise on our world area to students, and prospective students, and more broadly to $K-12$ teachers and students, postsecondary educators and graduate students, businesses, the media, the military, the community at large, and anyone else who is interested.

## RESOURCES AND SCHOLARSHIPS

Information about funding through the African Studies Program is available on our website (http://africa.wisc.edu/?page_id=28). We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https://iris.wisc.edu/funding).

## ASIAN STUDIES, B.A.

Admissions to the Asian Studies B.A. have been suspended as of fall 2018. If you have any questions, please contact the department (info@iris.wisc.edu).

Asian Studies is divided into two concentrations:

- East Asian Studies
- Southeast Asian Studies


## CONCENTRATION IN EAST ASIAN STUDIES

The Asian studies major with an East Asian studies concentration encompasses China, Japan, and Korea-Pacific Rim nations characterized by rich cultural heritages, critical geopolitical positions and rapidly expanding economies. East Asia plays a central role in world politics and the global economy, and the importance of this region will increase in the 21 st century.

This concentration is for undergraduates who are interested in a wide range of careers (business, public service, law, teaching, research, etc.) and who seek a focused yet multidisciplinary education with solid grounding in East Asian language and civilization. Students interested in the major should begin language study as early as possible.

## CONCENTRATION IN SOUTHEAST ASIAN STUDIES

The Asian studies major with a Southeast Asian concentration is an undergraduate major in the College of Letters \& Science, providing
a comprehensive foundation in Southeast Asian language and area studies. It includes Burma (Myanmar), Brunei, Cambodia (Kampuchea), East Timor, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam. Students are required to take a minimum of four semesters of a Southeast Asian language, and complete a minimum of thirty credits of Southeast Asian area studies coursework. The area studies courses must be taken in at least two academic disciplines, including courses in Southeast Asian humanities and social sciences. Students may opt to prepare a 6-credit senior thesis.

## HOW TO GET IN

Admissions to the Asian Studies B.A. have been suspended as of fall 2018. If you have any questions, please contact the department (info@iris.wisc.edu).

## CONCENTRATION IN SOUTHEAST ASIAN STUDIES

## DECLARING THE MAJOR

The major should be declared no later than the beginning of the junior year. (All L\&S students must declare a major by the time they have earned 86 degree credits.) Students with no previous language training or proficiency should consider beginning language study during their sophomore year, since language course sequences begin only once per year during the fall semester. Students interested in Southeast Asia are encouraged to consult with the undergraduate advisor (mmcullin@wisc.edu) at any time from the freshman year onward to discuss the program.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language
\&S Breadth

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ |  |
| Advanced intermediate or advanced credits |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit |  |

Minimum
GPAs
2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The Asian studies major requires that students concentrate in one of two options: East Asian Studies or Southeast Asian Studies. Students must declare one (and only one) of these concentrations. Both concentrations require 30 credits. As part of the 30 credits, students must complete at least two courses and 8 credits in a single SUBJECT, excluding language courses.

## CONCENTRATION IN EAST ASIAN STUDIES ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| Fourth Unit of Language-choose one: |  | 8-12 |
| E ASIAN 201 <br> \& E ASIAN 202 | Third Semester Chinese and Fourth Semester Chinese |  |
| E ASIAN 203 <br> \& E ASIAN 204 | Third Semester Japanese and Fourth Semester Japanese |  |
| E ASIAN 345 <br> \& E ASIAN 346 | Third Semester Korean and Fourth Semester Korean |  |
| LCA LANG 469 <br> \& LCA LANG 470 | Third Semester Modern Tibetan and Fourth Semester Modern Tibetan |  |
| Humanities: 8 credits |  | 8 |
| ART HIST 203 | Survey of Asian Art |  |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century |  |
| ART HIST 371 | Chinese Painting |  |
| ART HIST 372 | Arts of Japan |  |
| ART HIST 411 | Topics in Asian Art |  |
| ART HIST 475 | Japanese Ceramics and Allied Arts |  |
| ART HIST/ RELIG ST 478 | Art and Religious Practice in Medieval Japan |  |
| ART HIST 575 | Proseminar in Japanese Art |  |
| ART HIST 576 | Proseminar in Chinese Art |  |
| E A STDS/ HISTORY/ POLI SCI 255 | Introduction to East Asian Civilizations |  |
| E A STDS/ E ASIAN 300 | Humanities Topics in East Asian Studies |  |


| E A STDS 691 | Senior Thesis |
| :---: | :---: |
| E A STDS 692 | Senior Thesis |
| E ASIAN/LCA/ RELIG ST 235 | Genres of Asian Religious Writing |
| E ASIAN/ <br> KINES 277 | Kendo: Integration of Martial Arts and Liberal Arts |
| EASIAN/ <br> EASTDS 300 | Humanities Topics in East Asian Studies (Korean Culture) |
| E ASIAN/ HISTORY/LCA/ RELIG ST 308 | Introduction to Buddhism |
| EASIAN/ RELIG ST 350 | Introduction to Taoism |
| E ASIAN 351 | Survey of Chinese Literature |
| E ASIAN 352 | Survey of Chinese Literature |
| E ASIAN 353 | Survey of Japanese Literature |
| E ASIAN 356 | Chinese Painting |
| E ASIAN 358 | Language in Japanese Society |
| EASIAN/ <br> RELIG ST 363 | Introduction to Confucianism |
| E ASIAN 367 | Japanese Poetic Tradition |
| E ASIAN 371 | Topics in Chinese Literature |
| E ASIAN 376 | Manga. |
| E ASIAN 378 | Anime |
| E ASIAN 433 | Topics in East Asian Visual Cultures |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China |
| E ASIAN 563 | Readings in Modern Japanese Literature |
| E ASIAN 564 | Readings in Modern Japanese Literature |
| E ASIAN 573 | Readings in Classical Japanese Literature |
| E ASIAN 574 | Readings in Classical Japanese Literature |
| E ASIAN 631 | History of the Chinese Language |
| E ASIAN 632 | History of the Chinese Language |
| E ASIAN 651 | History of Chinese Literature |
| E ASIAN 652 | History of Chinese Literature |
| E ASIAN 672 | Literary Studies in Chinese Fiction |
| HISTORY/ <br> E A STDS 103 | Introduction to East Asian History: China |
| HISTORY/ <br> EASTDS 104 | Introduction to East Asian History: Japan |
| HISTORY 225 | Explorations in Third World History <br> (H) (China, Japan, Korea) |
| HISTORY 335 | Korean History, 1945 to present |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones |
| HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 |
| HISTORY/ <br> EA STDS 341 | History of Modern China, 1800-1949 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present |


| HISTORY/ <br> E A STDS 454 | Samurai: History and Image |  |
| :---: | :---: | :---: |
| HISTORY/ <br> EASTDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia |  |
| HISTORY 500 | Reading Seminar in History |  |
| INTL ST 310 | International Learning Community Seminar (China, East Asia, Japan, Korea, Tibet) |  |
| LITTRANS 261 | Survey of Chinese Literature in Translation |  |
| LITTRANS 262 | Survey of Chinese Literature in Translation |  |
| LITTRANS 263 | Survey of Japanese Literature in Translation |  |
| LITTRANS 264 | Survey of Japanese Literature in Translation |  |
| LITTRANS 368 | Modern Japanese Fiction |  |
| LITTRANS 372 | Classical Japanese Prose in Translation |  |
| LITTRANS 373 | Topics in Japanese Literature |  |
| LITTRANS 374 | Topics in Korean Literature |  |
| THEATRE 351 | Fundamentals of Asian Stage Discipline |  |
| THEATRE 526 | The Theatres of China and Japan |  |
| Social Science: 8 cre | dits | 8 |
| A A E 319 | The International Agricultural Economy |  |
| AAE/ECON 474 | Economic Problems of Developing Areas |  |
| ANTHRO 310 | Topics in Archaeology (East Asia, Southeast Asia) |  |
| ANTHRO 330 | Topics in Ethnology |  |
| ANTHRO 357 | Introduction to the Anthropology of Japan |  |
| E A STDS 301 | Social Studies Topics in East Asian Studies |  |
| ECON/A A E 474 | Economic Problems of Developing Areas |  |
| EPD/ <br> EASIAN 330 | Basic Technical Japanese I |  |
| EPD/ <br> EASIAN 332 | Basic Technical Japanese II |  |
| EPD/ <br> EASIAN 374 | Intermediate Technical Japanese I |  |
| EPD/ <br> EASIAN 375 | Intermediate Technical Japanese II |  |
| GEOG 101 | Introduction to Human Geography |  |
| GEOG 358 | Human Geography of Southeast Asia |  |
| GEOG/ <br> ENVIR ST 557 | Development and Environment in Southeast Asia |  |
| HISTORY/ <br> LCA 457 | History of Southeast Asia to 1800 |  |
| HISTORY/ LCA 458 | History of Southeast Asia Since 1800 |  |


| JOURN 621 | Mass Communication in Developing Nations |
| :---: | :---: |
| POLI SCI 201 | Special Topics in Political Science (East Asia, Southeast Asia) |
| POLI SCI/ <br> E A STDS/ HISTORY 255 | Introduction to East Asian Civilizations |
| POLI SCI 346 | China in World Politics |
| POLI SCI 640 | Politics of Japan |
| POLI SCI 654 | Politics of Revolution |
| SOC/ <br> C\&E SOC 222 | Food, Culture, and Society |
| Courses counted toward humanities may not also count toward social science, and vice versa. However, humanities and social science courses may count toward the concentration requirement if taken in a single SUBJECT. |  |
| 2 Students can als with the following Chinese, E ASIAN Year Classical Ch E ASIAN 333 Chin for Non-Majors, E E ASIAN 401 Sev Semester Chines History of the Chi Semester Japane E ASIAN 323 Firs Technical Japane II, E ASIAN 335 In EPD 374 Interm Semester Japane EASIAN/EPD 601 | o fulfill the East Asian language requirement courses: Chinese-E ASIAN 301 Fifth Semester 302 Sixth Semester Chinese, E ASIAN 321 First inese, E ASIAN 322 First Year Classical Chinese, ese Conversation, E ASIAN 341 Classical Chinese ASIAN 342 Classical Chinese for Non-Majors, nth Semester Chinese, E ASIAN 402 Eighth <br> , E ASIAN 379 Business Chinese, E ASIAN 631 nese Language; Japanese-E ASIAN 303 Fifth se, E ASIAN 304 Sixth Semester Japanese, Year Classical Japanese, E ASIAN/E P D 330 Basic se I, E ASIAN/E P D 332 Basic Technical Japanese termediate Japanese Conversation, E ASIAN/ ediate Technical Japanese I, E ASIAN 403 Seventh se, E ASIAN 404 Eighth Semester Japanese, 01 Japanese for Business and Industry. |
| CONCENTRATION IN SOUTHEAST ASIAN STUDIES ${ }^{1}$ |  |
| Code <br> Fourth Unit of a So One: | utheast Asian Language -Choose |
| LCA LANG 401 \& LCA LANG 402 | Third Semester Asian Language and Fourth Semester Asian Language |
| LCA LANG 403 \& LCA LANG 404 | Third Semester Burmese and Fourth Semester Burmese |
| LCA LANG 405 \& LCA LANG 406 | Third Semester Filipino and Fourth Semester Filipino |
| LCA LANG 407 \& LCA LANG 408 | Third Semester Hmong and Fourth Semester Hmong |
| LCA LANG 409 \& LCA LANG 410 | Third Semester Indonesian and Fourth Semester Indonesian |
| LCA LANG 411 <br> \& LCA LANG 412 | Third Semester Javanese and Fourth Semester Javanese |
| LCA LANG 413 <br> \& LCA LANG 414 | Third Semester Khmer and Fourth Semester Khmer |
| LCA LANG 415 \& LCA LANG 416 | Third Semester Lao and Fourth Semester Lao |
| LCA LANG 417 <br> \& LCA LANG 418 | Third Semester Thai and Fourth Semester Thai |


| LCA LANG 419 | Third Semester Vietnamese |
| :--- | :--- |
| \& LCA LANG 420 | and Fourth Semester Vietnamese |


| Humanities: $\mathbf{8}$ Credits | 8 |
| :--- | :--- |
| ASIAN AM/ | Asian American History: Movement |
| HISTORY 160 | and Dislocation |
| ASIAN AM/ | Asian American History: Settlement <br> HISTORY 161 <br> and National Belonging |
| COM ARTS 470 | Contemporary Political Discourse |
| DANCE/ | Javanese Performance Repertory |
| FOLKLORE/ |  |
| THEATRE 421 |  |
| HISTORY/ | Asian American History: Movement |
| ASIAN AM 160 | and Dislocation |
| HISTORY/ | Asian American History: Settlement |
| ASIAN AM 161 | and National Belonging |
| HISTORY/GEOG/ | Introduction to Southeast Asia: |
| LCA/POLI SCI/ | Vietnam to the Philippines |
| SOC 244 |  |
| HISTORY/ | Southeast Asian Refugees of the <br> ASIAN AM/ |
| "Cold" War |  |
| LCA 246 |  |

HISTORY 319 The Vietnam Wars
HISTORY/LCA/ Buddhism and Society in Southeast
RELIG ST 438 Asian History
HISTORY/ History of Southeast Asia to 1800
LCA 457
HISTORY/ History of Southeast Asia Since
LCA 4581800
HISTORY 600 Advanced Seminar in History (Southeast Asia)
LCA/GEOG/ Introduction to Southeast Asia:
HISTORY/ Vietnam to the Philippines
POLI SCI/
SOC 244
LCA/E ASIAN/ HISTORY/
RELIG ST 308

ART HIST 379
LCA/HISTORY/
RELIG ST 438
LCA/
RELIG ST 444
LCA/
HISTORY 457
LCA/
HISTORY 458
LCA/HISTORY
RELIG ST 547
LCA LANG 503
LCA LANG 504
LCA LANG 505
LCA LANG 506
LCA LANG 507
LCA LANG 508
LCA LANG 509 Fifth Semester Indonesian

| LCA LANG 510 | Sixth Semester Indonesian |  |
| :---: | :---: | :---: |
| LCA LANG 513 | Fifth Semester Khmer |  |
| LCA LANG 514 | Sixth Semester Khmer |  |
| LCA LANG 515 | Fifth Semester Lao |  |
| LCA LANG 516 | Sixth Semester Lao |  |
| LCA LANG 519 | Fifth Semester Vietnamese |  |
| LCA LANG 520 | Sixth Semester Vietnamese |  |
| RELIG ST/ <br> AFRICAN/ <br> LCA 370 | Islam: Religion and Culture |  |
| RELIG ST/ $\text { LCA } 620$ | Proseminar: Studies in Religions of Asia |  |
| Social Science: 8 Cre | dits | 8 |
| A A E 375 | Special Topics (Southeast Asia) |  |
| A A E/ECON 473 | Economic Growth and Development in Southeast Asia |  |
| ANTHRO 310 | Topics in Archaeology (Archaeology of East and Southeast Asia) |  |
| ANTHRO 330 | Topics in Ethnology (Peoples \& Cultures of Mainland Southeast Asia; Art in Island Southeast Asia) |  |
| ASIAN AM/ HISTORY/ <br> LCA 246 | Southeast Asian Refugees of the "Cold" War |  |
| COM ARTS 610 | Special Topics in Rhetoric and Public Address |  |
| ECON/A A E 473 | Economic Growth and Development in Southeast Asia |  |
| GEOG/HISTORY/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines |  |
| GEOG 358 | Human Geography of Southeast Asia |  |
| GEOG/ ENVIR ST 557 | Development and Environment in Southeast Asia |  |
| GEOG 675 | Special Topics in Geography |  |
| INTL ST/ AAE 373 | Globalization, Poverty and Development |  |
| POLI SCI 322 | Politics of Southeast Asia |  |
| SOC/GEOG/ HISTORY/LCA/ POLI SCI 244 | Introduction to Southeast Asia: Vietnam to the Philippines |  |

1 Courses counted toward humanities may not also count towards social science, and vice versa. However, humanities and social science courses may count toward the concentration requirement if taken in a single SUBJECT.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all E A STDS and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{2}$

15 credits in E A STDS, E ASIAN and/or courses counting toward the major, taken on the UW-Madison campus

2 Courses in the major numbered 300 through 699 are considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Asian Studies Major in consultation with the Asian Studies undergraduate advisor.

## HONORS IN ASIAN STUDIES MAJOR REQUIREMENTS

To earn a B.A. or B.S. with Honors in the Major in Asian Studies students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in all E A STDS courses, and all courses accepted in the major
- Complete 3 credits E A STDS at the intermediate or advanced level with a grade of B or better
- Complete a two-semester Senior Honors Thesis in E A STDS 681 Senior Honors Thesis and E A STDS 682 Senior Honors Thesis, for a total of 6 credits


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## ADVISING AND CAREERS

## ACADEMIC ADVISING

Students interested in Southeast Asia are encouraged to consult with the undergraduate advisor (mmcullin@wisc.edu) at any time from the freshman year onward to discuss the program.

## CAREER INFORMATION

Students are encouraged to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.ls.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## CONCENTRATION IN EAST ASIAN

 STUDIES
## CHINA CORE FACULTY:

Professors Curtin, Dong, Eichenseher, Friedman, Irish, Manion, Murray, Nienhauser, Pan

Associate Professors Huntington, Huang, Merli, Sheehan, Zhang, Zhou
Assistant Professor Meulenbeld, Yang

## JAPAN CORE FACULTY:

Professors Davis, McGloin, Mori, Ohnuki-Tierney, Phillips, Young
Associate Professors D'Etcheverry, Furumoto, Geyer, Kern, Leheny, Mori, Raymo, Thal

Assistant Professor Ridgeley

## KOREA CORE FACULTY:

Professor Sutton; Assistant Professors Kim, Ohnesorge

## UNDERGRADUATE ADVISOR:

Michael Cullinane

## CONCENTRATION IN SOUTHEAST ASIAN STUDIES

Professors Bowie, Cowell, Coxhead, Gade, Gunther, Hansen (director), Macken, A. McCoy, Olds, Rafferty, Sidel, Winichakul, Zhou

Associate Professor Nobles
Assistant Professors Baird, Choy, Ho, Kim

Faculty Associates Barnard, Cullinane, M McCoy
Librarian Ashmun
UNDERGRADUATE ADVISOR:
Michael Cullinane

## ASIAN STUDIES, B.S.

Admissions to the Asian Studies B.S. have been suspended as of fall 2018. If you have any questions, please contact the department (info@iris.wisc.edu).

Asian Studies is divided into two concentrations:

- East Asian Studies
- Southeast Asian Studies


## CONCENTRATION IN EAST ASIAN STUDIES

The Asian studies major with an East Asian studies concentration encompasses China, Japan, and Korea-Pacific Rim nations characterized by rich cultural heritages, critical geopolitical positions and rapidly expanding economies. East Asia plays a central role in world politics and the global economy, and the importance of this region will increase in the 21 st century.

This concentration is for undergraduates who are interested in a wide range of careers (business, public service, law, teaching, research, etc.) and who seek a focused yet multidisciplinary education with solid grounding in East Asian language and civilization. Students interested in the major should begin language study as early as possible.

## CONCENTRATION IN SOUTHEAST ASIAN STUDIES

The Asian studies major with a Southeast Asian concentration is an undergraduate major in the College of Letters \& Science, providing a comprehensive foundation in Southeast Asian language and area studies. It includes Burma (Myanmar), Brunei, Cambodia (Kampuchea), East Timor, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam. Students are required to take a minimum of four semesters of a Southeast Asian language, and complete a minimum of thirty credits of Southeast Asian area studies coursework. The area studies courses must be taken in at least two academic disciplines, including courses in Southeast Asian humanities and social sciences. Students may opt to prepare a 6-credit senior thesis.

## HOW TO GET IN

Admissions to the Asian Studies B.S. have been suspended as of fall 2018. If you have any questions, please contact the department (info@iris.wisc.edu).

## CONCENTRATION IN SOUTHEAST ASIAN STUDIES

## DECLARING THE MAJOR

The major should be declared no later than the beginning of the junior year. (All L\&S students must declare a major by the time they have earned 86 degree credits.) Students with no previous language training or proficiency should consider beginning language study during their sophomore year, since language course sequences begin only once per year during the fall semester. Students interested in Southeast Asia are encouraged to consult with the undergraduate advisor (mmcullin@wisc.edu) at any time from the freshman year onward to discuss the program.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits

## Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, <br> COMP SCI, STAT |
| :--- | :--- |
|  | Limit one each: COMP SCI, STAT |

Liberal Arts 108 credits and Science Coursework
Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- <br>  Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The Asian studies major requires that students concentrate in one of two options: East Asian Studies or Southeast Asian Studies. Students must declare one (and only one) of these concentrations. Both concentrations require 30 credits. As part of the 30 credits, students must complete at least two courses and $\mathbf{8}$ credits in a single SUBJECT, excluding language courses.

## CONCENTRATION IN EAST ASIAN STUDIES ${ }^{1}$

| Code | Title | Credits |
| :--- | :--- | ---: |
| Fourth Unit of Language-choose one: | $8-12$ |  |
| E ASIAN 201 | Third Semester Chinese |  |
| \& E ASIAN 202 | and Fourth Semester Chinese |  |


| E ASIAN 203 | Third Semester Japanese |
| :--- | :--- |
| \& E ASIAN 204 | and Fourth Semester Japanese |
| E ASIAN 345 | Third Semester Korean |
| \& E ASIAN 346 | and Fourth Semester Korean |
| LCA LANG 469 | Third Semester Modern Tibetan |
| \& LCA LANG 470 | and Fourth Semester Modern <br>  <br>  <br> Tibetan |
| Humanities: 8 credits |  |


| E ASIAN 573 | Readings in Classical Japanese Literature |  |
| :---: | :---: | :---: |
| E ASIAN 574 | Readings in Classical Japanese Literature |  |
| E ASIAN 631 | History of the Chinese Language |  |
| E ASIAN 632 | History of the Chinese Language |  |
| E ASIAN 651 | History of Chinese Literature |  |
| E ASIAN 652 | History of Chinese Literature |  |
| E ASIAN 672 | Literary Studies in Chinese Fiction |  |
| HISTORY/ <br> EA STDS 103 | Introduction to East Asian History: China |  |
| HISTORY/ <br> EASTDS 104 | Introduction to East Asian History: Japan |  |
| HISTORY 225 | Explorations in Third World History (H) (China, Japan, Korea) |  |
| HISTORY 335 | Korean History, 1945 to present |  |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones |  |
| HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 |  |
| HISTORY/ E A STDS 341 | History of Modern China, 1800-1949 |  |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present |  |
| HISTORY/ <br> EASTDS 454 | Samurai: History and Image |  |
| HISTORY/ <br> EASTDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia |  |
| HISTORY 500 | Reading Seminar in History |  |
| INTL ST 310 | International Learning Community Seminar (China, East Asia, Japan, Korea, Tibet) |  |
| LITTRANS 261 | Survey of Chinese Literature in Translation |  |
| LITTRANS 262 | Survey of Chinese Literature in Translation |  |
| LITTRANS 263 | Survey of Japanese Literature in Translation |  |
| LITTRANS 264 | Survey of Japanese Literature in Translation |  |
| LITTRANS 368 | Modern Japanese Fiction |  |
| LITTRANS 372 | Classical Japanese Prose in Translation |  |
| LITTRANS 373 | Topics in Japanese Literature |  |
| LITTRANS 374 | Topics in Korean Literature |  |
| THEATRE 351 | Fundamentals of Asian Stage Discipline |  |
| THEATRE 526 | The Theatres of China and Japan |  |
| Social Science: 8 cre | dits | 8 |
| A A E 319 | The International Agricultural Economy |  |
| AAE/ECON 474 | Economic Problems of Developing Areas |  |
| ANTHRO 310 | Topics in Archaeology (East Asia, Southeast Asia) |  |
| ANTHRO 330 | Topics in Ethnology |  |



| LCA/GEOG/ <br> HISTORY/ <br> POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines |  |
| :---: | :---: | :---: |
| LCA/E ASIAN/ HISTORY/ RELIG ST 308 | Introduction to Buddhism |  |
| LCA/ <br> ART HIST 379 | Cities of Asia |  |
| LCA/HISTORY/ RELIG ST 438 | Buddhism and Society in Southeast Asian History |  |
| $\begin{aligned} & \text { LCA/ } \\ & \text { RELIG ST } 444 \end{aligned}$ | Introduction to Sufism (Islamic Mysticism) |  |
| LCA/ <br> HISTORY 457 | History of Southeast Asia to 1800 |  |
| LCA/ <br> HISTORY 458 | History of Southeast Asia Since 1800 |  |
| LCA/HISTORY/ RELIG ST 547 | Religion, Colonialism \& Modernity in Southeast Asia |  |
| LCA LANG 503 | Fifth Semester Burmese |  |
| LCA LANG 504 | Sixth Semester Burmese |  |
| LCA LANG 505 | Fifth Semester Filipino |  |
| LCA LANG 506 | Sixth Semester Filipino |  |
| LCA LANG 507 | Fifth Semester Hmong |  |
| LCA LANG 508 | Sixth Semester Hmong |  |
| LCA LANG 509 | Fifth Semester Indonesian |  |
| LCA LANG 510 | Sixth Semester Indonesian |  |
| LCA LANG 513 | Fifth Semester Khmer |  |
| LCA LANG 514 | Sixth Semester Khmer |  |
| LCA LANG 515 | Fifth Semester Lao |  |
| LCA LANG 516 | Sixth Semester Lao |  |
| LCA LANG 519 | Fifth Semester Vietnamese |  |
| LCA LANG 520 | Sixth Semester Vietnamese |  |
| RELIG ST/ AFRICAN/ LCA 370 | Islam: Religion and Culture |  |
| RELIG ST/ <br> LCA 620 | Proseminar: Studies in Religions of Asia |  |
| Social Science: 8 Cre | dits | 8 |
| A A E 375 | Special Topics (Southeast Asia) |  |
| AAE/ECON 473 | Economic Growth and Development in Southeast Asia |  |
| ANTHRO 310 | Topics in Archaeology (Archaeology of East and Southeast Asia) |  |
| ANTHRO 330 | Topics in Ethnology (Peoples \& Cultures of Mainland Southeast Asia; Art in Island Southeast Asia) |  |
| ASIAN AM/ HISTORY/ LCA 246 | Southeast Asian Refugees of the "Cold" War |  |
| COM ARTS 610 | Special Topics in Rhetoric and Public Address |  |
| ECON/AAE 473 | Economic Growth and Development in Southeast Asia |  |


| GEOG/HISTORY/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines |
| :---: | :---: |
| GEOG 358 | Human Geography of Southeast Asia |
| GEOG/ <br> ENVIR ST 557 | Development and Environment in Southeast Asia |
| GEOG 675 | Special Topics in Geography |
| INTL ST/ <br> AAE 373 | Globalization, Poverty and Development |
| POLI SCI 322 | Politics of Southeast Asia |
| SOC/GEOG/ <br> HISTORY/LCA/ <br> POLI SCI 244 | Introduction to Southeast Asia: Vietnam to the Philippines |
| Courses counted toward humanities may not also count towards social science, and vice versa. However, humanities and social science courses may count toward the concentration requirement if taken in a single SUBJECT. |  |
| RESIDENCE AND QUALITY OF WORK |  |
| 2.000 GPA in all E A STDS and major courses |  |
| 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{2}$ |  |
| 15 credits in E A STDS, E ASIAN and/or courses counting toward the major, taken on the UW-Madison campus |  |
| 2 Courses in the major numbered 300 through 699 are considered upper level. |  |
| HONORS IN | HE MAJOR |

Students may declare Honors in the Asian Studies Major in consultation with the Asian Studies undergraduate advisor.

## HONORS IN ASIAN STUDIES MAJOR REQUIREMENTS

To earn a B.A. or B.S. with Honors in the Major in Asian Studies students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in all E A STDS courses, and all courses accepted in the major
- Complete 3 credits E A STDS at the intermediate or advanced level with a grade of $B$ or better
- Complete a two-semester Senior Honors Thesis in E A STDS 681 Senior Honors Thesis and E A STDS 682 Senior Honors Thesis, for a total of 6 credits


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Work | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## ADVISING AND CAREERS

## ACADEMIC ADVISING

Students interested in Southeast Asia are encouraged to consult with the undergraduate advisor (mmcullin@wisc.edu) at any time from the freshman year onward to discuss the program.

## CAREER INFORMATION

Students are encouraged to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/Isci)


## PEOPLE

## CONCENTRATION IN EAST ASIAN STUDIES

## CHINA CORE FACULTY:

Professors Curtin, Dong, Eichenseher, Friedman, Irish, Manion, Murray, Nienhauser, Pan

Associate Professors Huntington, Huang, Merli, Sheehan, Zhang, Zhou

Assistant Professor Meulenbeld, Yang

JAPAN CORE FACULTY:<br>Professors Davis, McGloin, Mori, Ohnuki-Tierney, Phillips, Young

Associate Professors D'Etcheverry, Furumoto, Geyer, Kern, Leheny, Mori, Raymo, Thal

Assistant Professor Ridgeley

## KOREA CORE FACULTY:

Professor Sutton; Assistant Professors Kim, Ohnesorge
UNDERGRADUATE ADVISOR:
Michael Cullinane

## CONCENTRATION IN SOUTHEAST ASIAN STUDIES

Professors Bowie, Cowell, Coxhead, Gade, Gunther, Hansen (director), Macken, A. McCoy, Olds, Rafferty, Sidel, Winichakul, Zhou

Associate Professor Nobles

Assistant Professors Baird, Choy, Ho, Kim

Faculty Associates Barnard, Cullinane, M McCoy

Librarian Ashmun

## UNDERGRADUATE ADVISOR:

Michael Cullinane

## EAST ASIAN STUDIES, CERTIFICATE

Students interested in more specialized study of the languages and literature of East Asia, South Asia, or Southeast Asia should see the Department of Asian Languages and Cultures, the Center for South Asia, or the Center for Southeast Asian Studies; those interested in study of languages and cultures of Central Asia should see the Center for Russian, East European, and Central Asian Studies. All questions pertaining to East Asian studies at UW-Madison should be addressed to the Center for East Asian Studies (see box at right).

## CERTIFICATE IN EAST ASIAN STUDIES

The undergraduate certificate in East Asian studies is available to students working toward a baccalaureate degree in any of the University of Wisconsin-Madison schools and colleges, and to Special students. This certificate meets the needs of students choosing to focus on
the East Asian region (China, Korea, Japan, and Tibet) within their primary major, but not wishing to commit to the rigorous language study required by the relevant majors in the Department of Asian Languages and Cultures. Students select coursework reflecting their interests from myriad classes offered through many university departments, and can work toward a variety of undergraduate majors. Upon earning the certificate, this emphasis is noted on the student's transcript. The certificate is of value to students wishing to demonstrate their knowledge of the East Asian region either to potential employers or to graduate schools.

## HOW TO GET IN

Students interested in declaring the East Asian Studies certificate contact the advisor for the program (Mike Cullinane, mmcullin@wisc.edu). More information about advising can be found at advising program (http://eastasia.wisc.edu/en/Students/advising.html).

## REQUIREMENTS

## REQUIREMENTS FOR THE CERTIFICATE

21 credits representing at least three SUBJECTs, from: ${ }^{1,2}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| E A STDS/HISTORY/ POLI SCI 255 | Introduction to East Asian Civilizations (unless specific exception (per approval of the center director) is given) | 3-4 |
| At least three courses | at $\mathbf{3 0 0}$ level or above: | 9 |
| A A E 319 | The International Agricultural Economy |  |
| A A E/ECON 474 | Economic Problems of Developing Areas |  |
| ANTHRO 330 | Topics in Ethnology |  |
| ANTHRO 357 | Introduction to the Anthropology of Japan |  |
| ART HIST 203 | Survey of Asian Art |  |
| ART HIST 371 | Chinese Painting |  |
| ART HIST 372 | Arts of Japan |  |
| ART HIST 411 | Topics in Asian Art |  |
| ART HIST 475 | Japanese Ceramics and Allied Arts |  |
| ART HIST 575 | Proseminar in Japanese Art |  |
| ART HIST 576 | Proseminar in Chinese Art |  |
| ASIAN 253 | Japanese Popular Culture |  |
| ASIAN 355 | Modern Japanese Literature |  |
| E A STDS/ E ASIAN 300 | Humanities Topics in East Asian Studies |  |
| E A STDS 301 | Social Studies Topics in East Asian Studies |  |
| E A STDS 691 | Senior Thesis |  |
| E A STDS 692 | Senior Thesis |  |
| E ASIAN 101 | First Semester Chinese ${ }^{2}$ |  |
| E ASIAN 102 | Second Semester Chinese ${ }^{2}$ |  |
| E ASIAN 103 | First Semester Japanese ${ }^{2}$ |  |
| E ASIAN 104 | Second Semester Japanese ${ }^{2}$ |  |


| E ASIAN 105 | Elementary Korean ${ }^{2}$ |
| :---: | :---: |
| E ASIAN 106 | Elementary Korean ${ }^{2}$ |
| E ASIAN 121 | Elementary Chinese ${ }^{2}$ |
| E ASIAN 122 | Elementary Chinese ${ }^{2}$ |
| E ASIAN 123 | Elementary Japanese ${ }^{2}$ |
| E ASIAN 124 | Elementary Japanese ${ }^{2}$ |
| E ASIAN 201 | Third Semester Chinese ${ }^{2}$ |
| E ASIAN 202 | Fourth Semester Chinese ${ }^{2}$ |
| E ASIAN 203 | Third Semester Japanese ${ }^{2}$ |
| E ASIAN 204 | Fourth Semester Japanese ${ }^{2}$ |
| E ASIAN/ KINES 277 | Kendo: Integration of Martial Arts and Liberal Arts |
| E ASIAN 301 | Fifth Semester Chinese ${ }^{2}$ |
| E ASIAN 302 | Sixth Semester Chinese ${ }^{2}$ |
| E ASIAN 303 | Fifth Semester Japanese ${ }^{2}$ |
| E ASIAN 304 | Sixth Semester Japanese ${ }^{2}$ |
| E ASIAN/ <br> HISTORY/LCA/ <br> RELIG ST 308 | Introduction to Buddhism |
| E ASIAN 321 | First Year Classical Chinese ${ }^{2}$ |
| E ASIAN 322 | First Year Classical Chinese ${ }^{2}$ |
| E ASIAN 323 | First Year Classical Japanese ${ }^{2}$ |
| $\begin{aligned} & \text { EASIAN/ } \\ & \text { EPD } 330 \end{aligned}$ | Basic Technical Japanese I ${ }^{2}$ |
| $\begin{aligned} & \text { EASIAN/ } \\ & \text { EPD } 332 \end{aligned}$ | Basic Technical Japanese II ${ }^{2}$ |
| E ASIAN 333 | Chinese Conversation ${ }^{2}$ |
| E ASIAN 335 | Intermediate Japanese Conversation ${ }^{2}$ |
| E ASIAN 341 | Classical Chinese for Non-Majors ${ }^{2}$ |
| E ASIAN 342 | Classical Chinese for Non-Majors ${ }^{2}$ |
| E ASIAN 345 | Third Semester Korean ${ }^{2}$ |
| E ASIAN 346 | Fourth Semester Korean ${ }^{2}$ |
| E ASIAN/ RELIG ST 350 | Introduction to Taoism ${ }^{2}$ |
| E ASIAN 351 | Survey of Chinese Literature |
| E ASIAN 352 | Survey of Chinese Literature |
| E ASIAN 353 | Survey of Japanese Literature |
| E ASIAN 356 | Chinese Painting |
| E ASIAN/ RELIG ST 363 | Introduction to Confucianism |
| E ASIAN 367 | Japanese Poetic Tradition |
| E ASIAN 371 | Topics in Chinese Literature |
| $\begin{aligned} & \text { EASIAN/ } \\ & \text { EPD } 374 \end{aligned}$ | Intermediate Technical Japanese I ${ }^{2}$ |
| $\begin{aligned} & \text { EASIAN/ } \\ & \text { EPD } 375 \end{aligned}$ | Intermediate Technical Japanese II 2 |
| E ASIAN 376 | Manga. |
| E ASIAN 378 | Anime |
| E ASIAN 401 | Seventh Semester Chinese ${ }^{2}$ |
| E ASIAN 402 | Eighth Semester Chinese ${ }^{2}$ |
| E ASIAN 403 | Seventh Semester Japanese ${ }^{2}$ |
| E ASIAN 404 | Eighth Semester Japanese ${ }^{2}$ |
| E ASIAN 406 | Eighth Semester Korean ${ }^{2}$ |


| E ASIAN 431 | Introduction to Chinese Linguistics 2 |
| :---: | :---: |
| E ASIAN 432 | Introduction to Chinese Linguistics 2 |
| E ASIAN 433 | Topics in East Asian Visual Cultures |
| E ASIAN 434 | Introduction to Japanese Linguistics |
| E ASIAN 501 | Fifth-year Chinese ${ }^{2}$ |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China |
| E ASIAN 563 | Readings in Modern Japanese Literature |
| E ASIAN 564 | Readings in Modern Japanese Literature |
| E ASIAN 573 | Readings in Classical Japanese Literature |
| E ASIAN 574 | Readings in Classical Japanese Literature |
| E ASIAN 631 | History of the Chinese Language |
| E ASIAN 632 | History of the Chinese Language |
| E ASIAN 651 | History of Chinese Literature |
| E ASIAN 652 | History of Chinese Literature |
| E ASIAN 672 | Literary Studies in Chinese Fiction |
| ECON 390 | Contemporary Economic Issues |
| ECON/A A E 474 | Economic Problems of Developing Areas |
| GEOG 358 | Human Geography of Southeast Asia |
| HISTORY/ EASTDS 103 | Introduction to East Asian History: China |
| HISTORY/ <br> EASTDS 104 | Introduction to East Asian History: Japan |
| HISTORY/ ASIAN 108 | Introduction to East Asian History Korea |
| HISTORY 200 | Historical Studies |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present |
| HISTORY/ <br> EASTDS 454 | Samurai: History and Image |
| HISTORY/ <br> E A STDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia |
| JOURN 621 | Mass Communication in Developing Nations |
| LCA LANG 369 | First Semester Modern Tibetan |
| LCA LANG 677 | Advanced Readings in Tibetan |
| LCA/ <br> RELIG ST 421 | A Survey of Tibetan Buddhism |
| LCA/ <br> ART HIST 428 | Visual Cultures of South Asia |
| LITTRANS 261 | Survey of Chinese Literature in Translation |


| LITTRANS 262 | Survey of Chinese Literature in Translation |
| :---: | :---: |
| LITTRANS 263 | Survey of Japanese Literature in Translation |
| LITTRANS 264 | Survey of Japanese Literature in Translation |
| LITTRANS 368 | Modern Japanese Fiction |
| LITTRANS 372 | Classical Japanese Prose in Translation |
| LITTRANS 373 | Topics in Japanese Literature |
| LITTRANS 374 | Topics in Korean Literature |
| MUSIC/ FOLKLORE 103 | Introduction to Music Cultures of the World |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World |
| POLI SCI 346 | China in World Politics |
| POLI SCI 640 | Politics of Japan |
| POLI SCI 654 | Politics of Revolution |
| SOC 225 | Contemporary Chinese Society |
| THEATRE 351 | Fundamentals of Asian Stage Discipline |
| THEATRE 526 | The Theatres of China and Japan |

Electives - take any course above to attain 21 credits in 9 the certificate

Total Credits
1 A maximum 3 credits in Directed Study (E A STDS 698 and E A STDS 699) may apply.
2 A maximum 12 credits of East Asian language may apply.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA on all certificate-approved courses

11 credits in the certificate must be taken in residence

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate is intended to be completed in the context of an undergraduate degree and for those seeking this certificate that is preferred. For students who have substantially completed this certificate at UW-Madison (at least 12 credits) and may need one or two courses to complete the certificate, they may do so immediately after completion of the bachelor's degree by enrolling in the course as a University Special (nondegree) student. The certificate must be completed within a year of completion of the bachelor's degree. Students should keep in mind that University Special students have the last registration priority and that may limit availability of desired courses. Financial aid is not available when enrolled as a University Special student to complete an undergraduate certificate.

## LEARNING OUTCOMES

1. (Historical Grounding) understanding the historical, political, and cultural forces and conditions that have given rise to the unity and diversity in the region today.
2. (Multi-disciplinarity) analyzing contemporary political, economic, and cultural realities in the region from at least two disciplinary perspectives,
ideally including humanities, social sciences and sometimes natural science approaches.
3. (Depth of Knowledge) mastering at the undergraduate generalist level a particular facet of life in the region by taking courses on a particular subregion or country, or by studying a regional language, or by taking at least two courses on the region in one discipline.

## ADVISING AND CAREERS

Study of an East Asian language is strongly encouraged, but not required. Courses in elementary Chinese, Japanese, Korean, and Tibetan are available, providing an introduction to the fundamentals of the languages, without necessarily requiring additional advanced language coursework.

Students should meet with the advisor for the certificate (Mike Cullinane, mmcullin@wisc.edu) in 207 Ingraham Hall for more assistance

## WISCONSIN EXPERIENCE

As a regional center within the Institute for Regional and International Studies, we support and enhance international and global awareness in our student communities and inspire informed thinking about the complexities of our world. We encourage our students to connect to international networks and our regional communities through our program's lecture series, film screenings, and varied outreach events and activities. We encourage our students to study abroad, do international internships, learn foreign languages, and expect them to gain an interdisciplinary grounding in global and regional affairs. We provide resources and expertise on our world area to students, and prospective students, and more broadly to $\mathrm{K}-12$ teachers and students, postsecondary educators and graduate students, businesses, the media, the military, the community at large, and anyone else who is interested.

## RESOURCES AND SCHOLARSHIPS

Information about funding through the Center for East Asian Studies is available from our website (http://eastasia.wisc.edu/en/Students/ fellows_grants.html). We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https://iris.wisc.edu/funding).

## EUROPEAN STUDIES, CERTIFICATE

The European Studies Program, in cooperation with the Center for European Studies, the Jean Monnet European Union Center of Excellence (JMEUCE), and the DAAD Center for German and European Studies (CGES), promotes knowledge and understanding of Europe both on and off campus. Established in 1968, the program provides integrated interdisciplinary studies on contemporary Europe for both undergraduate and graduate students. The program brings together scholars on campus interested in different aspects of Europe to discuss topics of mutual interest. More than thirty departments offer courses on Europe (excluding language courses), providing the largest number of courses on any region of the world other than the United States.

## HOW TO GET IN

Students interested in declaring the undergraduate certificate should contact the Center for European Studies (european@international.wisc.edu) or the undergraduate advisor, Csanád Siklós, 262-5006; siklos@wisc.edu.

## REQUIREMENTS

## LANGUAGE REQUIREMENT

Students may satisfy the European language requirement by taking college courses, or through high school units. There are two options to complete the requirement-students can either complete:

## 1. Four units of a single European language

 or2. Three units of one European language and two units of a second European language.

Title
Fourth unit courses:
Courses above fourth semester may be used to satisfy this requirement.

| FRENCH 204 | Fourth Semester French |
| :---: | :---: |
| GERMAN 204 | Fourth Semester German |
| GERMAN 214 | Fourth Semester Dutch |
| GREEK 306 | Intermediate Greek |
| ITALIAN 204 | Fourth Semester Italian |
| PORTUG 202 | Fourth Semester Portuguese |
| SCAND ST 202 | Second Year Norwegian |
| SCAND ST 212 | Second Year Swedish |
| SCAND ST 222 | Second Year Danish |
| SCAND ST 302 | Intensive Finnish II |
| SPANISH 204 | Fourth Semester Spanish |
| Third unit courses: |  |
| FRENCH 203 | Third Semester French |
| GERMAN 203 | Third Semester German |
| GERMAN 213 | Third Semester Dutch |
| GREEK 305 | Intermediate Greek |
| ITALIAN 203 | Third Semester Italian |
| PORTUG 201 | Third Semester Portuguese |
| SCAND ST 201 | Second Year Norwegian |
| SCAND ST 211 | Second Year Swedish |
| SCAND ST 221 | Second Year Danish |
| SCAND ST 301 | Intensive Finnish I |
| SPANISH 203 | Third Semester Spanish |
| Second unit courses: |  |
| FRENCH 102 | Second Semester French |
| GERMAN 102 | Second Semester German |
| GERMAN 112 | Second Semester Dutch |
| GREEK 104 | Second Semester Greek |
| GREEK 304 | Second Semester Greek |
| ITALIAN 102 | Second Semester Italian |


| PORTUG 102 | Second Semester Portuguese |
| :--- | :--- |
| SCAND ST 102 | Second Semester Norwegian |
| SCAND ST 112 | Second Semester Swedish |
| SCAND ST 122 | Second Semester Danish |
| SCAND ST 132 | Second Semester Finnish |
| SPANISH 102 | Second Semester Spanish |

## EUROPEAN AREA STUDIES REQUIREMENT

Seven courses and 21 credits, with courses being taken in at least two subjects, and distributed in one of two ways:

1. Option 1: Seven courses on Europe as a whole: focusing on topics such as the European Union, European history, or European literature.
2. Option 2: Seven courses distributed across three or more regional/national areas. (Students may use Europe as a whole courses in partial fulfillment of this option combined with courses on two other regional/national areas).

## OPTION 1: EUROPE AS A WHOLE

| Code | Title |
| :--- | :--- |
| SEVEN courses from at least two SUBJECTS: |  |
| ANTHRO 309 | Prehistoric Europe |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism |
| ART HIST 318 | Romanesque and Gothic Art and <br> Architecture |
| ART HIST 332 | Northern Painting and Graphics <br> from Bosch and Holbein to Bruegel |
| ART HIST 350 | 19th Century Painting in Europe |
| ART HIST 351 | 20th Century Art in Europe |
| ART HIST 355 History of Photography |  |


| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms (Law \& Literature) |
| :---: | :---: |
| COMP LIT 370 | Comparative Problems in Periods and Movements |
| COMP LIT 475 | Poetics and Literary Theory (Existentialism) |
| COMP LIT 475 | Poetics and Literary Theory (Literature \& the World) |
| DS 355 | History of Fashion, 1400-Present |
| DS 421 | History of Architecture and Interiors <br> I: Antiquity through 18th Century |
| DS/ <br> FOLKLORE 655 | Comparative World Dress |
| ECON 364 | Survey of International Economics |
| ECON 464 | International Trade and Finance |
| ECON 467 | International Industrial Organizations |
| ED POL/ HISTORY 107 | The History of the University in the West |
| ED POL/ HISTORY 478 | Comparative History of Childhood and Adolescence |
| ED POL 675 | Introduction to Comparative and International Education |
| GEN\&WS/ <br> ENGL 250 | Women in Literature |
| GEN\&WS/ SOC 477 | Feminism and Sociological Theory |
| GEOG/ <br> URB R PL 305 | Introduction to the City |
| GEOG 318 | Introduction to Geopolitics |
| GEOG 340 | World Regions in Global Context |
| GEOG 349 | Europe |
| GEOG/ <br> URB R PL 506 | Historical Geography of European Urbanization |
| GEOG 510 | Economic Geography |
| HISTORY/ <br> ED POL 107 | The History of the University in the West |
| HISTORY 115 | Medieval Europe 410-1500 |
| HISTORY 119 | The Making of Modern Europe 1500-1815 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 |
| HISTORY/ <br> MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course |
| HISTORY/ JEWISH 220 | Introduction to Modern Jewish History |
| HISTORY 223 | Explorations in European History (H) |
| HISTORY 224 | Explorations in European History (S) |
| HISTORY 271 | History Study Abroad: European History |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam |


| HISTORY/ MEDIEVAL/ | The Medieval Church | HISTORY 500 | Reading Seminar in History (the Enlightenment) |
| :---: | :---: | :---: | :---: |
| RELIG ST 312 |  | HISTORY 525 | The World and the West from 1492 |
| HISTORY/ <br> MEDIEVAL 314 | Problems in Byzantine History and Civilization | HISTORY/ JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 |
| HISTORY/ | Medieval Social and Intellectual History, 1200-1450 |  |  |
| MEDIEVAL/ RELIG ST 318 |  | HISTORY/ <br> CLASSICS/ | Advanced Interdisciplinary Studies in Medieval Civilization |
| HISTORY/ <br> AFROAMER 321 | Afro-American History Since 1900 | FRENCH/ITALIAN/ MEDIEVAL 550 |  |
| HISTORY/ HIST SCI 324 | Science in the Enlightenment | HISTORY 600 | Advanced Seminar in History (See advisor for approvable Europerelated sections) |
| HISTORY/ | Environmental History of Europe |  |  |
| ENVIR ST 328 |  | HIST SCI 201 | The Origins of Scientific Thought |
| HISTORY/ | The Reformation | HIST SCI 202 | The Making of Modern Science |
| RELIG ST 334 |  | HIST SCI 203 | Science in the Twentieth Century: A |
| HISTORY/ | Trans/Gender in Historical Perspective |  | Historical Overview |
| GEN\&WS 346 |  | HIST SCI 222 | Technology and Social Change in History |
| HISTORY 352 | Eighteenth Century Europe |  |  |
| HISTORY 357 | The Second World War | HIST SCI/ C\&E SOC 230 | Agriculture and Social Change in Western History |
| HISTORY 359 | History of Europe Since 1945 |  |  |
| HISTORY/ JEWISH 373 | Modern Political History of the Jews: 1655-1919 | HIST SCI/ MED HIST 284 | Physician in History (Honors) |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | HIST SCI/ <br> MEDIEVAL 322 | Ancient and Medieval Science |
|  |  | HIST SCI/ HISTORY 323 | The Scientific Revolution: From Copernicus to Newton |
| HISTORY/ | Women and Gender in Modern |  |  |
| GEN\&WS 392 | Europe | HIST SCI/ HISTORY 324 | Science in the Enlightenment |
| HISTORY 403 | Immigration and Assimilation in |  |  |
|  | American History | HIST SCI 325 | History of Physics: The Classical Period |
| HISTORY/ | The Enlightenment and Its Critics |  |  |
| RELIG ST 411 |  | HIST SCI 326 | History of Physics: The Modern Period |
| HISTORY/ | The History of Punishment |  |  |
| LEGAL ST 426 |  | HIST SCI/ <br> MED HIST/ <br> RELIG ST 331 | Science, Medicine and Religion |
| HISTORY 434 | American Foreign Relations, 1901 to the Present |  |  |
| HISTORY/ RELIG ST 437 | Western Christianity from Augustine to Darwin | HIST SCI/ MED HIST 333 | History of Modern Biology |
| HISTORY 467 | Economic and Social History of | HIST SCI 337 | History of Technology |
|  | Europe 1500-1750 | HIST SCI 339 | Technology and Its Critics Since World War II |
| HISTORY/ | The Making of the American Landscape |  |  |
| ENVIR ST/ |  | HIST SCI 343 | The Darwinian Revolution |
| GEOG 469 |  | HIST SCI/ | History of Ecology |
| HISTORY/ | Religious Thought in Modern Europe | ENVIR ST 353 |  |
| RELIG ST 470 |  | HIST SCI/ S\&A PHM 401 | History of Pharmacy |
| HISTORY 474 | European Social History, 1830-1914 |  |  |
| HISTORY 475 | European Social History, 1914Present | HIST SCI/ HISTORY/ MED HIST 507 | Health, Disease and Healing I |
| HISTORY/ | Comparative History of Childhood and Adolescence | MED HIST 507 |  |
| ED POL 478 |  | HIST SCI 512 | Galileo Galilei: Life, Writings, and Interpretations |
| HISTORY 514 | European Cultural History Since |  |  |
|  | 1870 | HIST SCI/ HISTORY/ MED HIST 543 | Doctors and Delusions: Madness and Medicine in the Modern Era |
| HISTORY/ JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 |  |  |
| HISTORY 500 | Reading Seminar in History (Migrants \& Refugees) | HIST SCI/ <br> MED HIST/ <br> POP HLTH 553 | International Health and Global Society |


| HIST SCI 622 | Studies in Ancient and Medieval Science | MUSIC 416 | Survey of Music in the Twentieth Century |
| :---: | :---: | :---: | :---: |
| HIST SCI 623 | Studies in Early Modern Science | MUSIC 513 | Survey of Opera |
| HIST SCI 637 | Studies in History of Technology | PHILOS 432 | History of Modern Philosophy |
| ILS 201 | Western Culture: Science, Technology, Philosophy I | PHILOS/JEWISH/ RELIG ST 435 | Jewish Philosophy from Antiquity to the Seventeenth Century |
| ILS 202 | Western Culture: Science, Technology, Philosophy II | PHILOS 526 | Philosophy and Literature |
|  |  | PHILOS 530 | Freedom Fate and Choice |
| ILS 203 | Western Culture: Literature and the Arts I | PHILOS 549 | Great Moral Philosophers |
|  |  | PHILOS 555 | Political Philosophy |
| ILS 204 | Western Culture: Literature and the Arts II | POLI SCI 351 | Politics of the World Economy |
|  |  | POLI SCI 356 | Principles of International Law |
| ILS 205 | Western Culture: Political, Economic, and Social Thought I | $\begin{aligned} & \text { POLI SCI/ } \\ & \text { INTL ST } 439 \end{aligned}$ | The Comparative Study of Genocide |
| ILS 206 | Western Culture: Political, Economic, and Social Thought II | POLI SCI 340 | The European Union: Politics and Political Economy |
| ILS 208 | History of Western Culture II | POLI SCI 350 | International Political Economy |
| ILS/RELIG ST 234 | Genres of Western Religious Writing | POLI SCI 265 | Development of Ancient and |
| INTL BUS 200 | International Business |  | Medieval Western Political Thought |
| INTL BUS/ GEN BUS 320 | Intercultural Communication in Business | POLI SCI 266 | The Development of Modern Western Political Thought |
| INTL BUS/ <br> MHR 403 | Global Issues in Management | POLI SCI 637 | Comparative Political Economy |
|  |  | POLI SCI 432 | Comparative Legal Institutions |
| INTL BUS/ <br> MARKETNG 420 | Global Marketing Strategy | POLI SCI 538 | Politics and Policies in the European Union |
| INTL BUS/ REAL EST 430 | International Real Estate | RELIG ST/ HISTORY/ | The Medieval Church |
| INTL BUS/ FINANCE 445 | Multinational Business Finance | MEDIEVAL 312 |  |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | RELIG ST/ HISTORY 470 | Religious Thought in Modern Europe |
| LITTRANS/ MEDIEVAL 235 | The World of Sagas | $\begin{aligned} & \text { SOC/ } \\ & \text { C\&E SOC } 475 \end{aligned}$ | Classical Sociological Theory |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | SOC 621 | Class, State and Ideology: an Introduction to Marxist Social Science |
| MATH/ <br> HIST SCI 473 | History of Mathematics | $\begin{aligned} & \text { SOC/ } \\ & \text { C\&E SOC } 623 \end{aligned}$ | Gender, Society, and Politics |
| MED HIST/ HIST SCI 212 | Bodies, Diseases, and Healers: An Introduction to the History of Medicine | THEATRE 327 | History of Costume for the Stage |
|  |  | THEATRE 420 | Theatre and Society |
| MED HIST/ HIST SCI/ | Health, Disease and Healing II | THEATRE 521 | The Pre-Modern Drama of Europe: 1650-1850 |
| HISTORY 508 |  | THEATRE 522 | Experimental Drama: The Theatre of |
| MED HIST/ | Byzantine Medicine and Pharmacy |  | Europe 1850-the Present |
| HIST SCI/ |  | HISTORY 118 | Early Modern World |
| HISTORY/ MEDIEVAL/ |  | HISTORY/ RELIG ST 209 | Western Intellectual and Religious History since 1500 |
| S\&A PHM 562 |  | HISTORY/ | The History of Western Christianity |
| MEDIEVAL/ | Ancient and Medieval Science | RELIG ST 212 | to 1750 |
| HIST SCI 322 |  | HISTORY 269 | War, Race, and Religion in Europe and the United States, from the Scramble for Africa to Today |
| MUSIC 411 | Survey of Music in the Middle Ages |  |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |  |
| MUSIC 413 | Survey of Music in the Baroque Era | HISTORY/ HIST SCI 323 | The Scientific Revolution: From |
| MUSIC 414 | Survey of Music in the Classic Era |  | Copernicus to Newton |
| MUSIC 415 | Survey of Music in the Romantic Era | HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe |


| HISTORY 351 | Seventeenth-Century Europe |
| :--- | :--- |
| HISTORY/ | The Bible in the Middle Ages |
| JEWISH/ |  |
| MEDIEVAL/ |  |
| RELIG ST 368 |  |
| HISTORY/ | History of Books and Print Culture |
| ART HIST/ | in Europe and North America |
| JOURN/L IS 650 |  |

## OPTION 2: THREE REGIONS/COUNTRIES

Seven courses from at least two subjects and from at least three regions/ countries

| Ancient Europe |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Ancient Europe |  |  |
| ART HIST/ CLASSICS 300 | The Art and Archaeology of Ancient Greece |  |
| ART HIST 301 | Myths, Loves, and Lives in Greek Vases |  |
| ART HIST 302 | Greek Sculpture |  |
| ART HIST/ CLASSICS 304 | The Art and Archaeology of Ancient Rome |  |
| ART HIST 310 | Early Christian and Byzantine Art |  |
| ART HIST 351 | 20th Century Art in Europe |  |
| ART HIST 405 | Cities and Sanctuaries of Ancient Greece |  |
| ART HIST 505 | Proseminar in Ancient Art |  |
| CLASSICS/ ART HIST 300 | The Art and Archaeology of Ancient Greece |  |
| CLASSICS/ ART HIST 304 | The Art and Archaeology of Ancient Rome |  |
| CLASSICS 320 | The Greeks |  |
| CLASSICS 322 | The Romans |  |
| CLASSICS/ <br> ITALIAN 350 | Rome: The Changing Shape of the Eternal City |  |
| CLASSICS/ GEN\&WS 351 | Women and Gender in the Classical World |  |
| CLASSICS 370 | Classical Mythology |  |
| CLASSICS 371 | Topics in Greek Culture |  |
| CLASSICS 372 | Topics in Roman Culture |  |
| CLASSICS 373 | Topics in Classical Culture |  |
| CLASSICS 376 | Love Poetry of the Ancient Mediterranean |  |
| CLASSICS 379 | Eureka! Technology and Practice in the Ancient World |  |
| CLASSICS 430 | Topics in Classical Archaeology |  |
| CLASSICS/ HISTORY/ RELIG ST 517 | Religions of the Ancient Mediterranean |  |
| CLASSICS 554 | Classical Backgrounds to English Literature |  |
| CLASSICS 556 | The Literature of Ancient Rome |  |


| CLASSICS/ <br> HIST SCI/ HISTORY/ <br> MED HIST/ <br> S\&A PHM 561 | Greek and Roman Medicine and Pharmacy |
| :---: | :---: |
| CLASSICS 591 | Undergraduate Seminar: Approaches to the Classical World |
| COM ARTS 570 | Classical Rhetorical Theory |
| GEN\&WS/ CLASSICS 351 | Women and Gender in the Classical World |
| GREEK 401 | Greek Drama |
| GREEK 402 | Greek Drama and Lyric Poetry |
| GREEK 510 | Homer |
| GREEK 511 | Hesiod |
| GREEK 512 | Greek Lyric Poets |
| GREEK 520 | Greek Comedy |
| GREEK 521 | Greek Tragedy |
| GREEK 532 | Thucydides |
| GREEK 541 | Plato |
| GREEK 551 | Attic Orators |
| GREEK 560 | Hellenistic Greek |
| GREEK 564 | Plutarch |
| HISTORY/ <br> CLASSICS 110 | The Ancient Mediterranean |
| HISTORY 303 | A History of Greek Civilization |
| HISTORY/ <br> MEDIEVAL 313 | Introduction to Byzantine History and Civilization |
| HISTORY/ <br> CLASSICS/ <br> RELIG ST 517 | Religions of the Ancient Mediterranean (Byzantine Gender) |
| HISTORY 600 | Advanced Seminar in History (See advisor for approvable Ancient Europe-related sections) |
| HIST SCI/ <br> CLASSICS/ <br> HISTORY/ <br> MED HIST/ <br> S\&A PHM 561 | Greek and Roman Medicine and Pharmacy |
| LATIN 204 | Introduction to Latin Literature |
| LATIN 301 | Latin Literature of the Roman Republic |
| LATIN 302 | Latin Literature of the Roman Empire |
| LATIN 515 | Vergil |
| LATIN 519 | Latin Poetry |
| LATIN 520 | Roman Drama |
| LATIN 521 | Roman Elegy |
| LATIN 522 | Roman Lyric Poetry |
| LATIN 523 | Roman Satire |
| LATIN 524 | Roman Novel |
| LATIN 539 | Latin Historical Writers |
| LATIN 549 | Latin Philosophical Writers |
| LATIN 559 | Latin Oratory |


| MED HIST/ | Greek and Roman Medicine and |  |
| :---: | :---: | :---: |
| CLASSICS/ | Pharmacy |  |
| HIST SCI/ |  |  |
| HISTORY/ |  |  |
| S\&A PHM 561 |  |  |
| PHILOS 430 | History of Ancient Philosophy |  |
| PHILOS 454 | Classical Philosophers |  |
| PHILOS 464 | Classical Philosophers |  |
| Balkans |  |  |
| Balkans |  |  |
| HISTORY 540 | Balkans and Middle East, |  |
|  | 1700-1918: The Rise of National |  |
|  | States |  |
| HISTORY 600 | Advanced Seminar in History (See advisor for approvable sections for this region) |  |
| LITTRANS 454 | History of Serbian and Croatian Literature |  |
| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation |  |
| SLAVIC 342 | Uvod u srpsku i hrvatsku literaturu |  |
| SLAVIC 449 | Istorija srpske i hrvatske literature |  |
| SLAVIC 454 | Moderna srpska i hrvatska literatura |  |


| $\quad$ Belgium |  |
| :--- | :--- | :--- |
| Code |  |
| Title | Credit |


| Central Europe |  |  |
| :--- | :--- | :--- |
| Code | Title |  |
| Central Europe ${ }^{\text {Also }}$ used for Central European Study Abroad courses |  |  |$\quad$ Credits


| LITTRANS 334 | In Translation: The Art of Isak <br>  <br> Dinesen/Karen Blixen |
| :--- | :--- |

LITTRANS 339 In Translation: Kierkegaard and Scandinavian Literature
SCAND ST 271 Readings in Danish Literature
SCAND ST 375 The Writings of Hans Christian Andersen
SCAND ST 426 Kierkegaard and Scandinavian Literature
SCAND ST 434 The Art of Isak Dinesen/Karen Blixen

SCAND ST 475 The Writings of Hans Christian Andersen for Scandinavian Majors

| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today |  |
| :---: | :---: | :---: |
| SCAND ST/ MEDIEVAL 444 | Kalevala and Finnish Folk-Lore |  |
| France <br> Code | Title | Credits |
| France |  |  |
| COM ARTS 455 | French Film |  |
| FRENCH 210 | Sexuality and Gender in 20thCentury French Literature |  |
| FRENCH 240 | Immigration and Expression |  |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World |  |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise |  |
| FRENCH/ <br> INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication |  |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature |  |
| FRENCH 322 | Introduction to Literature of Modernity |  |
| FRENCH 325 | Visual Culture in French/ Francophone Studies |  |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization |  |
| FRENCH 348 | Modernity Studies |  |
| FRENCH 430 | Readings in Medieval and Renaissance Literature |  |
| FRENCH 431 | Readings in Early Modern Literature |  |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature |  |
| FRENCH 449 | Francophone Modernity Studies |  |
| FRENCH 451 | Medieval, Renaissance, and Early Modern Studies |  |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries |  |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries |  |
| FRENCH 465 | French/Francophone Film |  |
| FRENCH 467 | Aspects of Contemporary French Literature |  |
| FRENCH 472 | French/Francophone Literature and Women |  |
| FRENCH 567 | Undergraduate Seminar in French/ Francophone Literary Studies |  |
| FRENCH 568 | Undergraduate Seminar in French/ Francophone Cultural Studies |  |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama |  |
| FRENCH 618 | Career Strategies for the FrenchSpeaking World |  |
| FRENCH 626 | Critical Approaches to French Literature |  |


| FRENCH 630 | Le Siecle des Lumieres |  |
| :---: | :---: | :---: |
| FRENCH 631 | Litterature Francaise Du XVIIIe Siecle |  |
| FRENCH 633 | Le Roman Au XVIIIe Siecle |  |
| FRENCH 636 | Le Roman Francais 1850-1900 |  |
| FRENCH 637 | La Littérature française du XIXe siècle |  |
| FRENCH 639 | La Litterature Du XVIIe Siecle |  |
| FRENCH 640 | La Litterature Du XVIIe Siecle |  |
| FRENCH 642 | Culture et sociétés dans le monde francophone |  |
| FRENCH 645 | La Litterature Francaise du XVIe Siecle |  |
| FRENCH 646 | La Litterature Francaise du XVIe Siecle |  |
| FRENCH 647 | Le Roman Francais au XXe Siecle |  |
| FRENCH 653 | Cinéma français/francophone |  |
| FRENCH 657 | La Poesie Francaise du XIXe Siecle |  |
| HISTORY 320 | Early Modern France, 1500-1715 |  |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 |  |
| HISTORY 349 | Contemporary France, 1914 to the Present |  |
| HISTORY 358 | French Revolution and Napoleon |  |
| HISTORY 600 | Advanced Seminar in History (See advisor for approvable sections for France) |  |
| INTL BUS/ <br> FRENCH 313 | Professional Communication and Culture in the Francophone World |  |
| INTL BUS/ <br> FRENCH 314 | Contemporary Issues in Government, Organizations, and Enterprise |  |
| INTL BUS/ FRENCH 315 | Advanced Interdisciplinary Studies in Professional Communication |  |
| LITTRANS 209 | Masterpieces of French Literature and Culture |  |
| LITTRANS 249 | Literature in Translation: Nineteenth-Century French Masterpieces |  |
| LITTRANS 268 | French Women Writers from the Middle Ages to the Nineteenth Century |  |
| LITTRANS 272 | French Pop Culture |  |
| LITTRANS 360 | French and Italian Renaissance Literature Online |  |
| PHILOS 440 | Existentialism |  |
| Germany <br> Code | Title | Credits |
|  |  |  |
| ART HIST 330 | The Painting \& Graphic Arts of Germany 1350-1530 | 3-4 |
| ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |
| COM ARTS/ GERMAN 655 | German Film | 3 |


| CURRIC/HISTORY/ JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| :---: | :---: | :---: |
| GEN\&WS/ <br> LITTRANS 270 | German Women Writers in Translation | 3 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 |
| GERMAN 266 | Topics in German and/or Yiddish Culture | 3 |
| GERMAN/ JEWISH 267 | Yiddish Song and the Jewish Experience | 3-4 |
| GERMAN/JEWISH/ <br> LITTRANS 269 | Yiddish Literature and Culture in Europe | 3 |
| GERMAN 271 | The German Immigration Experience | 3 |
| GERMAN 272 | Nazi Culture | 3 |
| GERMAN 275 | Kafka and the Kafkaesque | 3 |
| GERMAN/ <br> LITTRANS 276 | Special Topics in German and World Literature/s | 3 |
| GERMAN 278 | Topics in German Culture | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 |
| GERMAN 305 | Literatur des 20 . und 21. Jahrhunderts | 3-4 |
| GERMAN 362 | Topics in German Literature | 3-4 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 |
| GERMAN 372 | Topics in German Culture | 3-4 |
| GERMAN 385 | Honors Seminar in German Literature | 3 |
| GERMAN 410 | Kultur 1648-1918 | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN/ <br> JEWISH 510 | German-Jewish Culture Since the 18th Century | 3 |
| GERMAN/ <br> MEDIEVAL 611 | Survey of German Literature to 1700 | 3 |
| GERMAN 612 | German Literary Movements Since 1750 | 3 |
| GERMAN 632 | A Theme in German Literature | 3 |
| GERMAN 644 | Theory and Practice of German Drama | 3 |
| GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
| GERMAN/ <br> COM ARTS 655 | German Film | 3 |
| GERMAN 676 | Advanced Seminar in German Studies | 3 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |
| GERMAN 683 | Senior Honors Seminar in German Literature | 3 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY 600 | Advanced Seminar in History (See advisor for approvable sections for Germany) | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |


| LITTRANS/ GERMAN 276 | Special Topics in German and World Literature/s | 3 |
| :---: | :---: | :---: |
| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) | 3 |
| MEDIEVAL/ GERMAN 611 | Survey of German Literature to 1700 | 3 |
| PHILOS/ JEWISH 442 | Moral Philosophy and the Holocaust | 3 |
| Iceland <br> Code <br> Iceland | Title | Credits |
| LITTRANS/ MEDIEVAL 235 | The World of Sagas | 3 |
| LITTRANS/ FOLKLORE/ MEDIEVAL 346 | In Translation: The Icelandic Sagas | 3-4 |
| MEDIEVAL/ <br> FOLKLORE/ <br> LITTRANS 346 | In Translation: The Icelandic Sagas | 3-4 |
| MEDIEVAL/ SCAND ST 409 | Survey of Old Norse-Icelandic Literature | 3 |
| SCAND ST/ MEDIEVAL 409 | Survey of Old Norse-Icelandic Literature | 3 |
| SCAND ST 411 | Areas in Scandinavian Literature | 1 |
| SCAND ST 435 | The Icelandic Sagas | 4 |

## Ireland

## Cod

Title
Credits
Ireland

| ENGL 352 | Modernist Poetry | 3 |
| :--- | :--- | ---: |
| ENGL 454 | James Joyce | 3 |
| HISTORY 503 | Irish and Scottish Migrations | 3 |
| THEATRE 619 | Special Topics in Theatre and | $1-3$ |
|  | Drama (Irish Theatre) |  |


| Code | Title | Credits |
| :---: | :---: | :---: |
| Italy |  |  |
| ART HIST 320 | Italian Renaissance Art | 3-4 |
| ART HIST 321 | Italian Art: 1250-1400 | 3-4 |
| ART HIST 322 | Italian Art from Donatello to Leonardo da Vinci, 1400-1500 | 3-4 |
| ART HIST 323 | From Michelangelo \& Raphael to Titian: The Arts in 16th Century Italy | 3-4 |
| ART HIST 336 | Study Abroad in Renaissance/ Baroque/Northern Art | 1-6 |
| ART HIST 408 | Topics in Twentieth-Century Art (Modern Italian Art) | 3-4 |
| ART HIST 420 | Topics in Italian Renaissance Art | 3 |
| ART HIST 425 | Race and Gender in Italian Early Modern Art | 3 |
| ART HIST 525 | Proseminar in Italian Renaissance Art | 3 |
| COM ARTS/ <br> ITALIAN 460 | Italian Film | 3 |


| HIST SCI 512 | Galileo Galilei: Life, Writings, and Interpretations | 3-4 |
| :---: | :---: | :---: |
| HISTORY 307 | A History of Rome | 3-4 |
| HISTORY 333 | The Renaissance | 3-4 |
| HISTORY 600 | Advanced Seminar in History (See advisor for approvable sections for Italy) | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN/ CLASSICS 350 | Rome: The Changing Shape of the Eternal City | 3-4 |
| ITALIAN 450 | Special Topics in Italian Literature | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN/ COM ARTS 460 | Italian Film | 3 |
| ITALIAN/CLASSICS/ FRENCH/HISTORY/ MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 | 11 Settecento | 3 |
| ITALIAN 622 | II Settecento | 3 |
| ITALIAN 623 | II Teatro Italiano | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 |
| ITALIAN 632 | Lineamenti Di Letteratura Italiana | 3 |
| ITALIAN 635 | II Romanzo Italiano | 3 |
| ITALIAN 636 | II Romanzo Italiano | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 641 | II Seicento: Ribelli, Libertini e Ortodossi | 3 |
| ITALIAN 651 | Il Rinascimento | 3 |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 671 | Il Duecento | 3 |
| ITALIAN/ MEDIEVAL 672 | Il Duecento | 3 |
| LITTRANS 213 | Love and Sex in Italian Comedy | 3-4 |
| LITTRANS/ MEDIEVAL/ RELIG ST 253 | Of Demons and Angels. Dante's Divine Comedy | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS 255 | Literature in Translation: <br> Boccaccio's Decameron-The Human Comedy | 3 |
| LITTRANS 256 | Lit in Translation: Images of the Individual in the Italian Renaissance | 3 |


| LITTRANS 260 | Italy and the Invention of America: from Columbus to World War II | 3 |
| :---: | :---: | :---: |
| LITTRANS/ ILS/ITALIAN/ POLI SCI 365 | Machiavelli and His World | 3 |
| LITTRANS 410 | In Translation: Special Topics in Italian Literature | 3 |
| MEDIEVAL/ LITTRANS/ RELIG ST 253 | Of Demons and Angels. Dante's Divine Comedy | 3 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Francis of Assisi) | 3-4 |

Netherlands
Cod
Title Credits
Netherlands

| ART HIST 331 | Angels, Demons, and Nudes: Early <br> Netherlandish Painting from Bosch <br> to Bruegel | $3-4$ |
| :--- | :--- | ---: |
| ART HIST 332 | Northern Painting and Graphics <br> from Bosch and Holbein to Bruegel | $3-4$ |
| ART HIST 333 | Netherlandish Painting of the 17th <br> Century | $3-4$ |
| GERMAN 245 | Topics in Dutch Life and Culture | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 |
| GERMAN 377 | Study Abroad in Dutch Literature | $2-5$ |
| GERMAN 378 | Study Abroad in Dutch Culture | $2-5$ |
| GERMAN 445 | Topics in Dutch Culture | $3-4$ |
| GERMAN 625 | Letterkunde der Lage Landen | $3-4$ |
| GERMAN 645 | Cultur | $3-4$ |
| JEWISH 490 | Topics in Jewish Studies (Spinoza) | 3 |
| LITTRANS 326 | Topics in Dutch Literature in | 3 |
|  | Translation |  |

## Norway

Title
Credits
Norway
LITTRANS/ In Translation: The Drama of Henrik 3-4
THEATRE 335 Ibsen
LITTRANS 338 In Translation: Knut Hamsun and 3-4
the 20th Century Norwegian Novel
Readings in Norwegian Literature 3-4

| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| :--- | :--- | ---: |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |

SCAND ST 425 Knut Hamsun and the 20th Century 4

Norwegian Novel
THEATRE/ In Translation: The Drama of Henrik 3-4

LITTRANS 335
Ibsen

Title
Credits

## Code

Poland
LITTRANS 215 Polish Literature in Translation: 3
14th to the Mid-19th Century
LITTRANS $471 \quad$ Polish Literature (in Translation), 3
Middle Ages to 1863
LITTRANS 473 Polish Literature (in Translation) 3
since 1863

| SLAVIC 302 | Zarys historii literatury polskiej | 3 | LITTRANS 343 | In Translation: The Woman in | 3-4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SLAVIC 470 | Historia literatury polskiej do roku | 3 |  | Scandinavian Literature |  |
|  | 1863 |  | LITTRANS/ | In Translation: The Scandinavian | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 | FOLKLORE/ MEDIEVAL 345 | Tale and Ballad |  |
| Portugal |  |  | LITTRANS 350 | Scandinavian Decadence in its European Context | 3-4 |
| Code | Title | Credits |  | In Translation: Mythology of | 3-4 |
| Portugal |  |  | FOLKLORE/ | Scandinavia |  |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 | LITTRANS/ RELIG ST 342 |  |  |
| PORTUG 361 | Portuguese Civilization | 3 | MEDIEVAL/ | In Translation: The Scandinavian | 3-4 |
| PORTUG 411 | Survey of Portuguese Literature before 1825 | 3 | FOLKLORE/ <br> LITTRANS 345 | Tale and Ballad |  |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 | MEDIEVAL/ SCAND ST 430 | The Vikings | 4 |
| Scandinavia |  |  | MEDIEVAL/ FOLKLORE/ | Celtic-Scandinavian Cultural Interrelations | 3 |
| Code | Title | Credits | SCAND ST 446 |  |  |
| Scandinavia |  |  | SCAND ST 276 | Scandinavian Life and Civilization | 3 |
| FOLKLORE/ LITTRANS/ | In Translation: Mythology of Scandinavia | 3-4 | SCAND ST 284 | The "Scandinavian Modern" Phenomenon in Arts and Literature | 3 |
| MEDIEVAL/ RELIG ST 342 |  |  | SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to | 3-4 |
| FOLKLORE/ | In Translation: The Scandinavian | 3-4 |  | 1900 |  |
| LITTRANS/ MEDIEVAL 345 | Tale and Ballad |  | SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| FOLKLORE/ <br> LITTRANS/ <br> MEDIEVAL 346 | In Translation: The Icelandic Sagas | 3-4 | SCAND ST 411 | Areas in Scandinavian Literature | 1 |
|  |  |  | SCAND ST 419 | Scandinavian Children's Literature | 4 |
| FOLKLORE/ | Celtic-Scandinavian Cultural Interrelations | 3 | SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| $\text { SCAND ST } 446$ |  |  | SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| HISTORY/ SCAND ST 431 | History of Scandinavia to 1815 | 3 | SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 | SCAND ST/ <br> LITTRANS 428 | Memory and Literature from Proust to Knausgard | 3 |
| HISTORY/ SCAND ST 577 | Contemporary Scandinavia: Politics and History | 3-4 | SCAND ST 429 | Mythology of Scandinavia | 4 |
| LITTRANS 271 | In Translation:Masterpieces of Scandinavian Literature, Middle Ages-1900 | 3-4 | SCAND ST/ <br> MEDIEVAL 430 | The Vikings | 4 |
|  |  |  | SCAND ST/ | History of Scandinavia to 1815 | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 | HISTORY 431 <br> SCAND ST/ <br> HISTORY 432 | History of Scandinavia Since 1815 | 3 |
| LITTRANS/LIS 319 | Scandinavian Children's Literature | 3-4 | SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| LITTRANS 324 | Topics in Scandinavian Literature | 3-4 | SCAND ST 436 | Topics in Scandinavian Literature | 3-4 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 | SCAND ST/ <br> FOLKLORE/ | Celtic-Scandinavian Cultural Interrelations | 3 |
| LITTRANS 337 | In Translation: 19th Century Scandinavian Fiction | 3-4 | MEDIEVAL 446 |  |  |
|  |  |  | SCAND ST 450 | Scandinavian Decadence in its | 3-4 |
| LITTRANS 340 |  | 3-4 |  | European Context |  |
|  | Literature in Translation |  | SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| LITTRANS/ FOLKLORE/ | In Translation: Mythology of Scandinavia | 3-4 | SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| MEDIEVAL/ |  |  | SCAND ST 520 | Special Topics | 3 |


| SCAND ST/ | Contemporary Scandinavia: Politics | 3-4 | SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HISTORY 577 | and History |  | SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 634 | Survey of Scandinavian Literature: $1500-1800$ | 3 | THEATRE/ LITTRANS 336 | In Translation: The Drama of August Strindberg | 3-4 |
| SCAND ST 635 | Survey of Scandinavian Literature: 1800-1890 | 3 | Switzerland |  |  |
| SCAND ST 636 | Survey of Scandinavian Literature: 1890-1920 | 3 | Code <br> Switzerland | Title | Credits |
| Spain |  |  | FRENCH 568 | Undergraduate Seminar in French/ Francophone Cultural Studies | 3 |
| Code | Title | Credits |  |  |  |
| Spain |  |  | Turkey |  |  |
| LITTRANS 252 | Spanish Literary Masterpieces in Translation | 3 | Code <br> Turkey | Title | Credits |
| HISTORY 600 | Advanced Seminar in History (See advisor for approvable sections for | 3 | GEN\&WS/HISTORY/ <br> LCA 472 | Women in Turkish Society | 3 |
|  | Spain) |  | HISTORY/GEN\&WS/ | Women in Turkish Society | 3 |
| MEDIEVAL/ | Literatura de la Edad Media | 3 | LCA 472 |  |  |
| SPANISH 414 | Castellana (ss. XII-XV) |  | HISTORY 600 | Advanced Seminar in History (See | 3 |
| MEDIEVAL/ SPANISH 503 | Survey of Medieval Literature | 3 |  | advisor for approvable sections for Turkey) |  |
| MEDIEVAL/ SPANISH 504 | Survey of Medieval Literature | 3 | LCA/FOLKLORE 279 | Introduction to Turkish Folk Literature | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 | LCA/GEN\&WS/ | Women in Turkish Society | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 | HISTORY 472 |  |  |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 | LCA 579 | Fiction and Ethnography in Turkey | 3 |
| SPANISH 324 | Survey of Modern Spanish | 3 | United Kingdom |  |  |
|  |  |  | Code | Title | Credits |
| SPANISH 359 | Spanish Business Area Studies | 3 | United Kingdom |  |  |
| SPANISH 361 | Spanish Civilization | 3 | ART HIST 346 |  |  |
| SPANISH/ MEDIEVAL 414 | Literatura de la Edad Media Castellana (ss. XII-XV) | 3 |  | Eighteenth Century to the Present |  |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 | COMP LIT 203 | Introduction to Cross-Cultural Literary Forms |  |
| SPANISH 435 | Cervantes | 3 | ED POL/ | History of Radical and Experimental |  |
| SPANISH 451 | Literature of the Eighteenth and | 3 | HISTORY 622 | Education in the US and UK |  |
|  | Nineteenth Centuries |  | ENGL 219 | Shakespearean Drama |  |
| SPANISH 453 | Literature of the Twentieth Century | 3 | ENGL 220 | Shakespearean Drama |  |
| SPANISH 468 | Topics in Hispanic Culture | 3 | ENGL 328 | The Sixteenth Century |  |
| SPANISH/ MEDIEVAL 503 | Survey of Medieval Literature | 3 | ENGL 331 | Seventeenth-Century Literature and Culture |  |
| SPANISH/ MEDIEVAL 504 | Survey of Medieval Literature | 3 | ENGL 334 | Eighteenth Century Literature and Culture |  |
| SPANISH 505 | Advanced Survey of Spanish Literature | 3 | ENGL 335 | Stage and Page in the Long Eighteenth Century |  |
| SPANISH 506 | Advanced Survey of Spanish Literature | 3 | ENGL 336 | Eighteenth-Century Novel |  |
| SPANISH 627 | Historia de Teoria Literaria: de Platon AI Siglo XVIII | 3 | ENGL/ <br> MEDIEVAL 424 | Medieval Drama |  |
| SPANISH 628 | Historia de Teoria Literaria: Siglos XIX-XX | 3 | ENGL/ <br> MEDIEVAL 425 | Medieval Romance |  |
| Sweden |  |  | ENGL/ <br> RELIG ST 434 | Milton |  |
| Code | Title | Credits | ENGL 341 | Romantic Poetry |  |
| Sweden |  |  | ENGL 344 | Victorian Literature and Culture |  |
| LITTRANS/ | In Translation: The Drama of August | 3-4 | ENGL 345 | Nineteenth-Century Novel |  |
| THEATRE 336 | Strindberg |  | ENGL 346 | Victorian Poetry |  |


| ENGL 351 | Modernist Novel |
| :---: | :---: |
| ENGL 353 | British Literature since 1900 |
| ENGL/HISTORY/ <br> RELIG ST 360 | The Anglo-Saxons |
| ENGL 422 | Outstanding Figure(s) in Literature before 1800 |
| ENGL/ MEDIEVAL 423 | Topic in Medieval Literature and Culture |
| ENGL/ <br> MEDIEVAL 426 | Chaucers Courtly Poetry |
| ENGL/ MEDIEVAL 427 | Chaucer's Canterbury Tales |
| ENGL 430 | Topic in Early Modern Literature and Culture |
| ENGL 431 | Early Works of Shakespeare |
| ENGL 432 | Later Works of Shakespeare |
| ENGL 433 | Spenser |
| ENGL 438 | Topic in Eighteenth-Century Literature and Culture |
| ENGL 443 | Outstanding Figure(s) in Literature since 1800 |
| ENGL 444 | Topic in Romantic or Victorian Literature and Culture |
| ENGL 453 | Topic in British Literature and Culture since 1900 |
| ENVIR ST 307 | Literature of the Environment: Speaking for Nature |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) |
| HISTORY 123 | English History: England to 1688 |
| HISTORY 124 | British History: 1688 to the Present |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 |
| HISTORY 367 | Society and Ideas in Shakespeare's England |
| HISTORY 503 | Irish and Scottish Migrations |
| HISTORY 600 | Advanced Seminar in History (See advisor for approvable sections for the United Kingdom) |
| MEDIEVAL 351 | Arthurian Legend and Literature |
| MEDIEVAL/ <br> ENGL 423 | Topic in Medieval Literature and Culture |
| THEATRE/ ENGL 575 | British Drama, 1914 to Present |

## RESIDENCE AND QUALITY OF WORK

2.500 GPA on all courses completed to meet the European Area Studies Requirement

11 credits in the certificate must be taken in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Historical Grounding) understanding the historical, political, and cultural forces and conditions that have given rise to the unity and diversity in the region today.
2. (Multi-disciplinarity) analyzing contemporary political, economic, and cultural realities in the region from at least two disciplinary perspectives, ideally including humanities, social sciences and sometimes natural science approaches.
3. (Depth of knowledge) mastering at the undergraduate generalist level a particular facet of life in the region by taking seven courses on three particular sub-regions or countries or by taking seven courses on the region in more than one discipline
4. (Language knowledge) mastering at undergraduate generalist level a particular facet of life in the region by studying a regional language to the intermediate level.

## ADVISING AND CAREERS

Advising for the certificate is through the Institute for Regional and International Studies (IRIS). The IRIS assistant director for students and curriculum can assist students in developing a plan of study for the certificate, track progress toward the certificate, explore study abroad and international internship options, and begin the career exploration process. We offer walk-in advising, advising workshops, and scheduled appointments. We strongly encourage students to begin career exploration early on and to make use of the many resources available on campus.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Faculty: Ringe (director, Political Science), Brossard (Life Sciences Communication), Covington (European Studies), Ferree (Sociology), Klug (Law), Livorni (French and Italian), Moynihan (Public Affairs), Olds (Geography), Potter (CGES, German), Wolf (Scandinavian Studies)

## WISCONSIN EXPERIENCE

As a regional center within the Institute for Regional and International Studies, we support and enhance international and global awareness in our student communities and inspire informed thinking about the complexities of our world. We encourage our students to connect to international networks and our regional communities through our program's lecture series, film screenings, and varied outreach events and activities. We encourage our students to study abroad, do international internships, learn foreign languages, and expect them to gain an interdisciplinary grounding in global and regional affairs. We provide resources and expertise on our world area to students, and prospective students, and more broadly to K-12 teachers and students, postsecondary educators and graduate students, businesses, the media, the military, the community at large, and anyone else who wants it.

## RESOURCES AND SCHOLARSHIPS

Information about funding through the Center for European Studies is available from our website (http://europe.wisc.edu/outreachopportunities). We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https:///iris.wisc.edu/funding).

## INTERNATIONAL STUDIES, B.A.

International studies (IS) is an interdisciplinary major with a broad background in international and transnational political, social, economic, commercial, and environmental affairs, together with a comparative study of politics, economics, security, and culture. The goal is to provide students with the necessary tools to understand global processes in their totality and how they are situated and lived in specific regions. The major provides an integrated program of courses that lays the foundation for professional training in a wide variety of areas. Such a foundation can be invaluable in securing a place in competitive graduate or professional schools, which, in turn, prepare students for government service, or for other careers with an international focus, including those in multinational corporations, international finance, non-governmental organizations, and institutions of teaching and research.

The IS major complements numerous majors across campus. Many students choose to double major or enhance their studies with one or more certificates, such as the global health certificate or those offered by the area studies centers.

This major is interdisciplinary, offering a wealth of options. Careful planning and consultation with the IS advisor is especially important.

## IS MAJORS SPECIALIZE IN ONE OF THREE OPTIONS:

Option I: Global Security

In this option, majors explore conditions that challenge the ability of people and societies to survive. Students consider the causes of and solutions to political crises and violent conflicts in interstate, transnational, and domestic settings. Using historical and regional approaches, students develop a better understanding of the dilemmas the state and the global community face when confronted by threats to human rights, peace, and stability.

## Option II: Politics and Policy in the Global Economy

This option offers a multidisciplinary survey of international economic and political institutions and transactions, as well as the policy issues pertaining to international commerce and trade, international finance and monetary relations, international macroeconomic policy coordination, U.S. trade imbalances, aid and development, and related environmental and natural resource problems.

## Option III: Culture in the Age of Globalization

In this option, majors investigate cross-cultural interactions at different levels: local, national, and transnational. Students engage in such issues as cosmopolitanism; international and global flows of images, ideas, and people; questions of identity; changing assumptions of what it means to be indigenous and foreign; globalization and technology; and the impact of globalization on cultures.

## STUDY ABROAD

International studies and studying abroad are a natural combination. While study abroad is not a requirement for the major, all IS students are strongly encouraged to pursue a significant international experience during the course of the undergraduate career. Whether through a study abroad program, an internship, or service learning, the experience of studying or working in a foreign culture is invaluable. Many courses taken abroad will count toward the IS major. See the IS advisor for specific guidelines. More information about study abroad and internships is available through International Academic Programs (http:// www.studyabroad.wisc.edu).

## HOW TO GET IN

Students are advised to declare the major by the end of the sophomore year and/or before studying abroad. To be eligible to declare the international studies major a student must have a GPA of 2.000 both in the major and overall, and have completed (or be in progress toward completing) the following courses, with a minimum combined 2.000 GPA :

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTL ST 101 | Introduction to International Studies | $3-4$ |
| Complete the 5th unit of a foreign language 1 | $4-8$ |  |
| Select one of the following: |  |  |
| ECON 101 | Principles of Microeconomics <br> \& ECON 102 | and Principles of Macroeconomics |
| A A E 215 | Introduction to Agricultural and <br> \& ECON 102 | Applied Economics <br> and Principles of Macroeconomics |
| ECON 111 | Principles of Economics- <br> Accelerated Treatment |  |

1 This requirement must be completed before graduation. ESL 118 substitutes for the foreign language admission requirement.
2
ECON 111 requires placement in MATH 221 or higher and is limited enrollment.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.) <br> Students pursuing a bachelor of arts degree in the College of Letters \&

 Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)
## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

Liberal Arts and Science
Coursework
Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work
Major Declare and complete at least one (1) major
Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit
Minimum $\quad 2.000$ in all coursework at UW-Madison
GPAs $\quad 2.000$ in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS OF THE MAJOR

Students must declare the major, complete the common requirements, and the requirements for one of the options within the international studies major.

The international studies major offers three options:

1. Culture in the Age of Globalization
2. Global Security
3. Politics and Policy in the Global Economy

A student may not declare or earn more than one major option.

## COMMON MAJOR REQUIREMENTS INTRODUCTORY REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTL ST 101 | Introduction to International Studies | $3-4$ |
| Complete the 5th Unit of a Foreign Language (see course |  |  |
| list below) |  |  |
|  |  |  |
| Select one of the following: | $4-8$ |  |


| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |
| :---: | :---: |
| A A E 215 <br> \& ECON 102 | Introduction to Agricultural and Applied Economics and Principles of Macroeconomics |
| ECON 111 | Principles of EconomicsAccelerated Treatment ${ }^{2}$ |

1 ESL 118 Academic Writing II substitutes for the Foreign Language requirement.
2
ECON 111 requires placement in MATH 221 or higher is limited enrollment.

| 5th Unit of Foreign Language Course List |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AFRICAN 435 | Advanced Studies in Swahili Language-Grammar | 3 |
| AFRICAN 436 | Advanced Studies in Swahili Language-Readings | 3 |
| AFRICAN/ <br> LCA LANG 445 | Readings in Advanced Arabic Texts | 3 |
| AFRICAN 475 | Fifth Semester Yoruba | 3 |
| AFRICAN 476 | Sixth Semester Yoruba | 3 |
| AFRICAN 493 | Fifth Semester, A Language of Southern Africa | 3 |
| AFRICAN 494 | Sixth Semester, A Language of Southern Africa | 3 |
| AFRICAN 495 | Fifth Semester, A Language of Northern Africa | 3 |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa | 3 |
| AFRICAN 497 | Fifth Semester, A Language of West Africa | 3 |
| AFRICAN 498 | Sixth Semester, A Language of West Africa | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 301 | Fifth Semester Chinese | 4 |
| E ASIAN 302 | Sixth Semester Chinese | 4 |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 335 | Intermediate Japanese Conversation | 3 |
| E ASIAN 347 | Fifth Semester Korean | 3 |
| E ASIAN 348 | Sixth Semester Korean | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 |
| E ASIAN 402 | Eighth Semester Chinese | 3 |
| E ASIAN 403 | Seventh Semester Japanese | 3 |
| E ASIAN 404 | Eighth Semester Japanese | 3 |
| E ASIAN 405 | Seventh Semester Korean | 3 |
| E ASIAN 406 | Eighth Semester Korean | 3 |
| E ASIAN 431 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 432 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 501 | Fifth-year Chinese | 3 |


| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| :---: | :---: | :---: |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ <br> INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH/ITALIAN/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 590 | Advanced Phonetics | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |


| GERMAN 221 | Introduction to German Literature and Culture I | 3 |
| :---: | :---: | :---: |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 |
| GERMAN 225 | Composition and Conversation I | 3 |
| GERMAN 226 | Composition and Conversation II | 3-4 |
| GERMAN 235 | Dutch Conversation and Composition | 3 |
| GERMAN 249 | Intermediate German - Speaking and Listening | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 |
| GERMAN 305 | Literatur des 20 . und 21. Jahrhunderts | 3-4 |
| GERMAN 313 | Third Semester Dutch for Graduate Students | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 |
| GERMAN 337 | Advanced Composition \& Conversation | 3-4 |
| GERMAN 351 | Introduction to German Linguistics | 3-4 |
| GERMAN 352 | Topics in German Linguistics | 3-4 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 |
| GERMAN 369 | Study Abroad in German Linguistics | 2-5 |
| GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
| GERMAN 379 | Study Abroad in Dutch Linguistics | 2-5 |
| GERMAN 410 | Kultur 1648-1918 | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| GERMAN 632 | A Theme in German Literature | 3 |
| GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |
| GREEK 401 | Greek Drama | 3 |
| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| GREEK 505 | Elementary Prose Composition | 3 |
| GREEK 510 | Homer | 3 |
| GREEK 511 | Hesiod | 3 |
| GREEK 512 | Greek Lyric Poets | 3 |
| GREEK 520 | Greek Comedy | 3 |
| GREEK 521 | Greek Tragedy | 3 |
| GREEK 532 | Thucydides | 3 |
| GREEK 541 | Plato | 3 |
| GREEK 551 | Attic Orators | 3 |
| GREEK 560 | Hellenistic Greek | 3 |
| GREEK 564 | Plutarch | 3 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |


| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| :---: | :---: | :---: |
| HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry | 3 |
| HEBR-BIB/ JEWISH 514 | Biblical Texts, Poetry | 3 |
| HEBR-BIB 701 | Aramaic I | 3 |
| HEBR-BIB 702 | Aramaic II | 3 |
| HEBR-BIB 703 | Ugaritic Texts | 3 |
| HEBR-BIB 704 | Canaanite Dialects | 3 |
| HEBR-BIB 705 | Syriac I | 3 |
| HEBR-BIB 706 | Syriac II | 3 |
| HEBR-BIB 723 | Classical Hebrew Linguistics: Historical and Descriptive | 3 |
| HEBR-BIB 751 | The Book of Isaiah | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 311 | Advanced Italian Language | 3 |
| ITALIAN 312 | Writing Workshop | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 423 | Corso Di Stilistica Applicata | 3 |
| ITALIAN/FRENCH/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages | 3 |
| ITALIAN 450 | Special Topics in Italian Literature | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 | Il Settecento | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 |
| ITALIAN 635 | Il Romanzo Italiano | 3 |
| ITALIAN 636 | Il Romanzo Italiano | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 651 | Il Rinascimento | 3 |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 671 | II Duecento | 3 |
| JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 |
| LATIN 505 | Elementary Prose Composition | 3 |
| LCA LANG 501 | Fifth Semester Asian Language | 3 |
| LCA LANG 503 | Fifth Semester Burmese | 3 |
| LCA LANG 504 | Sixth Semester Burmese | 3 |
| LCA LANG 505 | Fifth Semester Filipino | 3 |


| LCA LANG 506 | Sixth Semester Filipino | 3 |
| :---: | :---: | :---: |
| LCA LANG 507 | Fifth Semester Hmong | 3 |
| LCA LANG 508 | Sixth Semester Hmong | 3 |
| LCA LANG 509 | Fifth Semester Indonesian | 3 |
| LCA LANG 510 | Sixth Semester Indonesian | 3 |
| LCA LANG 513 | Fifth Semester Khmer | 3 |
| LCA LANG 514 | Sixth Semester Khmer | 3 |
| LCA LANG 515 | Fifth Semester Lao | 3 |
| LCA LANG 516 | Sixth Semester Lao | 3 |
| LCA LANG 517 | Fifth Semester Thai | 3 |
| LCA LANG 518 | Sixth Semester Thai | 3 |
| LCA LANG 519 | Fifth Semester Vietnamese | 3 |
| LCA LANG 520 | Sixth Semester Vietnamese | 3 |
| LCA LANG/ AFRICAN 527 | Advanced Summer Immersion Arabic | 8 |
| LCA LANG 528 | Advanced Summer Immersion Persian | 8 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 |
| LCA LANG 531 | Fifth Semester Kazak | 3 |
| LCA LANG 532 | Sixth Semester Kazak | 3 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |
| LCA LANG 553 | Fifth Semester Hindi | 3-4 |
| LCA LANG 554 | Sixth Semester Hindi | 3-4 |
| LCA LANG 557 | Fifth Semester Tibetan | 4 |
| LCA LANG 558 | Sixth Semester Tibetan | 4 |
| LCA LANG 563 | Fifth Semester Persian | 3 |
| LCA LANG 564 | Sixth Semester Persian | 3 |
| LCA LANG 571 | Fifth Semester Urdu | 3-4 |
| LCA LANG 572 | Sixth Semester Urdu | 3-4 |
| LCA LANG 601 | Seventh Semester Asian Language | 3 |
| LCA LANG 602 | Eighth Semester Asian Language | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| LCA LANG 648 | Advanced Readings in Pali Literature | 3 |
| LCA LANG 653 | Advanced Readings in Hindi Language | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 671 | Advanced Readings in Urdu Language | 3 |
| LCA LANG 675 | Advanced Readings in Sanskrit | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| PORTUG 225 | Third Year Conversation and Composition | 3 |


| PORTUG 226 | Third Year Conversation and Composition | 3 |
| :---: | :---: | :---: |
| PORTUG 311 | Fourth Year Composition and Conversation | 3 |
| PORTUG 312 | Fourth Year Composition and Conversation | 3 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 401 | Contemporary Scandinavian Languages | 3 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SLAVIC 275 | Third Year Russian I | 3-4 |
| SLAVIC 276 | Third Year Russian II | 3-4 |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 309 | Russian Area Studies on Study Abroad | 1-4 |
| SLAVIC 315 | Russian Language and Culture I | 2 |
| SLAVIC 316 | Russian Language and Culture II | 2 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 350 | Special Topics in Russian Language, Literature, and Culture | 3 |


| SLAVIC 420 | Chekhov | 3-4 |
| :---: | :---: | :---: |
| SLAVIC 421 | Gogol | 3-4 |
| SLAVIC 422 | Dostoevsky | 3-4 |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |

## AREA STUDIES

Area studies courses help students focus their on a specific geographic regions. Students must choose one course from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN/ | Africa: An Introductory Survey | 4 |
| AFROAMER/ |  |  |
| ANTHRO/GEOG/ |  |  |
| HISTORY/POLI SCI/ <br> SOC 277 |  | $3-4$ |
| E A STDS/HISTORY/ | Introduction to East Asian <br> POLI SCI 255 | Civilizations |
| GEOG 340 | World Regions in Global Context | 3 |
| HISTORY 120 | Europe and the Modern World 1815 <br> to the Present | 4 |
| HISTORY 139 | The Middle East in the 20th Century | $3-4$ |


| HISTORY 142 | History of South Asia to the Present | 3-4 |
| :---: | :---: | :---: |
| HISTORY 201 | The Historian's Craft (Portraying China) | 3-4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/ <br> EA STDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 253 | Russia: An Interdisciplinary Survey | 4 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey | 4 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all INTL ST courses and other courses in the major
2.000 GPA on 15 upper-level major credits, taken in residence

15 credits in the major, taken on the UW-Madison campus ${ }^{3}$
3 Major courses designated Intermediate and Advanced level are considered upper level.

## OPTIONS IN THE MAJOR

- International Studies: Culture in an Age of Globalization (p. 830)
- International Studies: Global Security (p. 848)
- International Studies: Politics and Policy in the Global Economy (p. 863)

Each option in the major requires 35 credits. Students select one Area Studies course (above), and the option-specific requirements for Core, Issues, and Elective classes (below). ${ }^{4}$

4
A maximum four courses from a single SUBJECT may be applied to the 35 credits in the major. This excludes INTL ST courses and courses cross-listed in INTL ST. For example: A student with five POLI SCI courses that could apply to the major will see only four of those courses applying in the international studies major. (However, if one of those POLI SCI courses is also cross-listed in INTL ST, that course will not count against the limit, and thus, all five POLI SCI courses will apply in the major). The degree audit (DARS) enforces this limitation.

Though some courses are identified as acceptable for two or more requirements, a course may meet only one requirement. For example, a course that could count in either Option Core or Option Issues will meet only one of those requirements, based on which requirement needs that course to become satisfied. The degree audit (DARS) determines the best scenario.

## DISTINCTION IN THE MAJOR

Students not enrolled in the Honors Program may apply for Distinction in the Major. Criteria include:

1. A 3.500 grade point average in the major
2. Completion of a Senior Thesis, Senior Seminar, or "substantial extra work" in an advanced course in the major
3. A letter of recommendation from a member of the UW-Madison faculty to the international studies advising staff (submitted three weeks prior to the date of graduation).

## HONORS IN THE MAJOR

Students may declare Honors in the International Studies Major in consultation with the International Studies advisor(s). They must declare prior to enrollment in their Senior Honors Thesis (typically second semester of junior year).

## HONORS IN THE INTERNATIONAL STUDIES MAJOR REQUIREMENTS

To earn Honors in the Major in International Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in major courses
- Complete 16 upper-level $^{1}$ major credits, taken for Honors, with individual grades of B or better in each course ${ }^{2}$
- Complete a two-semester Senior Honors Thesis, for a total of 6 credits, or two Senior Seminars, with grades of B or better; choose from:


## Code Title

Credits
Senior Honors Thesis (2 courses):

| AFRICAN 681 | Senior Honors Thesis |
| :--- | :--- |
| \& AFRICAN 682 | and Senior Honors Thesis |


| E A STDS 681 <br> \& E A STDS 682 | Senior Honors Thesis and Senior Honors Thesis |
| :---: | :---: |
| E ASIAN 681 \& E ASIAN 682 | Senior Honors Thesis and Senior Honors Thesis |
| ECON 681 <br> \& ECON 682 | Senior Honors Thesis and Senior Honors Thesis |
| FRENCH 681 <br> \& FRENCH 682 | Senior Honors Thesis and Senior Honors Thesis |
| GERMAN 681 <br> \& GERMAN 682 | Senior Honors Thesis-First <br> Semester <br> and Senior Honors Thesis-Second Semester |
| HISTORY 681 <br> \& HISTORY 682 | Senior Honors Thesis and Senior Honors Thesis |
| INTL ST 681 \& INTL ST 682 | Senior Honors Thesis and Senior Honors Thesis |
| POLI SCI 681 <br> \& POLI SCI 682 | Senior Honors Thesis and Senior Honors Thesis |
| PORTUG 681 <br> \& PORTUG 682 | Senior Honors Thesis and Senior Honors Thesis |
| SLAVIC 681 <br> \& SLAVIC 682 | Senior Honors Thesis and Senior Honors Thesis |
| SPANISH 681 <br> \& SPANISH 682 | Senior Honors Thesis and Senior Honors Thesis |
| Senior Seminar (2 courses): |  |
| INTL ST 601 | Topics in Global Security |
| INTL ST 602 | Topics in Politics and Policy in the Global Economy |
| INTL ST 603 | Topics in Culture in the Age of Globalization |
| INTL ST 604 | Topics in Global Environment |
| $\begin{aligned} & 1 \quad \text { All intermediate- } \\ & \text { are considered u } \\ & 2 \text { A maximum of 2 } \\ & \text { Abroad may cou } \end{aligned}$ | All intermediate- and advanced-level courses counting in the major are considered upper level. |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work
grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Interdisciplinarity) analyzing contemporary political, economic, security and cultural realities globally from multi-disciplinary perspectives, ideally including humanities, social sciences, humanitarian, and sometimes natural science approaches.
2. (Depth of knowledge) mastering at the undergraduate generalist level major issues related to key themes in International Studies (e.g. culture, global security and political economy) by taking 15 credits in one particular theme area.
3. (Regional (studies) grounding) understanding the social, political, economic and cultural forces and conditions that have given rise to the unity and diversity of a specific region of the world today.
4. (Language knowledge) mastering at the undergraduate generalist level a particular facet of life in one or more region of the world by studying a foreign language to at least the advanced (5th semester) level.
5. (Analytical skills) demonstrating the ability to think critically and analytically, the capacity to write clearly and effectively, and the ability to identify and evaluate research methods and outcomes.

## ADVISING AND CAREERS

## INTERNATIONAL STUDIES MAJOR ADVISING STAFF

International studies majors have a wide variety of academic advising and career resources and support. Academic advising is essential to a successful undergraduate experience. For this reason, the international studies major has a professional advisor, a peer advisor, and a career advisor. We recommend that you meet with your advisor at least once per semester to track progress toward your degree, explore study abroad options, and begin the career exploration process. The IS major offers walk-in advising, advising workshops, and scheduled appointments. Students exploring the IS major should plan to attend an Intro to the IS Major workshop (http://www.ismajor.wisc.edu/about/ news-and-events/upcoming-workshop-dates). To learn more about academic advising information, please visit the IS Major website (http:// www.ismajor.wisc.edu/about/current-students/academic-advising).

Students should also begin the career advising process early. The international studies major offers a 1-credit career class designed for sophomores or juniors. Students are strongly encouraged to meet with both the IS career advisor and SuccessWorks at the College of Letters \& Science, and to apply for internship opportunities-both domestically and via International Internship Programs or the Washington DC Internship Program. The IS major also maintains a list of career events (http:// www.ismajor.wisc.edu/about/news-and-events/career-and-internshipevents) across campus that will benefit undergraduate students, hosts career workshops, and has a transition checklist to help students prepare for post-undergraduate life. For more information, please visit our website (http://www.ismajor.wisc.edu/about/current-students/careers).

Molly Donnellan, Academic Advisor
Csanád Siklós, Ph.D., Academic Advisor
Joel Clark, Career Advisor

## LETTERS \& SCIENCE CAREER RESOURCES

The program encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks (https://careers.Is.wisc.edu) at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

The international studies major is directed by Dr. Jo Ellen Fair, Professor of African Cultural Studies.

The advisors for the international studies major are Dr. Csanád Siklós and Molly Donnellan.

The career advisor is Dr. Joel Clark.

## WISCONSIN EXPERIENCE

## STUDY ABROAD

International studies majors are strongly encourage to study abroad. The International Studies Major website (http://www.ismajor.wisc.edu/about/ current-students/study-abroad) provides information about how to plan your experience abroad.

## INTERNSHIP ABROAD

International studies majors are strongly encourage to study abroad. Please review information on the International Studies Major website (http://www.ismajor.wisc.edu/about/current-students/ internships) and the International Internship Program website (http:// internships.international.wisc.edu) about opporunities.

## UNDERGRADUATE RESEARCH

The international studies major encourages students to become engaged in undergraduate research. There are numerous programs (https:// teachlearn.provost.wisc.edu/initiatives-and-programs/undergraduateresearch) that provide research opportunities for undergraduates at UWMadison including:

- Hilldale Undergraduate/Faculty Research Fellowships (https://awards.advising.wisc.edu/all-scholarships/hilldale-undergraduatefaculty-research-fellowship)
- McNair Scholars (http://grad.wisc.edu/mcnair)
- Summer Research Programs (https://grad.wisc.edu/diversity/srop)
- Undergraduate Research Scholars (https://urs.Is.wisc.edu)
- The Wisconsin Idea Undergraduate Fellowship Program (https:// morgridge.wisc.edu/students/wisconsin-idea-fellowships)


## INTERNATIONAL STUDIES: CULTURE IN AN AGE OF GLOBALIZATION

## REQUIREMENTS

## INTRODUCTORY REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| Complete the 5th Unit of a Foreign Language (see course list below) ${ }^{1}$ |  |  |
| Select one of the following: |  | 4-8 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| AAE 215 <br> \& ECON 102 | Introduction to Agricultural and Applied Economics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment ${ }^{2}$ |  |

Total Credits 7-12

1 ESL 118 Academic Writing II substitutes for the Foreign Language requirement.
2 ECON 111 requires placement in MATH 221 or higher is limited enrollment.

| 5th Unit of Foreign Language Course List |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AFRICAN 435 | Advanced Studies in Swahili Language-Grammar | 3 |
| AFRICAN 436 | Advanced Studies in Swahili Language-Readings | 3 |
| AFRICAN/ LCA LANG 445 | Readings in Advanced Arabic Texts | 3 |
| AFRICAN 475 | Fifth Semester Yoruba | 3 |
| AFRICAN 476 | Sixth Semester Yoruba | 3 |
| AFRICAN 493 | Fifth Semester, A Language of Southern Africa | 3 |


| AFRICAN 494 | Sixth Semester, A Language of Southern Africa | 3 |
| :---: | :---: | :---: |
| AFRICAN 495 | Fifth Semester, A Language of Northern Africa | 3 |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa | 3 |
| AFRICAN 497 | Fifth Semester, A Language of West Africa | 3 |
| AFRICAN 498 | Sixth Semester, A Language of West Africa | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 301 | Fifth Semester Chinese | 4 |
| E ASIAN 302 | Sixth Semester Chinese | 4 |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 335 | Intermediate Japanese Conversation | 3 |
| E ASIAN 347 | Fifth Semester Korean | 3 |
| E ASIAN 348 | Sixth Semester Korean | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 |
| E ASIAN 402 | Eighth Semester Chinese | 3 |
| E ASIAN 403 | Seventh Semester Japanese | 3 |
| E ASIAN 404 | Eighth Semester Japanese | 3 |
| E ASIAN 405 | Seventh Semester Korean | 3 |
| E ASIAN 406 | Eighth Semester Korean | 3 |
| E ASIAN 431 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 432 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 501 | Fifth-year Chinese | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |


| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 | GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
|  |  |  | GERMAN 379 | Study Abroad in Dutch Linguistics | 2-5 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 | GERMAN 410 | Kultur 1648-1918 | 3-4 |
|  |  |  | GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 | GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 | GERMAN 632 | A Theme in German Literature | 3 |
|  |  |  | GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
|  |  |  | GERMAN 677 | Seminar in German Culture Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 | GREEK 401 | Greek Drama | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 | GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| FRENCH/ITALIAN/ PORTUG/ <br> SPANISH 429 | Introduction to the Romance Languages | 3 | GREEK 505 | Elementary Prose Composition | 3 |
|  |  |  | GREEK 510 | Homer | 3 |
|  |  |  | GREEK 511 | Hesiod | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 | GREEK 512 | Greek Lyric Poets | 3 |
|  |  |  | GREEK 520 | Greek Comedy | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 | GREEK 521 | Greek Tragedy | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 | GREEK 532 | Thucydides | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 | GREEK 541 | Plato | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 | GREEK 551 | Attic Orators | 3 |
|  |  |  | GREEK 560 | Hellenistic Greek | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 | GREEK 564 | Plutarch | 3 |
|  |  |  | HEBR-MOD/ | Introduction to Hebrew Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 | JEWISH 301 |  |  |
|  |  |  | HEBR-MOD/ | Introduction to Hebrew Literature | 3 |
| FRENCH 590 | Advanced Phonetics | 3 | JEWISH 302 |  |  |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 | HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 | HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 | HEBR-BIB/ <br> JEWISH 513 | Biblical Texts, Poetry | 3 |
| GERMAN 225 | Composition and Conversation I | 3 | HEBR-BIB/ | Biblical Texts, Poetry | 3 |
| GERMAN 226 | Composition and Conversation II | 3-4 |  |  |  |
| GERMAN 235 | Dutch Conversation and | 3 | HEBR-BIB 701 | Aramaic I | 3 |
|  | Composition |  | HEBR-BIB 702 | Aramaic II | 3 |
| GERMAN 249 | Intermediate German - Speaking and Listening | 3 | HEBR-BIB 703 | Ugaritic Texts | 3 |
|  |  |  | HEBR-BIB 704 | Canaanite Dialects | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 | HEBR-BIB 705 | Syriac I | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 | HEBR-BIB 706 | Syriac II | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 | HEBR-BIB 723 | Classical Hebrew Linguistics: | 3 |
| GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 |  | Historical and Descriptive |  |
|  |  |  | HEBR-BIB 751 | The Book of Isaiah | 3 |
| GERMAN 313 | Third Semester Dutch for Graduate Students | 3 | ITALIAN 230 | Modern Italian Culture | 3 |
|  |  |  | ITALIAN 311 | Advanced Italian Language | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 | ITALIAN 312 | Writing Workshop | 3 |
| GERMAN 337 | Advanced Composition \& Conversation | 3-4 | ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| GERMAN 351 | Introduction to German Linguistics | 3-4 | ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| GERMAN 352 | Topics in German Linguistics | 3-4 |  |  |  |
| GERMAN 367 | Study Abroad in German Literature | 2-5 | ITALIAN 423 | Corso Di Stilistica Applicata | 3 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 | ITALIAN/FRENCH/ | Introduction to the Romance | 3 |
| GERMAN 369 | Study Abroad in German Linguistics | 2-5 | PORTUG/ <br> SPANISH 429 | Languages |  |


| ITALIAN 450 | Special Topics in Italian Literature | 3 | LCA LANG 557 | Fifth Semester Tibetan | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 | LCA LANG 558 | Sixth Semester Tibetan | 4 |
|  |  |  | LCA LANG 563 | Fifth Semester Persian | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 | LCA LANG 564 | Sixth Semester Persian | 3 |
|  |  |  | LCA LANG 571 | Fifth Semester Urdu | 3-4 |
| ITALIAN 601 | L'Ottocento | 3 | LCA LANG 572 | Sixth Semester Urdu | 3-4 |
| ITALIAN 621 | II Settecento | 3 | LCA LANG 601 | Seventh Semester Asian Language | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 | LCA LANG 602 | Eighth Semester Asian Language | 3 |
| ITALIAN 635 | II Romanzo Italiano | 3 | LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| ITALIAN 636 | II Romanzo Italiano | 3 | LCA LANG 617 | Thai Poetry | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 | LCA LANG 618 | Thai Prose Literature: The Short | 3 |
| ITALIAN 651 | 11 Rinascimento | 3 |  | Story |  |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 | LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 | LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| ITALIAN/ MEDIEVAL 671 | II Duecento | 3 | LCA LANG 648 | Advanced Readings in Pali Literature | 3 |
| JEWISH/HEBR- <br> MOD 301 | Introduction to Hebrew Literature | 3 | LCA LANG 653 | Advanced Readings in Hindi Language | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 | LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 | LCA LANG 671 | Advanced Readings in Urdu Language | 3 |
| LATIN 505 | Elementary Prose Composition | 3 | LCA LANG 675 | Advanced Readings in Sanskrit | 3 |
| LCA LANG 501 | Fifth Semester Asian Language | 3 | LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| LCA LANG 503 | Fifth Semester Burmese | 3 | PORTUG 225 | Third Year Conversation and | 3 |
| LCA LANG 504 | Sixth Semester Burmese | 3 |  | Composition |  |
| LCA LANG 505 | Fifth Semester Filipino | 3 | PORTUG 226 | Third Year Conversation and | 3 |
| LCA LANG 506 | Sixth Semester Filipino | 3 |  | Composition |  |
| LCA LANG 507 | Fifth Semester Hmong | 3 | PORTUG 311 | Fourth Year Composition and | 3 |
| LCA LANG 508 | Sixth Semester Hmong | 3 |  | Conversation |  |
| LCA LANG 509 | Fifth Semester Indonesian | 3 | PORTUG 312 | Fourth Year Composition and Conversation | 3 |
| LCA LANG 510 | Sixth Semester Indonesian | 3 |  |  | 3-4 |
| LCA LANG 513 | Fifth Semester Khmer | 3 | SCAND ST 251 | Readings in Norwegian Literatur | 3-4 |
| LCA LANG 514 | Sixth Semester Khmer | 3 | SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| LCA LANG 515 | Fifth Semester Lao | 3 | SCAND ST 271 | Readings in Danish Literature | 3-4 |
| LCA LANG 516 | Sixth Semester Lao | 3 | SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to | 3-4 |
| LCA LANG 517 | Fifth Semester Thai | 3 |  |  |  |
| LCA LANG 518 | Sixth Semester Thai | 3 | SCAND ST 374 | Masterpieces of Scandinavian | 3-4 |
| LCA LANG 519 | Fifth Semester Vietnamese | 3 |  | Literature: the Twentieth Century |  |
| LCA LANG 520 | Sixth Semester Vietnamese | 3 | SCAND ST 375 | The Writings of Hans Christian | 3-4 |
| LCA LANG/ | Advanced Summer Immersion | 8 |  | Andersen |  |
| AFRICAN 527 | Arabic |  | SCAND ST 401 | Contemporary Scandinavian | 3 |
| LCA LANG 528 | Advanced Summer Immersion Persian | 8 |  | Languages |  |
|  |  |  | SCAND ST 419 | Scandinavian Children's Literature | 4 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 | SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| LCA LANG 531 | Fifth Semester Kazak | 3 | SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| LCA LANG 532 | Sixth Semester Kazak | 3 | SCAND ST 423 | The Drama of August Strindberg | 4 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 | SCAND ST 424 | Nineteenth-Century Scandinavian | 3-4 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |  | Fiction |  |
| LCA LANG 553 | Fifth Semester Hindi | 3-4 | SCAND ST 425 | Knut Hamsun and the 20th Century | 4 |
| LCA LANG 554 | Sixth Semester Hindi | 3-4 |  | Norwegian Novel |  |


| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| :---: | :---: | :---: |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SLAVIC 275 | Third Year Russian I | 3-4 |
| SLAVIC 276 | Third Year Russian II | 3-4 |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 309 | Russian Area Studies on Study Abroad | 1-4 |
| SLAVIC 315 | Russian Language and Culture I | 2 |
| SLAVIC 316 | Russian Language and Culture II | 2 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 350 | Special Topics in Russian Language, Literature, and Culture | 3 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 421 | Gogol | 3-4 |
| SLAVIC 422 | Dostoevsky | 3-4 |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |


| SPANISH 462 | Spanish American Theater and Drama | 3 |
| :---: | :---: | :---: |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |

## AREA STUDIES

Area studies courses help students focus their on a specific geographic regions. Students must choose one course from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey | 4 |
| E A STDS/HISTORY/ POLI SCI 255 | Introduction to East Asian Civilizations | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY 201 | The Historian's Craft (Portraying China) | 3-4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |


| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| :---: | :---: | :---: |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 253 | Russia: An Interdisciplinary Survey | 4 |
| SLAVIC/GEOG/ <br> HISTORY/ <br> POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey | 4 |

## CULTURE IN THE AGE OF GLOBALIZATION

In this option, majors investigate cross-cultural interactions at different levels: local, national, and transnational. Students engage in such issues as cosmopolitanism; international and global flows of images, ideas, and people; questions of identity; changing assumptions of what it means to be indigenous and foreign; globalization and technology; and the impact of globalization on cultures.

## Culture Core

Two courses from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN 405 | Topics in African Cultural Studies (The Problem of Whiteness) | 3 |
| AFRICAN 669 | Special Topics (Celebrity Culture) | 3 |
| AFRICAN 403 | Theories of African Cultural Studies | 3 |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| INTL ST 403 | Topics in Culture in the Age of Globalization | 3-4 |
| INTL ST 503 | Study Abroad Topics in Culture in the Age of Globalization | 1-6 |
| INTL ST 603 | Topics in Culture in the Age of Globalization | 1-4 |
| INTL ST 620 | Topics in International Studies (Global Social Networks) | 1-4 |
| JOURN 620 | International Communication | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LINGUIS/ | Language and Culture | 3-4 |

HIST SCI/ History
MED HIST 275
AFROAMER/ Africa: An Introductory Survey 4
AFRICAN/ANTHRO/
GEOG/HISTORY/
POLI SCI/SOC 277

| PSYCH 428 | Introduction to Cultural Psychology | $3-4$ |
| :--- | :--- | ---: |
| SOC 626 | Social Movements | 3 |
| THEATRE/ENGL 577 | Postcolonial Theatre: Drama, <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Theory and Performance in the | 3 |

## Culture Issues

15 credits from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN 230 | Introduction to Yoruba Life and <br> Culture | 3 |
| AFRICAN/ | African and African-American |  |
| AFROAMER/ | Linkages: An Introduction |  |
| HISTORY/ | African Literature in Translation |  |
| POLI SCI 297 | (Arabic Fiction \& Falsehood) | 4 |
| AFRICAN 300 | African Literature in Translation <br> (Contemp Arabic Lit \& Cinema) | 3 |
| AFRICAN 300 | Islam: Religion and Culture | 3 |
| AFRICAN/LCA/ |  |  |

RELIG ST 370

| AFRICAN 412 | Contemporary African Fiction | $3-4$ |
| :--- | :--- | :--- |
| AFRICAN/ | Contemporary African and | $3-4$ |


| AFROAMER 413 | Caribbean Drama |
| :--- | :--- |
| AFRICAN/ | African/Francophone Film |

FRENCH 440
AFRICAN/ Lusophone African Literature 3
PORTUG 451 Modern African Literature in English 3-4
AFRICAN 453
AFRICAN/ Oral Traditions and the Written 3-4

| FOLKLORE 471 | Word |  |
| :--- | :--- | :--- |
| AFRICAN 500 | Language and Society in Africa |  |

AFROAMER/ Introduction to African Art and 3

| ART HIST 241 | Architecture |
| :--- | :--- |
| AFROAMER/ | Introduction to Afro-American Art |

ART HIST 242 Latin America: An Introduction 3-4
ANTHRO/C\&E SOC/

GEOG/HISTORY/
LACIS/POLI SCI/
SOC/SPANISH 260

| AFROAMER 265 | African-American Autobiography | 3 |
| :--- | :--- | :--- |
| AFROAMER/ | Artistic/Cultural Images of Black | 3 |

GEN\&WS 267 Women
AFROAMER 271 Selected Topics in African American 3
AFROAMER 272 Race and American Politics from 3
the New Deal to the New Right
Science, Medicine, and Race: A
4
3

Theory and Performance in the
Global South

3

4

3

3
-4 4

3

4

|  | the New Deal to the New Right |  |
| :--- | :--- | :--- |
| AFROAMER/ | Science, Medicine, and Race: A | 3 |


| AFROAMER/ AFRICAN/HISTORY/ | African and African-American Linkages: An Introduction | 4 | AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POLI SCI 297 |  |  | AFROAMER/ | History of the Civil Rights | 3 |
| AFROAMER 302 | Undergraduate Studies in Afro- | 3 | HISTORY 628 | Movement in the United States |  |
|  | American History |  | AFROAMER 631 | Colloquium in Afro-American | 3 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |  | History |  |
| AFROAMER/ | Black Music (1920-Present): | 2 | AFROAMER/ | Selected Topics in African Diaspora | 3 |
| MUSIC 308 | Rhythm Section and Combos |  | ART HIST 643 | Art History |  |
| AFROAMER/ | Black Music (1920-Present): | 2 | AFROAMER 669 | Interdisciplinary Studies in the Arts | 1-4 |
| MUSIC 309 | Vocalist/Trombone/Misc Instrumental |  | AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| AFROAMER/ MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 | AFROAMER/ <br> ENGL 672 | Selected Topics in Afro-American Literature | 3 |
| AFROAMER/ MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 | AFROAMER 673 | Selected Topics in Afro-American Society | 3 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the | 3 | AFROAMER/ ART 674 | Selected Topics on Afro-American Artists | 3 |
|  | Americas |  | AFROAMER 675 | Selected Topics in Afro-American | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |  | Culture |  |
| HISTORY 321 <br> AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 | AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 | AFROAMER 678 | Modern/Contemporary Art of Nigeria and the African Diaspora | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 | ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| AFROAMER/ | Race and Gender in Post-World War | 3 | ANTHRO 327 | Peoples of the Andes Today | 3 |
| GEN\&WS 326 | II U.S. Society |  | ANTHRO 330 | Topics in Ethnology (SE Asia) | 3-4 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 | ANTHRO 330 | Topics in Ethnology (Brazil) | 3-4 |
| AFROAMER 337 | The Harlem Renaissance | 3 | ANTHRO 350 | Political Anthropology | 3-4 |
| AFROAMER 338 | The Black Arts Movement | 3 3 | ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 | ANTHRO 358 | Anthropology of China | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 | ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |
| AFROAMER 469 | Interdisciplinary Studies in the Arts | 1-4 | ANTHRO 490 | Undergraduate Seminar | 3 |
| AFROAMER 501 | 19th Century Afro-American | 3 | ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
| AFROAMER 501 | Literature | 3 | ART HIST 350 | 19th Century Painting in Europe | 3-4 |
| AFROAMER/ | Seminar in Afro-American Music | 3 | ART HIST 351 | 20th Century Art in Europe | 3-4 |
| MUSIC 509 | History and Criticism |  | ART HIST 354 | Cross-Cultural Arts Around the | 3-4 |
| AFROAMER/ | African American Political Theory | 3-4 |  | Atlantic Rim: 1800 to the Present |  |
| POLI SCI 519 |  |  | ART HIST 358 | European Architecture: The Modern | 3-4 |
| AFROAMER/HDFS/ | African American Families | 3 |  | Movements |  |
| SOC WORK 521 |  |  | ART HIST 371 | Chinese Painting | 3-4 |
| AFROAMER/ | Race, American Medicine and | 3 | ART HIST 372 | Arts of Japan | 3-4 |
| HIST SCI/ <br> MED HIST 523 | Public Health |  | ART HIST 411 | Topics in Asian Art (Modern \& Contemporary) | 3-4 |
| AFROAMER 525 | Major Authors | 3 | ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |
| AFROAMER/ | History of African American | 3 | ART HIST 479 | Art and History in Africa | 3-4 |
| ED POL 567 | Education |  | ASIAN 253 | Japanese Popular Culture | 3 |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature | 3 | ASIAN 300 | Topics in Asian Studies (Sexuality in South Asia) | 3 |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) | 3 | ASIAN 300 | Topics in Asian Studies (Indian Traditions in Modern Age) | 3 |
|  |  |  | ASIAN 355 | Modern Japanese Literature | 3 |


| ASIAN 403 | Southeast Asian Literature | 3 |
| :---: | :---: | :---: |
| ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 |
| C\&E SOC/SOC 245 | Technology and Society | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |
| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| COM ARTS 346 | Critical Internet Studies | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 352 | Film History to 1960 | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 455 | French Film | 3 |
| COM ARTS 456 | Russian and Soviet Film | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| COM ARTS/ <br> ITALIAN 460 | Italian Film | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 557 | Contemporary Media Industries | 3 |
| COM ARTS 577 | Dynamics of Online Relationships | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms (Global DetectivesFiction and Film) | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms (Calling Planet Earth) | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms (Intro, Comics \& Graphic Novels) | 3 |
| COMP LIT 375 | Literature and Related Disciplines | 3-4 |
| COMP LIT 379 | Literature and Ethnic Experience | 3-4 |
| DS/LAND ARC 639 | Culture and Built Environment | 3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Korean Culture) | 1-3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Survey of Tibetan Buddhism) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Korean) | 1-3 |
| E ASIAN 301 | Fifth Semester Chinese (Contemporary Chinese Society) | 4 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| EASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL 340 | Comparative Education | 3 |
| ED POL/ <br> ANTHRO 570 | Anthropology and Education | 3 |
| ED POL/ HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |


| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings | 3 |
| :---: | :---: | :---: |
| ENGL 352 | Modernist Poetry | 3 |
| ENGL 353 | British Literature since 1900 | 3 |
| ENGL 453 | Topic in British Literature and Culture since 1900 | 3 |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |
| ENGL/THEATRE 575 | British Drama, 1914 to Present | 3 |
| FOLKLORE/ AFRICAN 270 | The Hero and Trickster in African Oral Traditions | 3 |
| FOLKLORE/LCA 279 | Introduction to Turkish Folk Literature | 3 |
| FOLKLORE/ <br> ANTHRO 344 | Anthropological Approaches to Folklore | 3 |
| FOLKLORE 510 | Folklore Theory | 3 |
| FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| FOLKLORE 560 | Folklore in a Digital Age | 3 |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| FRENCH 240 | Immigration and Expression | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer Film) | 1-3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) | 1-3 |
| GEN\&WS/ AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| GEN\&WS/HISTORY/ <br> LCA 472 | Women in Turkish Society | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |


| GEOG 358 | Human Geography of Southeast Asia | 3 | HISTORY 335 | Korean History, 1945 to present | 3-4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | HISTORY/ | The Caribbean and its Diasporas | 3 |
| GEOG 475 | Topics in Geography (International Migration and Health) | 1-4 | AFROAMER 347 |  |  |
|  |  |  | HISTORY/ | Women and Gender in Modern | 3-4 |
| GERMAN 245 | Topics in Dutch Life and Culture (Dutch Tolerance and Multiculturalism) | 3 | GEN\&WS 392 | Europe |  |
|  |  |  | HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| GERMAN 245 | Topics in Dutch Life and Culture (Low Lands or High Water?) | 3 | HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| GERMAN 278 | Topics in German Culture (Kafka and Kafkaesque) | 3 | HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| GERMAN 278 | Topics in German Culture (Culture in 20th Century) | 3 | HISTORY 475 | European Social History, 1914Present | 3-4 |
| GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 | HISTORY 503 | Irish and Scottish Migrations | 3 |
|  |  |  | HISTORY 514 | European Cultural History Since | 3-4 |
| GERMAN 325 | Topics in Dutch Literature (Bezetting, Holocaust) | 3 |  | 1870 |  |
|  |  |  | HISTORY 533 | Multi-Racial Societies in Latin | 3-4 |
| GERMAN 325 | Topics in Dutch Literature (lit:reizen,migratie) | 3 |  | America |  |
| GERMAN 362 | Topics in German Literature | 3-4 | HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| GERMAN 372 | Topics in German Culture (Deutschsprachiege Lieder) | 3-4 | INTL ST 322 | Washington DC Semester in International Affairs Internship | 4 |
| GERMAN 372 | Topics in German Culture (Oesterreich: Natur als Kultur) | 3-4 |  | Seminar |  |
|  |  |  | INTL ST/ED POL 335 | Globalization and Education | 3 |
| GERMAN 372 | Topics in German Culture (Deutscher Film) | 3-4 | INTL ST 403 | Topics in Culture in the Age of Globalization | 3-4 |
| GERMAN 372 | Topics in German Culture (Green Germany/Gruenes Deutschland) | 3-4 | INTL ST 503 | Study Abroad Topics in Culture in the Age of Globalization | 1-6 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 | INTL ST 603 | Topics in Culture in the Age of | 1-4 |
| GERMAN 445 | Topics in Dutch Culture (Lage landen of hoog water?) | 3-4 |  | Globalization |  |
|  |  |  | INTL ST 620 | Topics in International Studies | 1-4 |
| GERMAN/ <br> JEWISH 510 | German-Jewish Culture Since the 18th Century | 3 | INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| GERMAN/ COM ARTS 655 | German Film | 3 | ITALIAN 230 | Modern Italian Culture | 3 |
|  |  |  | ITALIAN 322 | Studies in Italian Literature and | 3 |
| HIST SCI 339 | Technology and Its Critics Since World War II | 3 |  | Culture II |  |
|  |  |  | ITALIAN 452 | Special Topics in Italian Studies: | 3 |
| HISTORY 223 | Explorations in European History <br> (H) (Commodity Culture in Europe) | 3-4 |  | Culture, Film, Language |  |
|  |  |  | ITALIAN/ | Italian Film | 3 |
| HISTORY 223 | Explorations in European History <br> (H) (Wars of Religion Since 1914) | 3-4 | COM ARTS 460 |  |  |
|  |  |  | ITALIAN 637 | La Poesia del Novecento | 3 |
| HISTORY 223 | Explorations in European History (H) (Picturing history: Visual, Culture, and Memory in Modern Europe) | 3-4 | JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
|  |  |  | JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| HISTORY 229 | Explorations in Transnational/ <br> Comparative History (Humanities) <br> (South Asians in Diaspora) | 3 | JEWISH/ <br> HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (Pan-Asianism) | 3 | JEWISH/ <br> PHILOS 442 | Moral Philosophy and the Holocaust | 3 |
|  |  |  | JEWISH/CURRIC/ | Holocaust: History, Memory and | 3 |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 | HISTORY 515 | Education |  |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 | JEWISH/ENGL 539 | Jewish Literatures in Diaspora | 3 |
|  |  |  | JEWISH 625 | The Holocaust: Facts, Trials, | 3 |
| HISTORY/GEOG/ | Introduction to Southeast Asia: | 4 |  | Verdicts, Post-Verdicts |  |
| LCA/POLI SCI/ SOC 244 | Vietnam to the Philippines |  | JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |


| JOURN 620 | International Communication | 4 |
| :---: | :---: | :---: |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LIS 201 | The Information Society | 4 |
| LCA 311 | Modern Indian Literatures | 3 |
| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| LCA 361 | Survey of Indonesian Cultures | 3 |
| LCA/RELIG ST 402 | Thought of Gandhi | 3 |
| LCA/ART HIST 428 | Visual Cultures of South Asia | 3 |
| LCA 441 | Language and Society in Southeast Asia | 3 |
| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LCA 630 | Proseminar: Studies in Cultures of Asia (Everyday: Lives, Spaces) | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| LINGUIS/ ANTHRO 430 | Language and Culture | 3-4 |
| LITTRANS 203 | Survey of 19th and 20th Century Russian Literature in Translation I | 4 |
| LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation II | 4 |
| LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 220 | Chekhov in Translation | 3-4 |
| LITTRANS 222 | Dostoevsky in Translation | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust in Poland) | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |


| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| :---: | :---: | :---: |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST/ <br> HISTORY 432 | History of Scandinavia Since 1815 | 3 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SCAND ST 635 | Survey of Scandinavian Literature: 1800-1890 | 3 |
| SLAVIC 242 | Literatures and Cultures of Eastern Europe | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC/ <br> RELIG ST 325 | Eastern Christianity/Russian Orthodoxy in a Global Context | 3 |
| SLAVIC 405 | Women in Russian Literature | 3-4 |
| SLAVIC 434 | Contemporary Russian Culture | 3 |
| SLAVIC 439 | Russia Today in Literature and Film | 4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 449 | Istorija srpske i hrvatske literature | 3 |
| SLAVIC 454 | Moderna srpska i hrvatska literatura | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SOC 170 | Population Problems | 3-4 |
| SOC 496 | Topics in Sociology (Intercultural Dialogues) | 1-3 |
| SOC 496 | Topics in Sociology (Soc, Cul, Pol Contemporary Russia) | 1-3 |
| SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/LCA/ <br> RELIG ST 634 | Social Structure of India | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC 646 | Race and Ethnic Relations | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |


| SPANISH 460 | Literatura Hispanoamericana | 3 |
| :---: | :---: | :---: |
| SPANISH 460 | Literatura Hispanoamericana (Latin American Neo-Vanguards) | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Documentary Film and Non-Fiction Writing) | 3 |
| THEATRE 327 | History of Costume for the Stage | 3 |
| THEATRE 351 | Fundamentals of Asian Stage Discipline | 3 |
| THEATRE 420 | Theatre and Society | 3 |
| THEATRE 424 | Contemporary World Theatre and Dramatic Literature | 3 |
| THEATRE 522 | Experimental Drama: The Theatre of Europe 1850-the Present | 3 |
| THEATRE 526 | The Theatres of China and Japan | 3 |
| THEATRE/ SLAVIC 532 | History of Russian Theatre | 3 |
| THEATRE/ENGL 577 | Postcolonial Theatre: Drama, Theory and Performance in the Global South | 3 |

## Electives

Students typically take three or four elective courses in the major. These courses can come from Issues lists of different options or they can be additional Issues classes within their own option. Students must take enough elective credits to attain the required 35 total credits in the major. Choose from:
Code Title Credits

A A E/ENVIR ST 244 The Environment and the Global 3
Economy
A A E 319 The International Agricultural 3

|  | Economy | 3 |
| :--- | :--- | :--- |

INTER-AG/
NUTR SCI 350
A A E/ECON 421 Economic Decision Analysis 4
A A E/ECON 473 Economic Growth and Development 3

A A E/ECON 474 Economic Problems of Developing 3
A A E/ECON 477 Agricultural and Economic 3
Development in Africa
A A E/ECON/ Natural Resource Economics 3
F\&W ECOL 531
A A E/M H R 540 Intellectual Property Rights, 3
Innovation and Technology
A A E/CIV ENGR/ Energy Markets 3
ENVIR ST/
URB R PL 561

| AFRICAN 230 | Introduction to Yoruba Life and Culture | 3 |
| :---: | :---: | :---: |
| AFRICAN/ AFROAMER/ HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFRICAN 300 | African Literature in Translation | 3 |
| AFRICAN 303 | African Literature and Visual Culture | 3 |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture | 3-4 |
| AFRICAN 405 | Topics in African Cultural Studies (The Problem of Whiteness) | 3 |
| AFRICAN 412 | Contemporary African Fiction | 3-4 |
| AFRICAN/ AFROAMER 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFRICAN/ <br> FRENCH 440 | African/Francophone Film | 3 |
| AFRICAN/ PORTUG 451 | Lusophone African Literature | 3 |
| AFRICAN 453 | Modern African Literature in English | 3-4 |
| AFRICAN/ <br> FOLKLORE 471 | Oral Traditions and the Written Word | 3-4 |
| AFRICAN 500 | Language and Society in Africa | 3-4 |
| AFRICAN 609 | Advanced Topics in Global Black Music Studies | 3 |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture | 3 |
| AFROAMER/ ART HIST 242 | Introduction to Afro-American Art | 3 |
| AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/HISTORY/ <br> LACIS/POLI SCI/ <br> SOC/SPANISH 260 | Latin America: An Introduction | 3-4 |
| AFROAMER 265 | African-American Autobiography | 3 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women | 3 |
| AFROAMER 271 | Selected Topics in African American Culture | 3 |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 275 | Science, Medicine, and Race: A History | 3 |
| AFROAMER/ <br> AFRICAN/ANTHRO/ <br> GEOG/HISTORY/ <br> POLISCI/SOC 277 | Africa: An Introductory Survey | 4 |
| AFROAMER/ <br> AFRICAN/HISTORY/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |
| AFROAMER/ MUSIC 308 | Black Music (1920-Present): <br> Rhythm Section and Combos | 2 |


| AFROAMER/ <br> MUSIC 309 | Black Music (1920-Present): <br> Vocalist/Trombone/Misc Instrumental | 2 |
| :---: | :---: | :---: |
| AFROAMER/ MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 |
| AFROAMER/ MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER 337 | The Harlem Renaissance | 3 |
| AFROAMER 338 | The Black Arts Movement | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| AFROAMER/ <br> MUSIC 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| AFROAMER/ AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFROAMER/ ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |
| AFROAMER 456 | Soul Music and the African American Freedom Movement | 3 |
| AFROAMER 469 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 501 | 19th Century Afro-American Literature | 3 |
| AFROAMER/ MUSIC 509 | Seminar in Afro-American Music History and Criticism | 3 |
| AFROAMER/ POLI SCI 519 | African American Political Theory | 3-4 |
| AFROAMER/HDFS/ SOC WORK 521 | African American Families | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER 525 | Major Authors | 3 |
| AFROAMER/ ED POL 567 | History of African American Education | 3 |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature | 3 |


| AFROAMER/ | African American Women's Activism | 3 | ART HIST 479 | Art and History in Africa | 3-4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GEN\&WS 624 | (19th \& 20th Centuries) |  | ASIAN 253 | Japanese Popular Culture | 3 |
| AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement | 3 | ASIAN 300 | Topics in Asian Studies (Sexuality in South Asia) | 3 |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States | 3 | ASIAN 300 | Topics in Asian Studies (Indian Traditions Modern Age) | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 | ASIAN 403 | Southeast Asian Literature | 3 |
| AFROAMER/ <br> ART HIST 643 | Selected Topics in African Diaspora Art History | 3 | ASIAN 355 <br> ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 |
| AFROAMER 669 | Interdisciplinary Studies in the Arts | 1-4 | ATM OCN 100 | Weather and Climate | 3 |
| AFROAMER 671 | Selected Topics in Afro-American History | 3 | ATM OCN 101 | Weather and Climate | 4 |
| AFROAMER/ <br> ENGL 672 | Selected Topics in Afro-American Literature | 3 | ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| AFROAMER 673 | Selected Topics in Afro-American Society | 3 | ATM OCN/ <br> ENVIR ST 171 | Global Change: Atmospheric Issues and Problems | 2-3 |
| AFROAMER/ <br> ART 674 | Selected Topics on Afro-American Artists | 3 | ATM OCN/ <br> ENVIR ST 520 | Bioclimatology | 3 |
| AFROAMER 675 | Selected Topics in Afro-American Culture | 3 | ATM OCN/ENVIR ST/ GEOG 528 | Past Climates and Climatic Change | 3 |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical <br> Perspectives in Black Women's | 3 | ATM OCN/ <br> ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
|  | Writings |  | BOTANY 240 | Plants and Humans | 3 |
| AFROAMER 678 | Modern/Contemporary Art of Nigeria and the African Diaspora | 3 | C\&E SOC/SOC 245 C\&E SOC/ENVIR ST/ | Technology and Society <br> Sociology of International | 3 |
| AFROAMER/ GEN\&WS 679 | Visual Culture, Gender and Critical Race Theory | 3 | SOC 540 | Development, Environment, and Sustainability |  |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 | C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |
| ANTHRO 327 | Peoples of the Andes Today | 3 | CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| ANTHRO 330 | Topics in Ethnology (SE Asia) | 3-4 | COM ARTS 346 | Critical Internet Studies | 3 |
| ANTHRO 330 | Topics in Ethnology (Anthropology of Foodways) | 3-4 | COM ARTS 350 | Introduction to Film | 3 |
| ANTHRO 330 | Topics in Ethnology (Brazil) | 3-4 | COM ARTS 352 | Film History to 1960 | 3 |
| ANTHRO 350 | Political Anthropology | 3-4 | COM ARTS 371 | Communication and Conflict Resolution | 3 |
| ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 | COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| ANTHRO 358 | Anthropology of China | 3 | COM ARTS/ | The Rhetoric of Religion | 3 |
| ANTHRO 365 | Medical Anthropology | 3 | RELIG ST 374 |  |  |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 | COM ARTS 455 | French Film | 3 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 | COM ARTS 456 | Russian and Soviet Film Global Media Cultures | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 | COM ARTS/ ITALIAN 460 | Italian Film | 3 |
| ART HIST 350 | 19th Century Painting in Europe | 3-4 | COM ARTS 470 | Contemporary Political Discourse | 3 |
| ART HIST 351 | 20th Century Art in Europe | 3-4 | COM ARTS 557 | Contemporary Media Industries | 3 |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present | 3-4 | COM ARTS 577 | Dynamics of Online Relationships | 3 |
| ART HIST 358 | European Architecture: The Modern Movements | 3-4 | COMP LIT 203 | Introduction to Cross-Cultural Literary Forms | 3 |
| ART HIST 371 | Chinese Painting | 3-4 | COMP LIT 375 | Literature and Related Disciplines | 3-4 |
| ART HIST 372 | Arts of Japan | 3-4 | COMP LIT 379 | Literature and Ethnic Experience | 3-4 |
| ART HIST 411 | Topics in Asian Art (Modern \& | 3-4 | DS/LAND ARC 639 | Culture and Built Environment | 3 |
| ART HIST 454 | Contempor) | 3-4 | E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Intro to Korean Culture) | 1-3 |


| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Korean Culture) | 1-3 | ENVIR ST/N E 373 | Nuclear Energy and the Environment | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Survey of Tibetan Buddhism) | 1-3 | ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Food Systems, Sustainability, and Climate | 1-4 |
| E A STDS 301 | Social Studies Topics in East Asian | 1-3 |  | Change) |  |
|  | Studies (Two Koreas) |  | ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Conserving Biodiversity) | 1-4 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Korean) | 1-3 |  |  |  |
| E ASIAN 352 | Survey of Chinese Literature | 3 | ENVIR ST 401 | Special Topics: Environmental <br> Perspectives in the Physical <br> Sciences (Sustainability Science) | 1-4 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |  |  |  |
| ECON 330 | Money and Banking | 4 | ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (People,Environment) | 1-4 |
| ECON 364 | Survey of International Economics | 3-4 |  |  |  |
| ECON 464 | International Trade and Finance | 3-4 | ENVIR ST/ ECON/POLI SCI/ | Government and Natural Resources | 3-4 |
| ECON/HISTORY 466 | The American Economy Since 1865 | 3-4 |  |  |  |
| ECON 467 | International Industrial Organizations | 3-4 |  |  |  |
|  |  |  | ENVIR ST/ | Introduction to Environmental Health | 3 |
| ECON 475 | Economics of Growth | 3-4 | POP HLTH 471 |  |  |
| ECON/AAE 567 | Public Finance in Less Developed Countries | 3 | ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 | ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 | ENVIR ST 539 | Air Resources Science and Policy | 3 |
| ED POL 340 | Comparative Education | 3 | ENVIR ST/ | Assessment of Environmental | 3 |
| ED POL/ | Anthropology and Education | 3 | SOIL SCI 575 | Impact |  |
| ANTHRO 570 |  |  | ENVIR ST/ | Green Politics: Global Experience, | 3 |
| ED POL/ | History of Radical and Experimental | 3 | URB R PL 668 | American Prospects |  |
| HISTORY 622 | Education in the US and UK |  | ENVIR ST/A A E/ | Energy Economics | 3 |
| ED POL 675 | Introduction to Comparative and International Education | 3 | ECON/URB R PL 671 |  |  |
|  |  |  | F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: Global Perspective and Policies | 3 | F\&W ECOL 410 | Principles of Silviculture | 3 |
|  |  |  | F\&W ECOL 450 | Communities and Forests | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings | 3 | F\&W ECOL/ ENVIR ST/ | World Forest History | 3 |
| ENGL 352 | Modernist Poetry | 3 | HISTORY 452 |  |  |
| ENGL 353 | British Literature since 1900 | 3 | FOLKLORE/ | The Hero and Trickster in African | 3 |
| ENGL 453 | Topic in British Literature and Culture since 1900 | 3 | AFRICAN 270 | Oral Traditions |  |
|  |  |  | FOLKLORE/LCA 279 | Introduction to Turkish Folk | 3 |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |  | Literature |  |
|  |  |  | FOLKLORE/ | Anthropological Approaches to | 3 |
| ENGL/THEATRE 575 | British Drama, 1914 to Present | 3 | ANTHRO 344 | Folklore |  |
| ENVIR ST/ILS 126 | Principles of Environmental Science | 4 | FOLKLORE 510 | Folklore Theory | 3 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 | FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
|  |  |  | FOLKLORE 560 | Folklore in a Digital Age | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 | FRENCH 211 | French Interdisciplinary Studies | 3 |
|  |  |  | FRENCH 240 | Immigration and Expression | 3 |
| ENVIR ST/AAE/ <br> ECON 343 | Environmental Economics | 3-4 | FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 | FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| ENVIR ST/BSE 367 | Renewable Energy Systems | 3 |  |  |  |
| ENVIR ST/ M\&ENVTOX/ | Environmental Law, Toxic Substances, and Conservation | 2 | FRENCH 322 | Introduction to Literature of Modernity | 3 |


| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 | GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FRENCH 348 | Modernity Studies | 3 | GEOG/ENVIR ST/ | American Environmental History | 4 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 | HISTORY 460 |  |  |
|  |  |  | GEOG 475 | Topics in Geography | 1-4 |
| FRENCH 449 | Francophone Modernity Studies | 3 | GEOG/URB R PL 506 | Historical Geography of European | 3 |
| FRENCH 462 | French/Francophone Cultural | 3 |  | Urbanization |  |
|  | Studies Across the Centuries |  | GEOG 510 | Economic Geography | 4 |
| FRENCH 465 | French/Francophone Film | 3 | GEOG/ENVIR ST 534 | Environmental Governance: | 3 |
| FRENCH 467 | Aspects of Contemporary French | 3 |  | Markets, States and Nature |  |
|  | Literature |  | GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| FRENCH 472 | French/Francophone Literature and Women | 3 | GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 | GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 | GEOSCI/ | Survey of Oceanography | 3-4 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer Film) | 1-3 | ATM OCN 105 |  |  |
|  |  |  | GEOSCI/ | Environmental Geology | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) | 1-3 | ENVIR ST 106 |  |  |
|  |  |  | GEOSCI/ | Minerals as a Public Problem | 3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 | ENVIR ST 410 |  |  |
|  |  |  | $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 411 \end{aligned}$ | Energy Resources | 3 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 | GERMAN 245 | Topics in Dutch Life and Culture (Dutch Tolerance) | 3 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 | GERMAN 245 | Topics in Dutch Life and Culture (Low Lands or High Water) | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 | GERMAN 278 | Topics in German Culture (Kafka and Kafkaesque) | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 | GERMAN 278 | Topics in German Culture (Culture in 20th Century) | 3 |
| GEN\&WS/HISTORY/ LCA 472 | Women in Turkish Society | 3 | GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 | GERMAN 325 | Topics in Dutch Literature (Bezetting, Holocaust) | 3 |
| GEOG 101 | Introduction to Human Geography | 4 | GERMAN 325 | Topics in Dutch Literature | 3 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |  | (lit:reizen,migratie) |  |
| GEOG/ENVIR ST 127 | Physical Systems of the | 5 | GERMAN 362 | Topics in German Literature (Musik) | 3-4 |
|  | Environment |  | GERMAN 362 | Topics in German Literature | 3-4 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |  | (Migration in deutscher) |  |
|  |  |  | GERMAN 372 | Topics in German Culture (Deutschsprachige Lieder) | 3-4 |
| GEOG 301 | Geography of Social Organization | 3 | GERMAN 372 | Topics in German Culture | 3-4 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |  | (Oesterreich) |  |
| GEOG 318 | Introduction to Geopolitics | 3 | GERMAN 372 | Topics in German Culture | 3-4 |
| GEOG 321 | Climatology | 3 |  | (Deutscher Film) |  |
| GEOG/ATM OCN/ ENVIR ST/ | Climatic Environments of the Past | 3 | GERMAN 372 | Topics in German Culture (Green Germany) | 3-4 |
| GEOSCI 335 |  |  | GERMAN 372 | Topics in German Culture (China- | 3-4 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |  | German Point of View) |  |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 | GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 | GERMAN 445 | Topics in Dutch Culture (Lage | 3-4 |
| GEOG 349 | Europe | 3 |  | landen of hoog water?) |  |
| GEOG 355 | Africa, South of the Sahara | 3 | GERMAN/ JEWISH 510 | German-Jewish Culture Since the 18th Century | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |  |  |  |


| GERMAN/ COM ARTS 655 | German Film | 3 |
| :---: | :---: | :---: |
| HIST SCI 337 | History of Technology | 3 |
| HIST SCI 339 | Technology and Its Critics Since World War II | 3 |
| HIST SCI/ ENVIR ST 353 | History of Ecology | 3 |
| HIST SCI/HISTORY/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HIST SCI/ENVIR ST/ MED HIST 513 | Environment and Health in Global Perspective | 3 |
| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 |
| HISTORY 201 | The Historian's Craft (various) | 3-4 |
| HISTORY 221 | Explorations in American History <br> (H) (US-Latin Amer Relations) | 3-4 |
| HISTORY 223 | Explorations in European History <br> (H) (Commodity Culture in Europe) | 3-4 |
| HISTORY 223 | Explorations in European History <br> (H) (Wars of Religion Since 1914) | 3-4 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (South Asians in Diaspora) | 3 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (Pan-Asianism) | 3 |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY/ GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY/ <br> EASTDS 454 | Samurai: History and Image | 3-4 |


| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| :---: | :---: | :---: |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY 503 | Irish and Scottish Migrations | 3 |
| HISTORY 514 | European Cultural History Since $1870$ | 3-4 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| ILS 371 | Interdisciplinary Studies in the Arts and Humanities (Tocqueville Democracy) | 3 |
| INTL BUS 200 | International Business | 3 |
| INTL BUS/ GEN BUS 320 | Intercultural Communication in Business | 3 |
| INTL BUS/A A E/ ECON 462 | Latin American Economic Development | 3 |
| INTL BUS 365 | Contemporary Topics (International Perspectives) | 1-3 |
| INTL ST 322 | Washington DC Semester in International Affairs Internship Seminar | 4 |
| INTL ST/ POLI SCI 325 | Social Movements and Revolutions in Latin America | 3-4 |
| INTL ST/ POLI SCI 327 | Indian Politics in Comparative Perspective | 3 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |
| INTL ST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTL ST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| INTL ST 401 | Topics in Global Security | 3-4 |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy | 3-4 |
| INTL ST 403 | Topics in Culture in the Age of Globalization | 3-4 |
| INTL ST 404 | Topics in Global Environment | 3-4 |
| INTL ST/ POLI SCI 423 | Social Mobilization in Latin America | 3 |
| INTL ST/ POLI SCI 431 | Contentious Politics | 3-4 |
| INTL ST/ <br> POLI SCI 434 | The Politics of Human Rights | 3-4 |
| INTL ST/ POLI SCI 436 | Political Inequality: Measures, Causes, Effects and Remedies | 3 |
| INTL ST/ POLI SCI 439 | The Comparative Study of Genocide | 3-4 |
| INTL ST 501 | Study Abroad Topics in Global Security | 1-6 |
| INTL ST 502 | Study Abroad Topics in Politics and Policy in the Global Economy | 1-6 |
| INTL ST 503 | Study Abroad Topics in Culture in the Age of Globalization | 1-6 |


| INTL ST 504 | Study Abroad Topics in Global Environment | 1-6 |
| :---: | :---: | :---: |
| INTL ST 520 | Study Abroad Topics in International Studies | 1-6 |
| INTL ST/ <br> GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| INTL ST 601 | Topics in Global Security | 1-4 |
| INTL ST 602 | Topics in Politics and Policy in the Global Economy | 1-4 |
| INTL ST 603 | Topics in Culture in the Age of Globalization | 1-4 |
| INTL ST 604 | Topics in Global Environment | 1-4 |
| INTL ST 620 | Topics in International Studies | 1-4 |
| INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 450 | Special Topics in Italian Literature (Modern Italian Drama) | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Culture) | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Political Fictn/Film in Italy) | 3 |
| ITALIAN/ COM ARTS 460 | Italian Film | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/ <br> HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| JEWISH/ PHILOS 442 | Moral Philosophy and the Holocaust | 3 |
| JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education | 3 |
| JEWISH/ENGL 539 | Jewish Literatures in Diaspora | 3 |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | 3 |
| JEWISH/ POLI SCI 665 | Israeli Politics and Society | 3-4 |
| JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| JOURN 618 | Mass Communication and Political Behavior | 4 |
| JOURN 620 | International Communication | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| L I S 201 | The Information Society | 4 |
| L I S 661 | Information Ethics and Policy | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies (Labor in the Americas) | 1-4 |
| LCA 311 | Modern Indian Literatures | 3 |


| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| :---: | :---: | :---: |
| LCA 361 | Survey of Indonesian Cultures | 3 |
| LCA/RELIG ST 402 | Thought of Gandhi | 3 |
| LCA/ART HIST 428 | Visual Cultures of South Asia | 3 |
| LCA 441 | Language and Society in Southeast Asia | 3 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LCA 630 | Proseminar: Studies in Cultures of Asia (Everyday: Lives, Spaces) | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| LEGAL ST 409 | Human Rights in Law and Society | 3 |
| LEGAL ST/L I S 663 | Introduction to Cyberlaw | 3 |
| LINGUIS/ ANTHRO 430 | Language and Culture | 3-4 |
| LITTRANS 203 | Survey of 19th and 20th Century Russian Literature in Translation I | 4 |
| LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation II | 4 |
| LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 220 | Chekhov in Translation | 3-4 |
| LITTRANS 222 | Dostoevsky in Translation | 3-4 |
| LITTRANS 224 | Tolstoy in Translation | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust) | 3 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Russia \& Jews) | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |


| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) (German Lit) | 3 |
| :---: | :---: | :---: |
| LITTRANS 301 | Modern Indonesian Literature in Translation | 3 |
| LITTRANS 304 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Dutch Lit: Travel \& Migration) | 3 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen | 3-4 |
| LITTRANS 338 | In Translation: Knut Hamsun and the 20th Century Norwegian Novel | 3-4 |
| LITTRANS 343 | In Translation: The Woman in Scandinavian Literature | 3-4 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Evangelion) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Japanese Ghost Stories) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Writing the Environment) | 3 |
| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation | 3 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| MED HIST/ <br> HIST SCI 668 | Topics in History of Medicine (Health, Disease \& Medicine) | 3 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| NUTR SCI/ AGRONOMY/ ENTOM 203 | Introduction to Global Health | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| PHYSICS/ <br> ENVIR ST 472 | Scientific Background to Global Environmental Problems | 3 |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 313 | Bargaining in the Global Economy | 3-4 |


| POLI SCI/ <br> INTL ST 325 | Social Movements and Revolutions in Latin America | 3-4 |
| :---: | :---: | :---: |
| POLI SCI/ <br> INTL ST 327 | Indian Politics in Comparative Perspective | 3 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 363 | Literature and Politics | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 390 | Study Abroad Topics in Political Science: International Relations | 1-4 |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/ <br> INTLST 431 | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI 460 | Topics in Political Philosophy ((Economic Inequality)) | 3-4 |
| POLI SCI 534 | Socialism and Transitions to the Market | 3-4 |
| POLI SCI 561 | Radical Political Theory | 3-4 |
| POLI SCI 601 | Proseminar. Topics in Political Science (Post-Conflict) | 3 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| POLI SCI/ <br> JEWISH 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Political Economy) | 1-4 |
| PORTUG/ <br> GEN\&WS 450 | Brazillian Women Writers | 3 |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| PORTUG 640 | Topics in Luso-Brazilian Literature (LusoAfroBrazilian Studies) | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | 3-4 |


| RELIG ST/ <br> ANTHRO 343 | Anthropology of Religion | 3-4 |
| :---: | :---: | :---: |
| RELIG ST/ HISTORY 379 | Islam in Iran | 3 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Indian Traditions Modern Age) | 3-4 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Belief \& Unbelief) | 3-4 |
| RELIG ST/HISTORY/ LCA 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |
| RELIG ST/ POLISCI 618 | Political Islam | 3-4 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST/ HISTORY 432 | History of Scandinavia Since 1815 | 3 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SCAND ST 635 | Survey of Scandinavian Literature: 1800-1890 | 3 |
| SLAVIC 242 | Literatures and Cultures of Eastern Europe | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC/ <br> RELIG ST 325 | Eastern Christianity/Russian Orthodoxy in a Global Context | 3 |
| SLAVIC 405 | Women in Russian Literature | 3-4 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 434 | Contemporary Russian Culture | 3 |
| SLAVIC 439 | Russia Today in Literature and Film | 4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 449 | Istorija srpske i hrvatske literature | 3 |
| SLAVIC 454 | Moderna srpska i hrvatska literatura | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SOC 170 | Population Problems | 3-4 |
| SOC 225 | Contemporary Chinese Society | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOC/C\&E SOC/ POP HLTH 380 | Contemporary Population Problems for Honors | 3 |


| SOC 496 | Topics in Sociology (Intercultural Dialogues) | 1-3 |
| :---: | :---: | :---: |
| SOC 496 | Topics in Sociology (The Soviet Jewish Experience) | 1-3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| SOC/LCA/ <br> RELIG ST 634 | Social Structure of India | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC 646 | Race and Ethnic Relations | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SOIL SCI/ <br> ATM OCN 132 | Earth's Water: Natural Science and Human Use | 3 |
| SOIL SCI/ENVIR ST/ GEOG 230 | Soil: Ecosystem and Resource | 3 |
| $\begin{aligned} & \text { SOIL SCI/ } \\ & \text { ENVIR ST } 324 \end{aligned}$ | Soils and Environmental Quality | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH/ <br> INTL BUS 329 | Spanish for Business | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana (Latin American Neo-Vanguards) | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Documentary Film) | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Minds and Machines) | 3 |
| SPANISH 468 | Topics in Hispanic Culture <br> (Anthropocene:Cult,Econ,Enviro) | 3 |



| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| :---: | :---: | :---: |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH/ITALIAN/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 590 | Advanced Phonetics | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 |


| GERMAN 222 | Introduction to German Literature and Culture II | 3 |
| :---: | :---: | :---: |
| GERMAN 225 | Composition and Conversation I | 3 |
| GERMAN 226 | Composition and Conversation II | 3-4 |
| GERMAN 235 | Dutch Conversation and Composition | 3 |
| GERMAN 249 | Intermediate German - Speaking and Listening | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 |
| GERMAN 305 | Literatur des 20 . und 21. Jahrhunderts | 3-4 |
| GERMAN 313 | Third Semester Dutch for Graduate Students | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 |
| GERMAN 337 | Advanced Composition \& Conversation | 3-4 |
| GERMAN 351 | Introduction to German Linguistics | 3-4 |
| GERMAN 352 | Topics in German Linguistics | 3-4 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 |
| GERMAN 369 | Study Abroad in German Linguistics | 2-5 |
| GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
| GERMAN 379 | Study Abroad in Dutch Linguistics | 2-5 |
| GERMAN 410 | Kultur 1648-1918 | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| GERMAN 632 | A Theme in German Literature | 3 |
| GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |
| GREEK 401 | Greek Drama | 3 |
| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| GREEK 505 | Elementary Prose Composition | 3 |
| GREEK 510 | Homer | 3 |
| GREEK 511 | Hesiod | 3 |
| GREEK 512 | Greek Lyric Poets | 3 |
| GREEK 520 | Greek Comedy | 3 |
| GREEK 521 | Greek Tragedy | 3 |
| GREEK 532 | Thucydides | 3 |
| GREEK 541 | Plato | 3 |
| GREEK 551 | Attic Orators | 3 |
| GREEK 560 | Hellenistic Greek | 3 |
| GREEK 564 | Plutarch | 3 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |


| HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry | 3 |
| :---: | :---: | :---: |
| HEBR-BIB/ JEWISH 514 | Biblical Texts, Poetry | 3 |
| HEBR-BIB 701 | Aramaic I | 3 |
| HEBR-BIB 702 | Aramaic II | 3 |
| HEBR-BIB 703 | Ugaritic Texts | 3 |
| HEBR-BIB 704 | Canaanite Dialects | 3 |
| HEBR-BIB 705 | Syriac I | 3 |
| HEBR-BIB 706 | Syriac II | 3 |
| HEBR-BIB 723 | Classical Hebrew Linguistics: Historical and Descriptive | 3 |
| HEBR-BIB 751 | The Book of Isaiah | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 311 | Advanced Italian Language | 3 |
| ITALIAN 312 | Writing Workshop | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 423 | Corso Di Stilistica Applicata | 3 |
| ITALIAN/FRENCH/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages | 3 |
| ITALIAN 450 | Special Topics in Italian Literature | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 | Il Settecento | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 |
| ITALIAN 635 | II Romanzo Italiano | 3 |
| ITALIAN 636 | Il Romanzo Italiano | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 651 | Il Rinascimento | 3 |
| ITALIAN/ <br> MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| ITALIAN/ <br> MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| ITALIAN/ <br> MEDIEVAL 671 | II Duecento | 3 |
| JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 |
| LATIN 505 | Elementary Prose Composition | 3 |
| LCA LANG 501 | Fifth Semester Asian Language | 3 |
| LCA LANG 503 | Fifth Semester Burmese | 3 |
| LCA LANG 504 | Sixth Semester Burmese | 3 |
| LCA LANG 505 | Fifth Semester Filipino | 3 |
| LCA LANG 506 | Sixth Semester Filipino | 3 |


| LCA LANG 507 | Fifth Semester Hmong | 3 |
| :---: | :---: | :---: |
| LCA LANG 508 | Sixth Semester Hmong | 3 |
| LCA LANG 509 | Fifth Semester Indonesian | 3 |
| LCA LANG 510 | Sixth Semester Indonesian | 3 |
| LCA LANG 513 | Fifth Semester Khmer | 3 |
| LCA LANG 514 | Sixth Semester Khmer | 3 |
| LCA LANG 515 | Fifth Semester Lao | 3 |
| LCA LANG 516 | Sixth Semester Lao | 3 |
| LCA LANG 517 | Fifth Semester Thai | 3 |
| LCA LANG 518 | Sixth Semester Thai | 3 |
| LCA LANG 519 | Fifth Semester Vietnamese | 3 |
| LCA LANG 520 | Sixth Semester Vietnamese | 3 |
| LCA LANG/ AFRICAN 527 | Advanced Summer Immersion Arabic | 8 |
| LCA LANG 528 | Advanced Summer Immersion Persian | 8 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 |
| LCA LANG 531 | Fifth Semester Kazak | 3 |
| LCA LANG 532 | Sixth Semester Kazak | 3 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |
| LCA LANG 553 | Fifth Semester Hindi | 3-4 |
| LCA LANG 554 | Sixth Semester Hindi | 3-4 |
| LCA LANG 557 | Fifth Semester Tibetan | 4 |
| LCA LANG 558 | Sixth Semester Tibetan | 4 |
| LCA LANG 563 | Fifth Semester Persian | 3 |
| LCA LANG 564 | Sixth Semester Persian | 3 |
| LCA LANG 571 | Fifth Semester Urdu | 3-4 |
| LCA LANG 572 | Sixth Semester Urdu | 3-4 |
| LCA LANG 601 | Seventh Semester Asian Language | 3 |
| LCA LANG 602 | Eighth Semester Asian Language | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| LCA LANG 648 | Advanced Readings in Pali Literature | 3 |
| LCA LANG 653 | Advanced Readings in Hindi Language | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 671 | Advanced Readings in Urdu Language | 3 |
| LCA LANG 675 | Advanced Readings in Sanskrit | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| PORTUG 225 | Third Year Conversation and Composition | 3 |
| PORTUG 226 | Third Year Conversation and Composition | 3 |


| PORTUG 311 | Fourth Year Composition and Conversation | 3 |
| :---: | :---: | :---: |
| PORTUG 312 | Fourth Year Composition and Conversation | 3 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 401 | Contemporary Scandinavian Languages | 3 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SLAVIC 275 | Third Year Russian I | 3-4 |
| SLAVIC 276 | Third Year Russian II | 3-4 |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 309 | Russian Area Studies on Study Abroad | 1-4 |
| SLAVIC 315 | Russian Language and Culture I | 2 |
| SLAVIC 316 | Russian Language and Culture II | 2 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 350 | Special Topics in Russian Language, Literature, and Culture | 3 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 421 | Gogol | 3-4 |


| SLAVIC 422 | Dostoevsky | 3-4 |
| :---: | :---: | :---: |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |

## AREA STUDIES

Area studies courses help students focus their on a specific geographic regions. Students must choose one course from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN/ | Africa: An Introductory Survey | 4 |
| AFROAMER/ |  |  |
| ANTHRO/GEOG/ <br> HISTORY/POLI SCI/ <br> SOC 277 |  | $3-4$ |
| E A STDS/HISTORY/ | Introduction to East Asian |  |
| POLI SCI 255 | Civilizations | 3 |
| GEOG 340 | World Regions in Global Context | 4 |
| HISTORY 120 | Europe and the Modern World 1815 <br> to the Present | $3-4$ |
| HISTORY 139 | The Middle East in the 20th Century | $3-4$ |
| HISTORY 142 | History of South Asia to the Present |  |


| HISTORY 201 | The Historian's Craft (Portraying China) | 3-4 |
| :---: | :---: | :---: |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/ <br> EA STDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EA STDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 253 | Russia: An Interdisciplinary Survey | 4 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey | 4 |

## GLOBAL SECURITY

In this option, majors explore conditions that challenge the ability of people and societies to survive. Students consider the causes of and solutions to political crises and violent conflicts in interstate, transnational, and domestic settings. Using historical and regional approaches, students develop a better understanding of the dilemmas the state and the global community face when confronted by threats to human rights, peace, and stability.

## Global Security Core

Two courses from:

## Code

Title
Credits
ANTHRO 606 Ethnicity, Nations, and Nationalism

| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 |
| :---: | :---: | :---: |
| HISTORY/ <br> LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| INTL ST 401 | Topics in Global Security | 3-4 |
| INTL ST/ <br> POLI SCI 431 | Contentious Politics | 3-4 |
| INTL ST 501 | Study Abroad Topics in Global Security | 1-6 |
| INTL ST 601 | Topics in Global Security | 1-4 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LCA 630 | Proseminar. Studies in Cultures of Asia | 3 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| POLI SCI 343 | Theories of International Security | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 508 | American National Security: Policy and Process | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| SOC 626 | Social Movements | 3 |

## Global Security Issues

15 credits from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| A AE 319 | The International Agricultural Economy | 3 |
| A A E/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| A A E/ECON 473 | Economic Growth and Development in Southeast Asia | 3 |
| A A E/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| ANTHRO 330 | Topics in Ethnology | 3-4 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
| ASIAN 300 | Topics in Asian Studies (Gender and Sexuality) | 3 |


| $\begin{aligned} & \text { C\&E SOC/ENVIR ST/ } \\ & \text { SOC } 540 \end{aligned}$ | Sociology of International Development, Environment, and Sustainability | 3 |
| :---: | :---: | :---: |
| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| COM ARTS 310 | Topics in Rhetoric and Communication Science (Intercultural Comm \& Rhetoric) | 3 |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 573 | Rhetoric of Globalization and Transnationalism | 3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL 340 | Comparative Education | 3 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST/ POP HLTH 560 | Health Impact Assessment of Global Environmental Change | 3 |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| ENVIR ST/A A E/ ECON/URB R PL 671 | Energy Economics | 3 |
| F\&W ECOL/ <br> ENVIR ST/ <br> HISTORY 452 | World Forest History | 3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS/ POLI SCI 429 | Gender and Politics in Comparative Perspective | 3-4 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |


| GEOG 358 | Human Geography of Southeast Asia | 3 |
| :---: | :---: | :---: |
| GEOG 475 | Topics in Geography (International Migration, Health, and Human Rights) | 1-4 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |
| GEOSCI/ <br> ENVIR ST 411 | Energy Resources | 3 |
| HIST SCI 337 | History of Technology | 3 |
| HIST SCI 339 | Technology and Its Critics Since World War II | 3 |
| HIST SCI/ ENVIR ST 353 | History of Ecology | 3 |
| HIST SCI/HISTORY/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 |
| HISTORY 201 | The Historian's Craft (The Catholic Church) | 3-4 |
| HISTORY 201 | The Historian's Craft (History of Humanitarianism) | 3-4 |
| HISTORY 201 | The Historian's Craft (WWII Eastern Europe) | 3-4 |
| HISTORY 201 | The Historian's Craft (Dems \& Dictators in Spain \& Italy) | 3-4 |
| HISTORY 201 | The Historian's Craft (Shanghai) | 3-4 |
| HISTORY 201 | The Historian's Craft (End of Empire: Occupation and Post-War) | 3-4 |
| HISTORY 221 | Explorations in American History <br> (H) (US-Latin Amer Relations) | 3-4 |
| HISTORY 223 | Explorations in European History (H) (Commodity Culture in Europe) | 3-4 |
| HISTORY 223 | Explorations in European History <br> (H) (Wars of Religion Since 1914) | 3-4 |
| HISTORY 223 | Explorations in European History (H) (War, Religion, \& Race) | 3-4 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY/ <br> E A STDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |


| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| :---: | :---: | :---: |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| ILS 371 | Interdisciplinary Studies in the Arts and Humanities (Political Economy \& Liberal) | 3 |
| INTL BUS/A A E/ ECON 462 | Latin American Economic Development | 3 |
| INTL ST 322 | Washington DC Semester in International Affairs Internship Seminar | 4 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |
| INTL ST 401 | Topics in Global Security | 3-4 |
| INTL ST/ <br> POLI SCI 431 | Contentious Politics | 3-4 |
| $\begin{aligned} & \text { INTL ST/ } \\ & \text { POLI SCI } 434 \end{aligned}$ | The Politics of Human Rights | 3-4 |
| INTL ST 501 | Study Abroad Topics in Global Security | 1-6 |
| INTL ST/ GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| INTL ST 601 | Topics in Global Security | 1-4 |
| INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| JOURN 618 | Mass Communication and Political Behavior | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| LCA 630 | Proseminar. Studies in Cultures of Asia (Human Rights in Asia) | 3 |
| LEGAL ST 409 | Human Rights in Law and Society | 3 |
| LEGALST/LIS 663 | Introduction to Cyberlaw | 3 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust in Poland) | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Occupation, Holocaust, Memory in Dutch Literature) | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| MED HIST/ <br> HIST SCI 668 | Topics in History of Medicine (Health, Disease \& Medicine) | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 334 | Russian Politics | 3-4 |


| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 343 | Theories of International Security | 3-4 |
| POLI SCI 345 | Conflict Resolution | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 |
| POLI SCI 401 | Selected Topics in Political Science (Nationalism \& Ethnic Conflict) | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| POLI SCI 508 | American National Security: Policy and Process | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 561 | Radical Political Theory | 3-4 |
| POLI SCI 601 | Proseminar. Topics in Political Science (Post-Conflict) | 3 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| POLI SCI/ JEWISH 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Political Economy) | 1-4 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| RELIG ST/ <br> POLI SCI 618 | Political Islam | 3-4 |
| SOC 225 | Contemporary Chinese Society | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOC/C\&E SOC/ <br> POP HLTH 380 | Contemporary Population Problems for Honors | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SPANISH 460 | Literatura Hispanoamericana (Human Rights: Argentina/Chile) | 3 |

## Electives

Students typically take three or four elective courses in the major. These courses can come from Issues lists for different options or they can be additional Issues classes within their own option. Students must take
enough elective credits to attain the required 35 total credits in the major. Choose from:

## Code Title

| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| :---: | :---: | :---: |
| A AE 319 | The International Agricultural Economy | 3 |
| AAE/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| A A E/ECON 421 | Economic Decision Analysis | 4 |
| AAE/ECON 473 | Economic Growth and Development in Southeast Asia | 3 |
| AAE/ECON 474 | Economic Problems of Developing Areas | 3 |
| AAE/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| A A E/ECON/ F\&W ECOL 531 | Natural Resource Economics | 3 |
| AAE/MHR 540 | Intellectual Property Rights, Innovation and Technology | 3 |
| A A E/CIV ENGR/ ENVIR ST/ URB R PL 561 | Energy Markets | 3 |
| AFRICAN 230 | Introduction to Yoruba Life and Culture | 3 |
| AFRICAN/ AFROAMER/ HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFRICAN 300 | African Literature in Translation | 3 |
| AFRICAN 303 | African Literature and Visual Culture | 3 |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture | 3-4 |
| AFRICAN 405 | Topics in African Cultural Studies (The Problem of Whiteness) | 3 |
| AFRICAN 412 | Contemporary African Fiction | 3-4 |
| AFRICAN/ AFROAMER 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFRICAN/ <br> FRENCH 440 | African/Francophone Film | 3 |
| AFRICAN/ PORTUG 451 | Lusophone African Literature | 3 |
| AFRICAN 453 | Modern African Literature in English | 3-4 |
| AFRICAN/ <br> FOLKLORE 471 | Oral Traditions and the Written Word | 3-4 |
| AFRICAN 500 | Language and Society in Africa | 3-4 |
| AFRICAN 609 | Advanced Topics in Global Black Music Studies | 3 |
| AFROAMER/ <br> ART HIST 241 | Introduction to African Art and Architecture | 3 |
| AFROAMER/ <br> ART HIST 242 | Introduction to Afro-American Art | 3 |


| AFROAMER/ | Latin America: An Introduction | 3-4 |
| :---: | :---: | :---: |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  |  |
| LACIS/POLI SCI/ |  |  |
| SOC/SPANISH 260 |  |  |
| AFROAMER 265 | African-American Autobiography | 3 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women | 3 |
| AFROAMER 271 | Selected Topics in African American Culture | 3 |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 275 | Science, Medicine, and Race: A History | 3 |
| AFROAMER/ <br> AFRICAN/ANTHRO/ <br> GEOG/HISTORY/ <br> POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| AFROAMER/ <br> AFRICAN/HISTORY/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |
| AFROAMER/ MUSIC 308 | Black Music (1920-Present): Rhythm Section and Combos | 2 |
| AFROAMER/ MUSIC 309 | Black Music (1920-Present): Vocalist/Trombone/Misc Instrumental | 2 |
| AFROAMER/ MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 |
| AFROAMER/ MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER 337 | The Harlem Renaissance | 3 |
| AFROAMER 338 | The Black Arts Movement | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |


| AFROAMER/ MUSIC 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| :---: | :---: | :---: |
| AFROAMER/ <br> AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFROAMER/ ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |
| AFROAMER 456 | Soul Music and the African American Freedom Movement | 3 |
| AFROAMER 469 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 501 | 19th Century Afro-American Literature | 3 |
| AFROAMER/ MUSIC 509 | Seminar in Afro-American Music History and Criticism | 3 |
| AFROAMER/ POLI SCI 519 | African American Political Theory | 3-4 |
| AFROAMER/HDFS/ SOC WORK 521 | African American Families | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER 525 | Major Authors | 3 |
| AFROAMER/ ED POL 567 | History of African American Education | 3 |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature | 3 |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement | 3 |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 |
| AFROAMER/ ART HIST 643 | Selected Topics in African Diaspora Art History | 3 |
| AFROAMER 669 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| AFROAMER/ ENGL 672 | Selected Topics in Afro-American Literature | 3 |
| AFROAMER 673 | Selected Topics in Afro-American Society | 3 |
| AFROAMER/ ART 674 | Selected Topics on Afro-American Artists | 3 |
| AFROAMER 675 | Selected Topics in Afro-American Culture | 3 |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| AFROAMER 678 | Modern/Contemporary Art of Nigeria and the African Diaspora | 3 |
| AFROAMER/ GEN\&WS 679 | Visual Culture, Gender and Critical Race Theory | 3 |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| ANTHRO 327 | Peoples of the Andes Today | 3 |


| ANTHRO 330 | Topics in Ethnology (SE Asia) | 3-4 |
| :---: | :---: | :---: |
| ANTHRO 330 | Topics in Ethnology (Anthropology of Foodways) | 3-4 |
| ANTHRO 330 | Topics in Ethnology (Brazil) | 3-4 |
| ANTHRO 350 | Political Anthropology | 3-4 |
| ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| ANTHRO 358 | Anthropology of China | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
| ART HIST 350 | 19th Century Painting in Europe | 3-4 |
| ART HIST 351 | 20th Century Art in Europe | 3-4 |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present | 3-4 |
| ART HIST 358 | European Architecture: The Modern Movements | 3-4 |
| ART HIST 371 | Chinese Painting | 3-4 |
| ART HIST 372 | Arts of Japan | 3-4 |
| ART HIST 411 | Topics in Asian Art (Modern \& Contempor) | 3-4 |
| ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |
| ART HIST 479 | Art and History in Africa | 3-4 |
| ASIAN 253 | Japanese Popular Culture | 3 |
| ASIAN 300 | Topics in Asian Studies (Indian Traditions Modern Age) | 3 |
| ASIAN 300 | Topics in Asian Studies (Sexuality in South Asia) | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| ASIAN 403 | Southeast Asian Literature | 3 |
| ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 |
| ATM OCN 100 | Weather and Climate | 3 |
| ATM OCN 101 | Weather and Climate | 4 |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems | 2-3 |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 |
| ATM OCN/ENVIR ST/ GEOG 528 | Past Climates and Climatic Change | 3 |
| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| BOTANY 240 | Plants and Humans | 3 |
| C\&E SOC/SOC 245 | Technology and Society | 3 |
| $\begin{aligned} & \text { C\&E SOC/ENVIR ST/ } \\ & \text { SOC } 540 \end{aligned}$ | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |


| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| :---: | :---: | :---: |
| COM ARTS 310 | Topics in Rhetoric and Communication Science (Intercultural Comm \& Rhetoric) | 3 |
| COM ARTS 346 | Critical Internet Studies | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 352 | Film History to 1960 | 3 |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ <br> RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 455 | French Film | 3 |
| COM ARTS 456 | Russian and Soviet Film | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| COM ARTS/ ITALIAN 460 | Italian Film | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 557 | Contemporary Media Industries | 3 |
| COM ARTS 577 | Dynamics of Online Relationships | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms | 3 |
| COMP LIT 375 | Literature and Related Disciplines | 3-4 |
| COMP LIT 379 | Literature and Ethnic Experience | 3-4 |
| DS/LAND ARC 639 | Culture and Built Environment | 3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Intro to Korean Culture) | 1-3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Korean Culture) | 1-3 |
| $\begin{aligned} & \text { E A STDS/ } \\ & \text { E ASIAN } 300 \end{aligned}$ | Humanities Topics in East Asian Studies (Survey of Tibetan Buddhism) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Korean) | 1-3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |
| ECON 330 | Money and Banking | 4 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON/HISTORY 466 | The American Economy Since 1865 | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON/A A E 567 | Public Finance in Less Developed Countries | 3 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 |
| ED POL 340 | Comparative Education | 3 |


| ED POL/ <br> ANTHRO 570 | Anthropology and Education | 3 |
| :---: | :---: | :---: |
| ED POL/ <br> HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |
| ED POL 675 | Introduction to Comparative and International Education | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: Global Perspective and Policies | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings | 3 |
| ENGL 352 | Modernist Poetry | 3 |
| ENGL 353 | British Literature since 1900 | 3 |
| ENGL 453 | Topic in British Literature and Culture since 1900 | 3 |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |
| ENGL/THEATRE 575 | British Drama, 1914 to Present | 3 |
| ENVIR ST/ILS 126 | Principles of Environmental Science | 4 |
| ENVIR ST/GEOG 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 |
| ENVIR ST/A A E/ <br> ECON 343 | Environmental Economics | 3-4 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| ENVIR ST/BSE 367 | Renewable Energy Systems | 3 |
| ENVIR ST/ <br> M\&ENVTOX/ <br> PL PATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| ENVIR ST/N E 373 | Nuclear Energy and the Environment | 3 |
| ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Food Systems, Sustainability, and Climate Change) | 1-4 |
| ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Conserving Biodiversity) | 1-4 |
| ENVIR ST 401 | Special Topics: Environmental Perspectives in the Physical Sciences (Sustainability Science) | 1-4 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (People,Environment) | 1-4 |
| ENVIR ST/ <br> ECON/POLI SCI/ <br> URB R PL 449 | Government and Natural Resources | 3-4 |
| ENVIR ST/ POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST 539 | Air Resources Science and Policy | 3 |


| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| :---: | :---: | :---: |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| ENVIR ST/A A E/ ECON/URB R PL 671 | Energy Economics | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 450 | Communities and Forests | 3 |
| F\&W ECOL/ ENVIR ST/ HISTORY 452 | World Forest History | 3 |
| FOLKLORE/ <br> AFRICAN 270 | The Hero and Trickster in African Oral Traditions | 3 |
| FOLKLORE/LCA 279 | Introduction to Turkish Folk Literature | 3 |
| FOLKLORE/ ANTHRO 344 | Anthropological Approaches to Folklore | 3 |
| FOLKLORE 510 | Folklore Theory | 3 |
| FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| FOLKLORE 560 | Folklore in a Digital Age | 3 |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| FRENCH 240 | Immigration and Expression | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer Film) | 1-3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) | 1-3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |


| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| :---: | :---: | :---: |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS/HISTORY/ <br> LCA 472 | Women in Turkish Society | 3 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG 321 | Climatology | 3 |
| GEOG/ATM OCN/ <br> ENVIR ST/ <br> GEOSCI 335 | Climatic Environments of the Past | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes | 3 |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History | 4 |
| GEOG 475 | Topics in Geography | 1-4 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |
| GEOG 510 | Economic Geography | 4 |
| GEOG/ENVIR ST 534 | Environmental Governance: Markets, States and Nature | 3 |
| GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 |
| GEOSCI/ <br> ATM OCN 105 | Survey of Oceanography | 3-4 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 106 \end{aligned}$ | Environmental Geology | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 410 \end{aligned}$ | Minerals as a Public Problem | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 411 \end{aligned}$ | Energy Resources | 3 |
| GERMAN 245 | Topics in Dutch Life and Culture (Dutch Tolerance) | 3 |


| GERMAN 245 | Topics in Dutch Life and Culture <br> (Low Lands or High Water) | 3 | HISTORY 241 | Latin America from 1780 to 1940 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| INTL ST/ | Indian Politics in Comparative | 3 | JEWISH/SOC | 258 | The Jews, States, and Citizenship: A <br> Sociological Perspective |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| POLI SCI 327 | Perspective | 3 | JEWISH/ | Israeli Fiction in Translation |  |


| LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| :---: | :---: | :---: |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 220 | Chekhov in Translation | 3-4 |
| LITTRANS 222 | Dostoevsky in Translation | 3-4 |
| LITTRANS 224 | Tolstoy in Translation | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust) | 3 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Russia \& Jews) | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |
| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) (German Lit) | 3 |
| LITTRANS 301 | Modern Indonesian Literature in Translation | 3 |
| LITTRANS 304 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Dutch Lit: Travel \& Migration) | 3 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen | 3-4 |
| LITTRANS 338 | In Translation: Knut Hamsun and the 20th Century Norwegian Novel | 3-4 |
| LITTRANS 343 | In Translation: The Woman in Scandinavian Literature | 3-4 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Evangelion) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Japanese Ghost Stories) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Writing the Environment) | 3 |
| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation | 3 |


| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| :---: | :---: | :---: |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| MED HIST/ HIST SCI 668 | Topics in History of Medicine (Health, Disease \& Medicine) | 3 |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| NUTR SCI/ AGRONOMY/ ENTOM 203 | Introduction to Global Health | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| PHYSICS/ ENVIR ST 472 | Scientific Background to Global Environmental Problems | 3 |
| POLI SCI 313 | Bargaining in the Global Economy | 3-4 |
| POLI SCI/ <br> INTL ST 325 | Social Movements and Revolutions in Latin America | 3-4 |
| POLI SCI/ INTL ST 327 | Indian Politics in Comparative Perspective | 3 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 363 | Literature and Politics | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 390 | Study Abroad Topics in Political Science: International Relations | 1-4 |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 |
| $\begin{aligned} & \text { POLI SCI/ } \\ & \text { INTL ST } 431 \end{aligned}$ | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |


| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 538 | Politics and Policies in the European Union | 3-4 |
| POLI SCI 601 | Proseminar: Topics in Political Science (Post-Conflict) | 3 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| POLI SCI/ JEWISH 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Political Economy) | 1-4 |
| PORTUG/ GEN\&WS 450 | Brazillian Women Writers | 3 |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| PORTUG 640 | Topics in Luso-Brazilian Literature (LusoAfroBrazilian Studies) | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | 3-4 |
| RELIG ST/ <br> ANTHRO 343 | Anthropology of Religion | 3-4 |
| RELIG ST/ HISTORY 379 | Islam in Iran | 3 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Indian Traditions Modern Age) | 3-4 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Belief \& Unbelief) | 3-4 |
| RELIG ST/HISTORY/ LCA 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |
| RELIG ST/ <br> POLISCI 618 | Political Islam | 3-4 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST/ HISTORY 432 | History of Scandinavia Since 1815 | 3 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |


| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| :---: | :---: | :---: |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SCAND ST 635 | Survey of Scandinavian Literature: 1800-1890 | 3 |
| SLAVIC 242 | Literatures and Cultures of Eastern Europe | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC/ <br> RELIG ST 325 | Eastern Christianity/Russian Orthodoxy in a Global Context | 3 |
| SLAVIC 405 | Women in Russian Literature | 3-4 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 434 | Contemporary Russian Culture | 3 |
| SLAVIC 439 | Russia Today in Literature and Film | 4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 449 | Istorija srpske i hrvatske literature | 3 |
| SLAVIC 454 | Moderna srpska i hrvatska literatura | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SOC 170 | Population Problems | 3-4 |
| SOC 225 | Contemporary Chinese Society | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOC/C\&E SOC/ POP HLTH 380 | Contemporary Population Problems for Honors | 3 |
| SOC 496 | Topics in Sociology (Intercultural Dialogues) | 1-3 |
| SOC 496 | Topics in Sociology (The Soviet Jewish Experience) | 1-3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| SOC/LCA/ <br> RELIG ST 634 | Social Structure of India | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC 646 | Race and Ethnic Relations | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SOIL SCI/ <br> ATM OCN 132 | Earth's Water. Natural Science and Human Use | 3 |


| SOIL SCI/ENVIR ST/ GEOG 230 | Soil: Ecosystem and Resource | 3 |
| :---: | :---: | :---: |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH/ <br> INTL BUS 329 | Spanish for Business | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana (Latin American Neo-Vanguards) | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Documentary Film) | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Minds and Machines) | 3 |
| SPANISH 468 | Topics in Hispanic Culture <br> (Anthropocene:Cult,Econ,Enviro) | 3 |
| THEATRE 327 | History of Costume for the Stage | 3 |
| THEATRE 351 | Fundamentals of Asian Stage Discipline | 3 |
| THEATRE 420 | Theatre and Society | 3 |
| THEATRE 424 | Contemporary World Theatre and Dramatic Literature | 3 |
| THEATRE 522 | Experimental Drama: The Theatre of Europe 1850-the Present | 3 |
| THEATRE 526 | The Theatres of China and Japan | 3 |
| THEATRE/ SLAVIC 532 | History of Russian Theatre | 3 |
| THEATRE/ENGL 577 | Postcolonial Theatre: Drama, Theory and Performance in the Global South | 3 |
| URB R PL/ECON/ REALEST 641 | Housing Economics and Policy | 3 |
| ZOOLOGY/BOTANY/ <br> ENVIR ST 260 | Introductory Ecology | 3 |
| ZOOLOGY/ ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY/ENVIR ST/ F\&W ECOL 360 | Extinction of Species | 3 |
| $\begin{aligned} & \text { ZOOLOGY/AN SCI/ } \\ & \text { F\&W ECOL } 520 \end{aligned}$ | Ornithology | 3 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |

ZOOLOGY/ $\quad$ Conservation Biology
BOTANY/ENVIR ST/
F\&W ECOL 651

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all INTL ST courses and other courses in the major 2.000 GPA on 15 upper-level major credits, taken in residence

15 credits in the major, taken on the UW-Madison campus ${ }^{3}$
3 Major courses with Intermediate and Advanced level are considered upper level.

## INTERNATIONAL STUDIES: POLITICS AND POLICY IN THE GLOBAL ECONOMY

## REQUIREMENTS

## INTRODUCTORY REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| Complete the 5th Unit of a Foreign Language (see course list below) ${ }^{1}$ |  |  |
| Select one of the following: |  | 4-8 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| A A E 215 <br> \& ECON 102 | Introduction to Agricultural and Applied Economics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment ${ }^{2}$ |  |
| Total Credits |  | 7-12 |
| ESL 118 Academic Writing II substitutes for the Foreign Language requirement. |  |  |
| ECON 111 requires placement in MATH 221 or higher is limited enrollment. |  |  |

## 5th Unit of Foreign Language Course List <br> Code Title Credits

AFRICAN $435 \quad$ Advanced Studies in Swahili 3
Language-Grammar
AFRICAN 436 Advanced Studies in Swahili 3

|  | Language-Readings |
| :--- | :--- |
| AFRICAN/ | Readings in Advanced Arabic Texts |

LCA LANG 445
AFRICAN 475 Fifth Semester Yoruba 3
AFRICAN 476 Sixth Semester Yoruba 3
AFRICAN 493 Fifth Semester, A Language of 3
Southern Africa
AFRICAN 494 Sixth Semester, A Language of 3
Southern Africa

| AFRICAN 495 | Fifth Semester, A Language of Northern Africa | 3 |
| :---: | :---: | :---: |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa | 3 |
| AFRICAN 497 | Fifth Semester, A Language of West Africa | 3 |
| AFRICAN 498 | Sixth Semester, A Language of West Africa | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 301 | Fifth Semester Chinese | 4 |
| E ASIAN 302 | Sixth Semester Chinese | 4 |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 335 | Intermediate Japanese Conversation | 3 |
| E ASIAN 347 | Fifth Semester Korean | 3 |
| E ASIAN 348 | Sixth Semester Korean | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 |
| E ASIAN 402 | Eighth Semester Chinese | 3 |
| E ASIAN 403 | Seventh Semester Japanese | 3 |
| E ASIAN 404 | Eighth Semester Japanese | 3 |
| E ASIAN 405 | Seventh Semester Korean | 3 |
| E ASIAN 406 | Eighth Semester Korean | 3 |
| E ASIAN 431 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 432 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 501 | Fifth-year Chinese | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ <br> INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |


| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| :---: | :---: | :---: |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH/ITALIAN/ PORTUG/ <br> SPANISH 429 | Introduction to the Romance Languages | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 590 | Advanced Phonetics | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 |
| GERMAN 225 | Composition and Conversation I | 3 |
| GERMAN 226 | Composition and Conversation II | 3-4 |
| GERMAN 235 | Dutch Conversation and Composition | 3 |
| GERMAN 249 | Intermediate German - Speaking and Listening | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 |
| GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 313 | Third Semester Dutch for Graduate Students | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 |
| GERMAN 337 | Advanced Composition \& Conversation | 3-4 |
| GERMAN 351 | Introduction to German Linguistics | 3-4 |
| GERMAN 352 | Topics in German Linguistics | 3-4 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 |
| GERMAN 369 | Study Abroad in German Linguistics | 2-5 |


| GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| :---: | :---: | :---: |
| GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
| GERMAN 379 | Study Abroad in Dutch Linguistics | 2-5 |
| GERMAN 410 | Kultur 1648-1918 | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| GERMAN 632 | A Theme in German Literature | 3 |
| GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |
| GREEK 401 | Greek Drama | 3 |
| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| GREEK 505 | Elementary Prose Composition | 3 |
| GREEK 510 | Homer | 3 |
| GREEK 511 | Hesiod | 3 |
| GREEK 512 | Greek Lyric Poets | 3 |
| GREEK 520 | Greek Comedy | 3 |
| GREEK 521 | Greek Tragedy | 3 |
| GREEK 532 | Thucydides | 3 |
| GREEK 541 | Plato | 3 |
| GREEK 551 | Attic Orators | 3 |
| GREEK 560 | Hellenistic Greek | 3 |
| GREEK 564 | Plutarch | 3 |
| HEBR-MOD/ <br> JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ <br> JEWISH 302 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ <br> JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| HEBR-MOD/ <br> JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| HEBR-BIB/ <br> JEWISH 513 | Biblical Texts, Poetry | 3 |
| HEBR-BIB/ <br> JEWISH 514 | Biblical Texts, Poetry | 3 |
| HEBR-BIB 701 | Aramaic I | 3 |
| HEBR-BIB 702 | Aramaic II | 3 |
| HEBR-BIB 703 | Ugaritic Texts | 3 |
| HEBR-BIB 704 | Canaanite Dialects | 3 |
| HEBR-BIB 705 | Syriac I | 3 |
| HEBR-BIB 706 | Syriac II | 3 |
| HEBR-BIB 723 | Classical Hebrew Linguistics: Historical and Descriptive | 3 |
| HEBR-BIB 751 | The Book of Isaiah | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 311 | Advanced Italian Language | 3 |
| ITALIAN 312 | Writing Workshop | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 423 | Corso Di Stilistica Applicata | 3 |
| ITALIAN/FRENCH PORTUG/ <br> SPANISH 429 | Introduction to the Romance Languages | 3 |


| ITALIAN 450 | Special Topics in Italian Literature | 3 |
| :---: | :---: | :---: |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 | II Settecento | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 |
| ITALIAN 635 | II Romanzo Italiano | 3 |
| ITALIAN 636 | Il Romanzo Italiano | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 651 | Il Rinascimento | 3 |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 671 | Il Duecento | 3 |
| JEWISH/HEBR- <br> MOD 301 | Introduction to Hebrew Literature | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 |
| LATIN 505 | Elementary Prose Composition | 3 |
| LCA LANG 501 | Fifth Semester Asian Language | 3 |
| LCA LANG 503 | Fifth Semester Burmese | 3 |
| LCA LANG 504 | Sixth Semester Burmese | 3 |
| LCA LANG 505 | Fifth Semester Filipino | 3 |
| LCA LANG 506 | Sixth Semester Filipino | 3 |
| LCA LANG 507 | Fifth Semester Hmong | 3 |
| LCA LANG 508 | Sixth Semester Hmong | 3 |
| LCA LANG 509 | Fifth Semester Indonesian | 3 |
| LCA LANG 510 | Sixth Semester Indonesian | 3 |
| LCA LANG 513 | Fifth Semester Khmer | 3 |
| LCA LANG 514 | Sixth Semester Khmer | 3 |
| LCA LANG 515 | Fifth Semester Lao | 3 |
| LCA LANG 516 | Sixth Semester Lao | 3 |
| LCA LANG 517 | Fifth Semester Thai | 3 |
| LCA LANG 518 | Sixth Semester Thai | 3 |
| LCA LANG 519 | Fifth Semester Vietnamese | 3 |
| LCA LANG 520 | Sixth Semester Vietnamese | 3 |
| LCA LANG/ AFRICAN 527 | Advanced Summer Immersion Arabic | 8 |
| LCA LANG 528 | Advanced Summer Immersion Persian | 8 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 |
| LCA LANG 531 | Fifth Semester Kazak | 3 |
| LCA LANG 532 | Sixth Semester Kazak | 3 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |
| LCA LANG 553 | Fifth Semester Hindi | 3-4 |
| LCA LANG 554 | Sixth Semester Hindi | 3-4 |


| LCA LANG 557 | Fifth Semester Tibetan | 4 |
| :---: | :---: | :---: |
| LCA LANG 558 | Sixth Semester Tibetan | 4 |
| LCA LANG 563 | Fifth Semester Persian | 3 |
| LCA LANG 564 | Sixth Semester Persian | 3 |
| LCA LANG 571 | Fifth Semester Urdu | 3-4 |
| LCA LANG 572 | Sixth Semester Urdu | 3-4 |
| LCA LANG 601 | Seventh Semester Asian Language | 3 |
| LCA LANG 602 | Eighth Semester Asian Language | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| LCA LANG 648 | Advanced Readings in Pali Literature | 3 |
| LCA LANG 653 | Advanced Readings in Hindi Language | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 671 | Advanced Readings in Urdu Language | 3 |
| LCA LANG 675 | Advanced Readings in Sanskrit | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| PORTUG 225 | Third Year Conversation and Composition | 3 |
| PORTUG 226 | Third Year Conversation and Composition | 3 |
| PORTUG 311 | Fourth Year Composition and Conversation | 3 |
| PORTUG 312 | Fourth Year Composition and Conversation | 3 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 401 | Contemporary Scandinavian Languages | 3 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |


| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| :---: | :---: | :---: |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SLAVIC 275 | Third Year Russian I | 3-4 |
| SLAVIC 276 | Third Year Russian II | 3-4 |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 309 | Russian Area Studies on Study Abroad | 1-4 |
| SLAVIC 315 | Russian Language and Culture I | 2 |
| SLAVIC 316 | Russian Language and Culture II | 2 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 350 | Special Topics in Russian Language, Literature, and Culture | 3 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 421 | Gogol | 3-4 |
| SLAVIC 422 | Dostoevsky | 3-4 |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |


| SPANISH 462 | Spanish American Theater and Drama | 3 |
| :---: | :---: | :---: |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |

## AREA STUDIES

Area studies courses help students focus on specific geographic regions. Students must choose one course from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey | 4 |
| E A STDS/HISTORY/ POLI SCI 255 | Introduction to East Asian Civilizations | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY 201 | The Historian's Craft (Portraying China) | 3-4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/ EA STDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |


| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| :---: | :---: | :---: |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC/GEOG/ <br> HISTORY/ <br> POLI SCI 253 | Russia: An Interdisciplinary Survey | 4 |
| SLAVIC/GEOG/ <br> HISTORY/ <br> POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey | 4 |

## POLITICS AND POLICY IN THE GLOBAL ECONOMY

This option offers a multidisciplinary survey of international economic and political institutions and transactions, as well as the policy issues pertaining to international commerce and trade, international finance and monetary relations, international macroeconomic policy coordination, U.S. trade imbalances, aid and development, and related environmental and natural resource problems.

## Politics and Policy Core

Two courses from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| A A E 319 | The International Agricultural Economy | 3 |
| A A E/ECON 474 | Economic Problems of Developing Areas | 3 |
| A A E/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON 475 | Economics of Growth | 3-4 |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 |
| INTL ST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTL ST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy | 3-4 |
| INTL ST 502 | Study Abroad Topics in Politics and Policy in the Global Economy | 1-6 |


| INTL ST 601 |  <br> Global Sys) | $1-4$ |
| :--- | :--- | :---: |
| INTL ST 602 | Topics in Politics and Policy in the <br> Global Economy | $1-4$ |
| LCA/ART HIST 621 | Mapping, Making, and Representing <br> Colonial Spaces | 3 |
| POLI SCI 313 | Bargaining in the Global Economy | $3-4$ |
| POLI SCI 350 | International Political Economy | $3-4$ |
| POLI SCI 351 | Politics of the World Economy | $3-4$ |
| POLI SCI 354 | International Institutions and World <br> Order | $3-4$ |
| POLI SCI 637 | Comparative Political Economy | $3-4$ |
| POLI SCI 652 | The Politics of Development | $3-4$ |
| POLI SCI 654 | Politics of Revolution |  |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ <br> Third World | $3-4$ |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| URB R PL/ | International Development and | 3 |
| GEN\&WS 644 | Gender | 3 |

## Politics and Policy Issues

15 credits from:

| AAE/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| :---: | :---: | :---: |
| A AE 319 | The International Agricultural Economy | 3 |
| AAE/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| A A E/ECON 421 | Economic Decision Analysis | 4 |
| A AE/ECON 473 | Economic Growth and Development in Southeast Asia | 3 |
| AAE/ECON 474 | Economic Problems of Developing Areas | 3 |
| A A E/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| A A E/ECON/ F\&W ECOL 531 | Natural Resource Economics | 3 |
| A AE/MHR 540 | Intellectual Property Rights, Innovation and Technology | 3 |
| A A E/CIV ENGR/ ENVIR ST/ URB R PL 561 | Energy Markets | 3 |
| ANTHRO 330 | Topics in Ethnology (Culture/Health in Africa) | 3-4 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 |
| C\&E SOC/ENVIR ST/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |
| CHICLA/ <br> POLI SCI 302 | Mexican-American Politics | 3-4 |


| COM ARTS 470 | Contemporary Political Discourse | 3 |
| :---: | :---: | :---: |
| CURRIC 366 | Internationalizing Educational Knowledge | 3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Contemporary Chinese Society) | 1-3 |
| ECON 330 | Money and Banking | 4 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 390 | Contemporary Economic Issues (Poverty, Inequality, \& Public Policy) | 3 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON/HISTORY 466 | The American Economy Since 1865 | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON/A AE 567 | Public Finance in Less Developed Countries | 3 |
| ECON 666 | Issues in International Finance | 3-4 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 |
| ED POL 340 | Comparative Education | 3 |
| ED POL/ HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |
| ED POL 675 | Introduction to Comparative and International Education | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: Global Perspective and Policies | 3 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| ENVIR ST 401 | Special Topics: Environmental Perspectives in the Physical Sciences (Sustainable Science) | 1-4 |
| ENVIR ST 401 | Special Topics: Environmental <br> Perspectives in the Physical Sciences (Sustainability, Science, Technology, and Policy) | 1-4 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies | 1-4 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| ENVIR ST/A A E/ ECON/URB R PL 671 | Energy Economics | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| GEN BUS 600 | Topics on Sustainable Business Practices | 3 |


| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in | 1-3 | INTL BUS/ GEN BUS 320 | Intercultural Communication in Business | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Africa) |  | INTL BUS 365 | Contemporary Topics (International | 1-3 |
| GEN\&WS 426 | Women and Grassroots Politics | 3 |  | Perspectives) |  |
|  | Across the Globe |  | INTL BUS/M H R 403 | Global Issues in Management | 3 |
| GEN\&WS/ POLI SCI 429 | Gender and Politics in Comparative Perspective | 3-4 | INTL BUS/A A E/ ECON 462 | Latin American Economic Development | 3 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 | INTL ST 322 | Washington DC Semester in International Affairs Internship | 4 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |  | Seminar |  |
|  |  |  | INTL ST/ED POL 335 | Globalization and Education | 3 |
|  |  |  | INTL ST/A A E 373 | Globalization, Poverty and | 3 |
| GEOG 302 | Economic Geography: Locational | 4 |  | Development |  |
|  | Behavior |  | INTL ST/A A E 374 | The Growth and Development of | 3 |
| GEOG 318 | Introduction to Geopolitics | 3 |  | Nations in the Global Economy |  |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 | INTL ST 402 | Topics in Politics and Policy in the | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 |  | Global Economy |  |
| GEOG 349 | Europe | 3 | INTL ST 502 | Study Abroad Topics in Politics and Policy in the Global Economy | 1-6 |
| GEOG 355 | Africa, South of the Sahara | 3 |  |  |  |
| GEOG 358 | Human Geography of Southeast Asia | 3 | INTL ST/ <br> GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| GEOG 475 | Topics in Geography (International Migration \& Health) | 1-4 | INTL ST 602 | Topics in Politics and Policy in the Global Economy | 1-4 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 | INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 | JEWISH/ <br> POLI SCI 665 | Israeli Politics and Society | 3-4 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 410 \end{aligned}$ | Minerals as a Public Problem | 3 | JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| GEOSCI/ <br> ENVIR ST 411 | Energy Resources | 3 | JOURN 618 | Mass Communication and Political Behavior | 4 |
| HIST SCI 337 | History of Technology | 3 | JOURN 620 | International Communication | 4 |
| HIST SCI 339 | Technology and Its Critics Since World War II | 3 | JOURN 621 | Mass Communication in Developing Nations | 4 |
| HIST SCI/MED HIST/ | International Health and Global | 3 | L I S 661 | Information Ethics and Policy | 3 |
| POP HLTH 553 | Society |  | LCA/POLI SCI 326 | Politics of South Asia | 3-4 |
| HISTORY 201 | The Historian's Craft (Shanghai Life and Crime) | 3-4 | LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| HISTORY 201 | The Historian's Craft (The Catholic Church) | 3-4 | LEGAL ST/L IS 663 | Introduction to Cyberlaw | 3 |
|  |  |  | MARKETNG/ | Global Marketing Strategy | 3 |
| HISTORY 201 | The Historian's Craft (UW-Latin Amer Relations) | 3-4 | INTL BUS 420 |  |  |
|  |  |  | MED HIST 526 | Medical Technology and the Body | 3 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 | NUTR SCI/ | Introduction to Global Health | 3 |
| HISTORY/ GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 | AGRONOMY/ <br> ENTOM 203 |  |  |
| HISTORY 419 | History of Soviet Russia | 3-4 | PHILOS/ | Environmental Ethics | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 | ENVIR ST 441 |  |  |
|  |  |  | PHILOS 555 | Political Philosophy | 3 |
| HISTORY 450 | Making of Modern South Asia | 3-4 | POLI SCI 266 | The Development of Modern | 3-4 |
| HISTORY 607 | The American Impact Abroad: The | 3 |  | Western Political Thought |  |
|  | Historical Dimension |  | POLI SCI 313 | Bargaining in the Global Economy | 3-4 |
| ILS 371 | Interdisciplinary Studies in the Arts and Humanities (Poli Econ \& Liberal) | 3 | POLI SCI 321 | Latin-American Politics | 3-4 |
|  |  |  | POLI SCI 322 | Politics of Southeast Asia | 3-4 |
|  |  |  | POLI SCI 340 | The European Union: Politics and | 3-4 |
| INTL BUS 200 | International Business | 3 |  |  |  |
|  |  |  | POLI SCI 350 | International Political Economy | 3-4 |


| POLI SCI 351 | Politics of the World Economy | 3-4 | additional Issues classes within their own option. Students must take enough elective credits to attain the required 35 total credits in the major. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POLI SCI 356 | Principles of International Law | 3-4 |  |  |  |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 | oose from: |  |  |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 | Code | Title | Credits |
| POLI SCI 401 | Selected Topics in Political Science (Political Economy) | 3-4 | A A E/ENVIR ST 244 | Economy ${ }^{\text {The International Agricultural }}$ |  |
| POLI SCI 421 | The Challenge of Democratization | 3-4 | A AE 319 | The International Agricultural Economy | 3 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 | AAE/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |  |  |  |
| POLI SCI 438 | Comparative Political Culture | 3-4 | A AE/ECON 473 | Economic Decision Analysis | 4 |
| POLI SCI 460 | Topics in Political Philosophy (Economic Inequality) | 3-4 |  | Economic Growth and Development in Southeast Asia | 3 |
| POLI SCI 460 | Topics in Political Philosophy 3-4(Economy, Politics, Society) |  | AAE/ECON 474 | Economic Problems of Developing Areas | 3 |
| POLI SCI 534 | Socialism and Transitions to the Market | 3-4 | AAE/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| POLI SCI 561 | Radical Political Theory | 3-4 | A A E/ECON/ F\&W ECOL 531 | Natural Resource Economics | 3 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |  |  |  |
| POLI SCI 652 | The Politics of Development | 3-4 | F\&W ECOL 531 | Intellectual Property Rights, Innovation and Technology | 3 |
| POLI SCI 654 | Politics of Revolution | 3-4 |  |  |  |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Pol Sci: CmpartvPo) | 1-4 | A A E/CIV ENGR/ ENVIR ST/ URB R PL 561 | Energy Markets | 3 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Comparative Politics) | 1-4 | AFRICAN 230 | Introduction to Yoruba Life and Culture | 3 |
|  |  |  | AFRICAN/ <br> AFROAMER/ <br> HISTORY/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |  |  |  |
| RELIG ST/ <br> POLI SCI 618 | Political Islam | 3-4 | AFRICAN 300 | African Literature in Translation | 3 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 | AFRICAN 303 | African Literature and Visual Culture | 3 |
| SOC 225 | Contemporary Chinese Society | 3 | AFRICAN/LCA/ <br> RELIG ST 370 | Islam: Religion and Culture | 3-4 |
| SOC/C\&E SOC/ POP HLTH 380 | Contemporary Population Problems for Honors | 3 | AFRICAN 405 | Topics in African Cultural Studies (The Problem of Whiteness) | 3 |
| SOC 620 | Comparative Racial Inequality | 3 | AFRICAN 412 | Contemporary African Fiction | 3-4 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |  | Contemporary African and Caribbean Drama | 3-4 |
| SOC 626 | Social Movements | 3 | AFRICAN/ <br> AFROAMER 413 |  |  |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 | AFRICAN/ <br> FRENCH 440 | African/Francophone Film | 3 |
| SOC 632 | Sociology of Organizations | 3-4 | AFRICAN/ PORTUG 451 | Lusophone African Literature | 3 |
| SOC 633 | Social Stratification | 3 |  |  |  |
| SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 | AFRICAN 453 | Modern African Literature in English | 3-4 |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 | AFRICAN/ FOLKLORE 471 | Oral Traditions and the Written Word | 3-4 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |  |  |  |
|  |  |  |  | Language and Society in Africa | 3-4 |
| SOC/ECON 663 | Population and Society | 3 | AFRICAN 609 | Advanced Topics in Global Black Music Studies | 3 |
| SPANISH/ | Spanish for Business | 3 |  |  |  |
| INTL BUS 329 |  |  | AFROAMER/ <br> ART HIST 241 | Introduction to African Art and Architecture | 3 |
| URB R PL/ECON/ | Housing Economics and Policy | 3 |  |  |  |
| REAL EST 641 |  |  | AFROAMER/ <br> ART HIST 242 | Introduction to Afro-American Art | 3 |


|  | Latin America: An Introdu | 3-4 |
| :---: | :---: | :---: |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  |  |
| LACIS/POLI SCI/ |  |  |
| SOC/SPANISH 260 |  |  |
| AFROAMER 265 | African-American Autobiography | 3 |
| AFROAMER/ | Artistic/Cultural Images of Black | 3 |
| GEN\&WS 267 | Women |  |
| AFROAMER 271 | Selected Topics in African American Culture | 3 |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 275 | Science, Medicine, and Race: A History | 3 |
| AFROAMER/ <br> AFRICAN/ANTHRO/ <br> GEOG/HISTORY/ <br> POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| AFROAMER/ <br> AFRICAN/HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |
| AFROAMER/ | Black Music (1920-Present): | 2 |
| MUSIC 308 | Rhythm Section and Combos |  |
| AFROAMER/ MUSIC 309 | Black Music (1920-Present): Vocalist/Trombone/Misc Instrumental | 2 |
| AFROAMER/ MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 |
| AFROAMER/ MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER 337 | The Harlem Renaissance | 3 |
| AFROAMER 338 | The Black Arts Movement | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |


| ANTHRO 330 | Topics in Ethnology (SE Asia) | 3-4 |
| :---: | :---: | :---: |
| ANTHRO 330 | Topics in Ethnology (Anthropology of Foodways) | 3-4 |
| ANTHRO 330 | Topics in Ethnology (Brazil) | 3-4 |
| ANTHRO 350 | Political Anthropology | 3-4 |
| ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| ANTHRO 358 | Anthropology of China | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
| ART HIST 350 | 19th Century Painting in Europe | 3-4 |
| ART HIST 351 | 20th Century Art in Europe | 3-4 |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present | 3-4 |
| ART HIST 358 | European Architecture: The Modern Movements | 3-4 |
| ART HIST 371 | Chinese Painting | 3-4 |
| ART HIST 372 | Arts of Japan | 3-4 |
| ART HIST 411 | Topics in Asian Art (Modern \& Contempor) | 3-4 |
| ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |
| ART HIST 479 | Art and History in Africa | 3-4 |
| ASIAN 253 | Japanese Popular Culture | 3 |
| ASIAN 300 | Topics in Asian Studies (Indian Traditions Modern Age) | 3 |
| ASIAN 300 | Topics in Asian Studies (Sexuality in South Asia) | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| ASIAN 403 | Southeast Asian Literature | 3 |
| ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 |
| ATM OCN 100 | Weather and Climate | 3 |
| ATM OCN 101 | Weather and Climate | 4 |
| ATM OCN/ENVIR ST GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems | 2-3 |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 |
| ATM OCN/ENVIR ST GEOG 528 | Past Climates and Climatic Change | 3 |
| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| BOTANY 240 | Plants and Humans | 3 |
| C\&E SOC/SOC 245 | Technology and Society | 3 |
| $\begin{aligned} & \text { C\&E SOC/ENVIR ST/ } \\ & \text { SOC } 540 \end{aligned}$ | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |


| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| :---: | :---: | :---: |
| COM ARTS 310 | Topics in Rhetoric and Communication Science (Intercultural Comm \& Rhetoric) | 3 |
| COM ARTS 346 | Critical Internet Studies | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 352 | Film History to 1960 | 3 |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 455 | French Film | 3 |
| COM ARTS 456 | Russian and Soviet Film | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| COM ARTS/ <br> ITALIAN 460 | Italian Film | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 557 | Contemporary Media Industries | 3 |
| COM ARTS 577 | Dynamics of Online Relationships | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms | 3 |
| COMP LIT 375 | Literature and Related Disciplines | 3-4 |
| COMP LIT 379 | Literature and Ethnic Experience | 3-4 |
| DS/LAND ARC 639 | Culture and Built Environment | 3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Intro to Korean Culture) | 1-3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Korean Culture) | 1-3 |
| E A STDS/ E ASIAN 300 | Humanities Topics in East Asian Studies (Survey of Tibetan Buddhism) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Korean) | 1-3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |
| ECON 330 | Money and Banking | 4 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON/HISTORY 466 | The American Economy Since 1865 | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON/A A E 567 | Public Finance in Less Developed Countries | 3 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 |
| ED POL 340 | Comparative Education | 3 |


| ED POL/ <br> ANTHRO 570 | Anthropology and Education | 3 |
| :---: | :---: | :---: |
| ED POL/ <br> HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |
| ED POL 675 | Introduction to Comparative and International Education | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: Global Perspective and Policies | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings | 3 |
| ENGL 352 | Modernist Poetry | 3 |
| ENGL 353 | British Literature since 1900 | 3 |
| ENGL 453 | Topic in British Literature and Culture since 1900 | 3 |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |
| ENGL/THEATRE 575 | British Drama, 1914 to Present | 3 |
| ENVIR ST/ILS 126 | Principles of Environmental Science | 4 |
| ENVIR ST/GEOG 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 |
| ENVIR ST/A A E/ ECON 343 | Environmental Economics | 3-4 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| ENVIR ST/BSE 367 | Renewable Energy Systems | 3 |
| ENVIR ST/ <br> M\&ENVTOX/ <br> PLPATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| ENVIR ST/N E 373 | Nuclear Energy and the Environment | 3 |
| ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Food Systems, Sustainability, and Climate Change) | 1-4 |
| ENVIR ST 400 | Special Topics in the Environment: <br> Biological Aspects of Envir St (Conserving Biodiversity) | 1-4 |
| ENVIR ST 401 | Special Topics: Environmental Perspectives in the Physical Sciences (Sustainability Science) | 1-4 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (People,Environment) | 1-4 |
| ENVIR ST/ <br> ECON/POLI SCI/ <br> URB R PL 449 | Government and Natural Resources | 3-4 |
| ENVIR ST/ POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST 539 | Air Resources Science and Policy | 3 |


| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| :---: | :---: | :---: |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| ENVIR ST/A A E/ ECON/URBRPL 671 | Energy Economics | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 450 | Communities and Forests | 3 |
| F\&W ECOL/ ENVIR ST/ HISTORY 452 | World Forest History | 3 |
| FOLKLORE/ AFRICAN 270 | The Hero and Trickster in African Oral Traditions | 3 |
| FOLKLORE/LCA 279 | Introduction to Turkish Folk Literature | 3 |
| FOLKLORE/ ANTHRO 344 | Anthropological Approaches to Folklore | 3 |
| FOLKLORE 510 | Folklore Theory | 3 |
| FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| FOLKLORE 560 | Folklore in a Digital Age | 3 |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| FRENCH 240 | Immigration and Expression | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer Film) | 1-3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) | 1-3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |


| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| :---: | :---: | :---: |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS/HISTORY/ LCA 472 | Women in Turkish Society | 3 |
| GEN\&WS/ POLI SCI 429 | Gender and Politics in Comparative Perspective | 3-4 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG 321 | Climatology | 3 |
| GEOG/ATM OCN/ <br> ENVIR ST/ <br> GEOSCI 335 | Climatic Environments of the Past | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes | 3 |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History | 4 |
| GEOG 475 | Topics in Geography | 1-4 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |
| GEOG 510 | Economic Geography | 4 |
| GEOG/ENVIR ST 534 | Environmental Governance: <br> Markets, States and Nature | 3 |
| GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 |
| GEOSCI/ <br> ATM OCN 105 | Survey of Oceanography | 3-4 |
| GEOSCI/ <br> ENVIR ST 106 | Environmental Geology | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 410 \end{aligned}$ | Minerals as a Public Problem | 3 |
| GEOSCI/ <br> ENVIR ST 411 | Energy Resources | 3 |


| GERMAN 245 | Topics in Dutch Life and Culture (Dutch Tolerance) | 3 |
| :---: | :---: | :---: |
| GERMAN 245 | Topics in Dutch Life and Culture (Low Lands or High Water) | 3 |
| GERMAN 278 | Topics in German Culture (Kafka and Kafkaesque) | 3 |
| GERMAN 278 | Topics in German Culture (Culture in 20th Century) | 3 |
| GERMAN 305 | Literatur des 20 . und 21. Jahrhunderts | 3-4 |
| GERMAN 325 | Topics in Dutch Literature (Bezetting, Holocaust) | 3 |
| GERMAN 325 | Topics in Dutch Literature (lit:reizen,migratie) | 3 |
| GERMAN 362 | Topics in German Literature (Musik) | 3-4 |
| GERMAN 362 | Topics in German Literature (Migration in deutscher) | 3-4 |
| GERMAN 372 | Topics in German Culture (Deutschsprachige Lieder) | 3-4 |
| GERMAN 372 | Topics in German Culture (Oesterreich) | 3-4 |
| GERMAN 372 | Topics in German Culture (Deutscher Film) | 3-4 |
| GERMAN 372 | Topics in German Culture (Green Germany) | 3-4 |
| GERMAN 372 | Topics in German Culture (ChinaGerman Point of View) | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 445 | Topics in Dutch Culture (Lage landen of hoog water?) | 3-4 |
| GERMAN/ JEWISH 510 | German-Jewish Culture Since the 18th Century | 3 |
| GERMAN/ COM ARTS 655 | German Film | 3 |
| HIST SCI 337 | History of Technology | 3 |
| HIST SCI 339 | Technology and Its Critics Since World War II | 3 |
| HIST SCI/ ENVIR ST 353 | History of Ecology | 3 |
| HIST SCI/HISTORY/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HIST SCI/ENVIR ST/ MED HIST 513 | Environment and Health in Global Perspective | 3 |
| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 |
| HISTORY 201 | The Historian's Craft (various) | 3-4 |
| HISTORY 221 | Explorations in American History <br> (H) (US-Latin Amer Relations) | 3-4 |
| HISTORY 223 | Explorations in European History <br> (H) (Commodity Culture in Europe) | 3-4 |
| HISTORY 223 | Explorations in European History <br> (H) (Wars of Religion Since 1914) | 3-4 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (South Asians in Diaspora) | 3 |


| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (Pan-Asianism) | 3 |
| :---: | :---: | :---: |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY/ <br> GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY/ <br> E A STDS 454 | Samurai: History and Image | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY 503 | Irish and Scottish Migrations | 3 |
| HISTORY 514 | European Cultural History Since 1870 | 3-4 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| ILS 371 | Interdisciplinary Studies in the Arts and Humanities (Tocqueville Democracy) | 3 |
| INTL BUS 200 | International Business | 3 |
| INTL BUS/ <br> GEN BUS 320 | Intercultural Communication in Business | 3 |
| INTL BUS/A A E/ ECON 462 | Latin American Economic Development | 3 |
| INTL BUS 365 | Contemporary Topics (International Perspectives) | 1-3 |


| INTL ST 322 | Washington DC Semester in International Affairs Internship Seminar | 4 |
| :---: | :---: | :---: |
| INTL ST/ POLI SCI 325 | Social Movements and Revolutions in Latin America | 3-4 |
| INTL ST/ POLI SCI 327 | Indian Politics in Comparative Perspective | 3 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |
| INTLST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTLST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| INTL ST 401 | Topics in Global Security | 3-4 |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy | 3-4 |
| INTL ST 403 | Topics in Culture in the Age of Globalization | 3-4 |
| INTL ST 404 | Topics in Global Environment | 3-4 |
| INTL ST/ <br> POLI SCI 423 | Social Mobilization in Latin America | 3 |
| $\begin{aligned} & \text { INTL ST/ } \\ & \text { POLI SCI } 431 \end{aligned}$ | Contentious Politics | 3-4 |
| $\begin{aligned} & \text { INTL ST/ } \\ & \text { POLI SCI } 434 \end{aligned}$ | The Politics of Human Rights | 3-4 |
| INTL ST/ POLI SCI 436 | Political Inequality: Measures, Causes, Effects and Remedies | 3 |
| INTL ST/ POLI SCI 439 | The Comparative Study of Genocide | 3-4 |
| INTL ST 501 | Study Abroad Topics in Global Security | 1-6 |
| INTL ST 502 | Study Abroad Topics in Politics and Policy in the Global Economy | 1-6 |
| INTL ST 503 | Study Abroad Topics in Culture in the Age of Globalization | 1-6 |
| INTL ST 504 | Study Abroad Topics in Global Environment | 1-6 |
| INTL ST 520 | Study Abroad Topics in International Studies | 1-6 |
| INTL ST/ GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| INTL ST 601 | Topics in Global Security | 1-4 |
| INTL ST 602 | Topics in Politics and Policy in the Global Economy | 1-4 |
| INTL ST 603 | Topics in Culture in the Age of Globalization | 1-4 |
| INTL ST 604 | Topics in Global Environment | 1-4 |
| INTL ST 620 | Topics in International Studies | 1-4 |
| INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 450 | Special Topics in Italian Literature (Modern Italian Drama) | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Culture) | 3 |


| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Political Fictn/Film in Italy) | 3 |
| :---: | :---: | :---: |
| ITALIAN/ COM ARTS 460 | Italian Film | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/ <br> HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| JEWISH/ PHILOS 442 | Moral Philosophy and the Holocaust | 3 |
| JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education | 3 |
| JEWISH/ENGL 539 | Jewish Literatures in Diaspora | 3 |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | 3 |
| JEWISH/ POLISCI 665 | Israeli Politics and Society | 3-4 |
| JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| JOURN 618 | Mass Communication and Political Behavior | 4 |
| JOURN 620 | International Communication | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| L I S 201 | The Information Society | 4 |
| LIS 661 | Information Ethics and Policy | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies (Labor in the Americas) | 1-4 |
| LCA 311 | Modern Indian Literatures | 3 |
| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| LCA 361 | Survey of Indonesian Cultures | 3 |
| LCA/RELIG ST 402 | Thought of Gandhi | 3 |
| LCA/ART HIST 428 | Visual Cultures of South Asia | 3 |
| LCA 441 | Language and Society in Southeast Asia | 3 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LCA 630 | Proseminar: Studies in Cultures of Asia (Everyday: Lives, Spaces) | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| LEGAL ST 409 | Human Rights in Law and Society | 3 |
| LEGAL ST/L I S 663 | Introduction to Cyberlaw | 3 |


| LINGUIS/ <br> ANTHRO 430 | Language and Culture | 3-4 |
| :---: | :---: | :---: |
| LITTRANS 203 | Survey of 19th and 20th Century Russian Literature in Translation I | 4 |
| LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation II | 4 |
| LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 220 | Chekhov in Translation | 3-4 |
| LITTRANS 222 | Dostoevsky in Translation | 3-4 |
| LITTRANS 224 | Tolstoy in Translation | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust) | 3 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Russia \& Jews) | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |
| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) (German Lit) | 3 |
| LITTRANS 301 | Modern Indonesian Literature in Translation | 3 |
| LITTRANS 304 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Dutch Lit: Travel \& Migration) | 3 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen | 3-4 |
| LITTRANS 338 | In Translation: Knut Hamsun and the 20th Century Norwegian Novel | 3-4 |
| LITTRANS 343 | In Translation: The Woman in Scandinavian Literature | 3-4 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Evangelion) | 3 |


| LITTRANS 373 | Topics in Japanese Literature (Japanese Ghost Stories) | 3 |
| :---: | :---: | :---: |
| LITTRANS 373 | Topics in Japanese Literature (Writing the Environment) | 3 |
| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation | 3 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| MED HIST/ HIST SCI 668 | Topics in History of Medicine (Health, Disease \& Medicine) | 3 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| NUTR SCI/ AGRONOMY/ ENTOM 203 | Introduction to Global Health | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| PHYSICS/ ENVIR ST 472 | Scientific Background to Global Environmental Problems | 3 |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 313 | Bargaining in the Global Economy | 3-4 |
| POLI SCI/ <br> INTL ST 325 | Social Movements and Revolutions in Latin America | 3-4 |
| POLI SCI 330 | Political Economy of Development | 3 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 343 | Theories of International Security | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 363 | Literature and Politics | 3-4 |


| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/ <br> INTL ST 423 | Social Mobilization in Latin America | 3 |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| POLI SCI 460 | Topics in Political Philosophy (Economic Inequality) | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 534 | Socialism and Transitions to the Market | 3-4 |
| POLI SCI 538 | Politics and Policies in the European Union | 3-4 |
| POLI SCI 561 | Radical Political Theory | 3-4 |
| POLI SCI 601 | Proseminar. Topics in Political Science (Post-Conflict) | 3 |
| POLI SCI/ <br> RELIG ST 618 | Political Islam | 3-4 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |
| POLI SCI 640 | Politics of Japan | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| POLI SCI 659 | Politics and Society: Contemporary Eastern Europe | 3-4 |
| POLI SCI/ASIAN 663 | South Asia and the Global System: Economy, Security \& Culture | 3-4 |
| POLI SCI/ JEWISH 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Political Economy) | 1-4 |
| PORTUG/ <br> GEN\&WS 450 | Brazillian Women Writers | 3 |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| PORTUG 640 | Topics in Luso-Brazilian Literature (LusoAfroBrazilian Studies) | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | 3-4 |
| RELIG ST/ ANTHRO 343 | Anthropology of Religion | 3-4 |
| RELIG ST/ HISTORY 379 | Islam in Iran | 3 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Indian Traditions Modern Age) | 3-4 |


| RELIG ST 400 | Topics in Religious Studies Humanities (Belief \& Unbelief) | 3-4 | SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RELIG ST/HISTORY/ LCA 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 | SOC 620 | Comparative Racial Inequality | 3 |
|  |  |  | SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| RELIG ST/ | Political Islam | 3-4 | SOC 626 | Social Movements | 3 |
| POLI SCI 618 |  |  | SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |  |  |  |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 | SOC 632 | Sociology of Organizations | -4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 | SOC 633 | Social Stratification | 3 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 | SOC/LCA/ <br> RELIG ST 634 | Social Structure of India | 3 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 | SOC 640 | Sociology of the Family | 3 |
|  |  |  | SOC 646 | Race and Ethnic Relations | 3 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 | SOC/ED POL 648 | Sociology of Education | 3 |
| SCAND ST 427 |  | 4 | SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
|  | Contemporary Scandinavian Literature |  | SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SCAND ST/ <br> HISTORY 432 | History of Scandinavia Since 1815 | 3 | SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 | SOC/ECON 663 | Population and Society | 3 |
|  |  |  | SOIL SCI/ | Earth's Water. Natural Science and | 3 |
| SCAND ST/ | Sami Culture, Yesterday and Today | 4 | ATM OCN 132 | Human Use |  |
| FOLKLORE 443 |  |  | SOIL SCI/ENVIR ST/ | Soil: Ecosystem and Resource | 3 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 | GEOG 230 |  |  |
| SCAND ST 635 | Survey of Scandinavian Literature: 1800-1890 | 3 | SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| SLAVIC 242 | Literatures and Cultures of Eastern Europe | 3 | SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 | SPANISH 326 | Survey of Spanish American Literature | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |  | Spanish for Busines | 3 |
| SLAVIC 322 | Fourth Year Russian II | 4 | INTL BUS 329 |  |  |
| SLAVIC/ RELIG ST 325 | Eastern Christianity/Russian | 3 | SPANISH 361 | Spanish Civilization | 3 |
| RELIG ST 325 | Orthodoxy in a Global Context |  | SPANISH 363 | Spanish American Civilization | 3 |
| SLAVIC 405 | Women in Russian Literature | 3-4 | SPANISH 453 | Literature of the Twentieth Century | 3 |
| SLAVIC 420 | Chekhov | 3-4 | SPANISH 460 | Literatura Hispanoamericana (Latin | 3 |
| SLAVIC 434 | Contemporary Russian Culture | 3 |  | American Neo-Vanguards) |  |
| SLAVIC 439 | Russia Today in Literature and Film | 4 | SPANISH 461 | The Spanish American Short Story | 3 |
| SLAVIC 440 | Soviet Literature | 3-4 | SPANISH 462 | Spanish American Theater and | 3 |
| SLAVIC 449 | Istorija srpske i hrvatske literature | 3 |  | Drama |  |
| SLAVIC 454 | Moderna srpska i hrvatska literatura | 3 | SPANISH 463 | The Spanish American Novel | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 | SPANISH 464 | Spanish American Poetry and Essay | 3 |
|  |  |  | SPANISH 465 | Literature and Film in Spanish | 3 |
| SOC 170 | Population Problems | 3-4 |  | America |  |
| SOC 225 | Contemporary Chinese Society | 3 | SPANISH 468 | Topics in Hispanic Culture | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |  | (Documentary Film) |  |
|  |  |  | SPANISH 468 | Topics in Hispanic Culture (Minds | 3 |
| SOC/C\&E SOC/ | Contemporary Population Problems | 3 |  | and Machines) |  |
| POP HLTH 380 | for Honors |  | SPANISH 468 | Topics in Hispanic Culture | 3 |
| SOC 496 | Topics in Sociology (Intercultural Dialogues) | 1-3 |  | (Anthropocene:Cult,Econ,Enviro) |  |
|  |  |  | THEATRE 327 | History of Costume for the Stage | 3 |
| SOC 496 | Topics in Sociology (The Soviet Jewish Experience) | 1-3 | THEATRE 351 | Fundamentals of Asian Stage Discipline | 3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 | THEATRE 420 | Theatre and Society | 3 |
|  |  |  | THEATRE 424 | Contemporary World Theatre and Dramatic Literature | 3 |


| THEATRE 522 | Experimental Drama: The Theatre of Europe 1850-the Present | 3 |
| :---: | :---: | :---: |
| THEATRE 526 | The Theatres of China and Japan | 3 |
| THEATRE/ SLAVIC 532 | History of Russian Theatre | 3 |
| THEATRE/ENGL 577 | Postcolonial Theatre: Drama, Theory and Performance in the Global South | 3 |
| URB R PL/ECON/ REALEST 641 | Housing Economics and Policy | 3 |
| ZOOLOGY/BOTANY/ <br> ENVIR ST 260 | Introductory Ecology | 3 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY/ENVIR ST/ <br> F\&W ECOL 360 | Extinction of Species | 3 |
| ZOOLOGY/AN SCI/ <br> F\&W ECOL 520 | Ornithology | 3 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY/ <br> BOTANY/ENVIR ST/ <br> F\&W ECOL 651 | Conservation Biology | 3 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all INTL ST courses and other courses in the major
2.000 GPA on 15 upper-level major credits, taken in residence

15 credits in the major, taken on the UW-Madison campus ${ }^{3}$
3
Major courses with Intermediate and Advanced level are considered upper level.

## INTERNATIONAL STUDIES, B.S.

International studies (IS) is an interdisciplinary major with a broad background in international and transnational political, social, economic, commercial, and environmental affairs, together with a comparative study of politics, economics, security, and culture. The goal is to provide students with the necessary tools to understand global processes in their totality and how they are situated and lived in specific regions. The major provides an integrated program of courses that lays the foundation for professional training in a wide variety of areas. Such a foundation can be invaluable in securing a place in competitive graduate or professional schools, which, in turn, prepare students for government service, or for other careers with an international focus, including those in multinational corporations, international finance, non-governmental organizations, and institutions of teaching and research.

The IS major complements numerous majors across campus. Many students choose to double major or enhance their studies with one or more certificates, such as the global health certificate or those offered by the area studies centers.

This major is interdisciplinary, offering a wealth of options. Careful planning and consultation with the IS advisor is especially important.

## IS MAJORS SPECIALIZE IN ONE OF THREE OPTIONS:

Option I: Global Security

In this option, majors explore conditions that challenge the ability of people and societies to survive. Students consider the causes of and solutions to political crises and violent conflicts in interstate, transnational, and domestic settings. Using historical and regional approaches, students develop a better understanding of the dilemmas the state and the global community face when confronted by threats to human rights, peace, and stability.

## Option II: Politics and Policy in the Global Economy

This option offers a multidisciplinary survey of international economic and political institutions and transactions, as well as the policy issues pertaining to international commerce and trade, international finance and monetary relations, international macroeconomic policy coordination, U.S. trade imbalances, aid and development, and related environmental and natural resource problems.

## Option III: Culture in the Age of Globalization

In this option, majors investigate cross-cultural interactions at different levels: local, national, and transnational. Students engage in such issues as cosmopolitanism; international and global flows of images, ideas, and people; questions of identity; changing assumptions of what it means to be indigenous and foreign; globalization and technology; and the impact of globalization on cultures.

## STUDY ABROAD

International studies and studying abroad are a natural combination. While study abroad is not a requirement for the major, all IS students are strongly encouraged to pursue a significant international experience during the course of the undergraduate career. Whether through a study abroad program, an internship, or service learning, the experience of studying or working in a foreign culture is invaluable. Many courses taken abroad will count toward the IS major. See the IS advisor for specific guidelines. More information about study abroad and internships is available through International Academic Programs (http:// www.studyabroad.wisc.edu).

## HOW TO GET IN

Students are advised to declare the major by the end of the sophomore year and/or before studying abroad. To be eligible to declare the international studies major a student must have a GPA of 2.000 both in the major and overall, and have completed (or be in progress toward completing) the following courses, with a minimum combined 2.000 GPA:

| Code | Title | Credits |
| :--- | :--- | ---: |
| INTL ST 101 | Introduction to International Studies | $3-4$ |
| Complete the 5th unit of a foreign language 1 | $4-8$ |  |
| Select one of the following: |  |  |
| ECON 101 | Principles of Microeconomics <br> \& ECON 102 | and Principles of Macroeconomics |
| A A E 215 | Introduction to Agricultural and <br> \& ECON 102 | Applied Economics <br> and Principles of Macroeconomics |
| ECON 111 | Principles of Economics- <br> Accelerated Treatment |  |

1 This requirement must be completed before graduation. ESL 118 substitutes for the foreign language admission requirement.
2
ECON 111 requires placement in MATH 221 or higher and is limited enrollment.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT |
|  | Limit one each: COMP SCI, STAT |

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS OF THE MAJOR

Students must declare the major, complete the common requirements, and the requirements for one of the options within the international studies major.

The international studies major offers three options:

1. Culture in the Age of Globalization
2. Global Security
3. Politics and Policy in the Global Economy

A student may not declare or earn more than one major option.

## COMMON MAJOR REQUIREMENTS INTRODUCTORY REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| Complete the 5th Unit of a Foreign Language (see course list below) ${ }^{1}$ |  |  |
| Select one of | wing: | 4-8 |


| ECON 101 | Principles of Microeconomics |
| :--- | :--- |
| \& ECON 102 | and Principles of Macroeconomics |
| A A E 215 | Introduction to Agricultural and <br> \& ECON 102 |
| Applied Economics <br> and Principles of Macroeconomics |  |
| ECON 111 | Principles of Economics- <br> Accelerated Treatment ${ }^{2}$ |
| Total Credits |  |

1 ESL 118 Academic Writing II substitutes for the Foreign Language requirement.
2
ECON 111 requires placement in MATH 221 or higher is limited enrollment.

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN 435 | Advanced Studies in Swahili Language-Grammar | 3 |
| AFRICAN 436 | Advanced Studies in Swahili Language-Readings | 3 |
| AFRICAN/ <br> LCA LANG 445 | Readings in Advanced Arabic Texts | 3 |
| AFRICAN 475 | Fifth Semester Yoruba | 3 |
| AFRICAN 476 | Sixth Semester Yoruba | 3 |
| AFRICAN 493 | Fifth Semester, A Language of Southern Africa | 3 |
| AFRICAN 494 | Sixth Semester, A Language of Southern Africa | 3 |
| AFRICAN 495 | Fifth Semester, A Language of Northern Africa | 3 |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa | 3 |
| AFRICAN 497 | Fifth Semester, A Language of West Africa | 3 |
| AFRICAN 498 | Sixth Semester, A Language of West Africa | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 301 | Fifth Semester Chinese | 4 |
| E ASIAN 302 | Sixth Semester Chinese | 4 |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 335 | Intermediate Japanese Conversation | 3 |
| E ASIAN 347 | Fifth Semester Korean | 3 |
| E ASIAN 348 | Sixth Semester Korean | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 |
| E ASIAN 402 | Eighth Semester Chinese | 3 |
| E ASIAN 403 | Seventh Semester Japanese | 3 |
| E ASIAN 404 | Eighth Semester Japanese | 3 |
| E ASIAN 405 | Seventh Semester Korean | 3 |
| E ASIAN 406 | Eighth Semester Korean | 3 |
| E ASIAN 431 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 432 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 501 | Fifth-year Chinese | 3 |


| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| :---: | :---: | :---: |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ <br> INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH/ITALIAN/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 590 | Advanced Phonetics | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |


| GERMAN 221 | Introduction to German Literature and Culture I | 3 |
| :---: | :---: | :---: |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 |
| GERMAN 225 | Composition and Conversation I | 3 |
| GERMAN 226 | Composition and Conversation II | 3-4 |
| GERMAN 235 | Dutch Conversation and Composition | 3 |
| GERMAN 249 | Intermediate German - Speaking and Listening | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 |
| GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 313 | Third Semester Dutch for Graduate Students | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 |
| GERMAN 337 | Advanced Composition \& Conversation | 3-4 |
| GERMAN 351 | Introduction to German Linguistics | 3-4 |
| GERMAN 352 | Topics in German Linguistics | 3-4 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 |
| GERMAN 369 | Study Abroad in German Linguistics | 2-5 |
| GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
| GERMAN 379 | Study Abroad in Dutch Linguistics | 2-5 |
| GERMAN 410 | Kultur 1648-1918 | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| GERMAN 632 | A Theme in German Literature | 3 |
| GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |
| GREEK 401 | Greek Drama | 3 |
| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| GREEK 505 | Elementary Prose Composition | 3 |
| GREEK 510 | Homer | 3 |
| GREEK 511 | Hesiod | 3 |
| GREEK 512 | Greek Lyric Poets | 3 |
| GREEK 520 | Greek Comedy | 3 |
| GREEK 521 | Greek Tragedy | 3 |
| GREEK 532 | Thucydides | 3 |
| GREEK 541 | Plato | 3 |
| GREEK 551 | Attic Orators | 3 |
| GREEK 560 | Hellenistic Greek | 3 |
| GREEK 564 | Plutarch | 3 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |


| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| :---: | :---: | :---: |
| HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry | 3 |
| HEBR-BIB/ JEWISH 514 | Biblical Texts, Poetry | 3 |
| HEBR-BIB 701 | Aramaic I | 3 |
| HEBR-BIB 702 | Aramaic II | 3 |
| HEBR-BIB 703 | Ugaritic Texts | 3 |
| HEBR-BIB 704 | Canaanite Dialects | 3 |
| HEBR-BIB 705 | Syriac I | 3 |
| HEBR-BIB 706 | Syriac II | 3 |
| HEBR-BIB 723 | Classical Hebrew Linguistics: Historical and Descriptive | 3 |
| HEBR-BIB 751 | The Book of Isaiah | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 311 | Advanced Italian Language | 3 |
| ITALIAN 312 | Writing Workshop | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 423 | Corso Di Stilistica Applicata | 3 |
| ITALIAN/FRENCH/ PORTUG/ <br> SPANISH 429 | Introduction to the Romance Languages | 3 |
| ITALIAN 450 | Special Topics in Italian Literature | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 | II Settecento | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 |
| ITALIAN 635 | Il Romanzo Italiano | 3 |
| ITALIAN 636 | Il Romanzo Italiano | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 651 | II Rinascimento | 3 |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 671 | II Duecento | 3 |
| JEWISH/HEBR- <br> MOD 301 | Introduction to Hebrew Literature | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 |
| LATIN 505 | Elementary Prose Composition | 3 |
| LCA LANG 501 | Fifth Semester Asian Language | 3 |
| LCA LANG 503 | Fifth Semester Burmese | 3 |
| LCA LANG 504 | Sixth Semester Burmese | 3 |
| LCA LANG 505 | Fifth Semester Filipino | 3 |


| LCA LANG 506 | Sixth Semester Filipino | 3 |
| :---: | :---: | :---: |
| LCA LANG 507 | Fifth Semester Hmong | 3 |
| LCA LANG 508 | Sixth Semester Hmong | 3 |
| LCA LANG 509 | Fifth Semester Indonesian | 3 |
| LCA LANG 510 | Sixth Semester Indonesian | 3 |
| LCA LANG 513 | Fifth Semester Khmer | 3 |
| LCA LANG 514 | Sixth Semester Khmer | 3 |
| LCA LANG 515 | Fifth Semester Lao | 3 |
| LCA LANG 516 | Sixth Semester Lao | 3 |
| LCA LANG 517 | Fifth Semester Thai | 3 |
| LCA LANG 518 | Sixth Semester Thai | 3 |
| LCA LANG 519 | Fifth Semester Vietnamese | 3 |
| LCA LANG 520 | Sixth Semester Vietnamese | 3 |
| LCA LANG/ AFRICAN 527 | Advanced Summer Immersion Arabic | 8 |
| LCA LANG 528 | Advanced Summer Immersion Persian | 8 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 |
| LCA LANG 531 | Fifth Semester Kazak | 3 |
| LCA LANG 532 | Sixth Semester Kazak | 3 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |
| LCA LANG 553 | Fifth Semester Hindi | 3-4 |
| LCA LANG 554 | Sixth Semester Hindi | 3-4 |
| LCA LANG 557 | Fifth Semester Tibetan | 4 |
| LCA LANG 558 | Sixth Semester Tibetan | 4 |
| LCA LANG 563 | Fifth Semester Persian | 3 |
| LCA LANG 564 | Sixth Semester Persian | 3 |
| LCA LANG 571 | Fifth Semester Urdu | 3-4 |
| LCA LANG 572 | Sixth Semester Urdu | 3-4 |
| LCA LANG 601 | Seventh Semester Asian Language | 3 |
| LCA LANG 602 | Eighth Semester Asian Language | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| LCA LANG 648 | Advanced Readings in Pali Literature | 3 |
| LCA LANG 653 | Advanced Readings in Hindi Language | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 671 | Advanced Readings in Urdu Language | 3 |
| LCA LANG 675 | Advanced Readings in Sanskrit | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| PORTUG 225 | Third Year Conversation and Composition | 3 |


| PORTUG 226 | Third Year Conversation and Composition | 3 |
| :---: | :---: | :---: |
| PORTUG 311 | Fourth Year Composition and Conversation | 3 |
| PORTUG 312 | Fourth Year Composition and Conversation | 3 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 401 | Contemporary Scandinavian Languages | 3 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SLAVIC 275 | Third Year Russian I | 3-4 |
| SLAVIC 276 | Third Year Russian II | 3-4 |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 309 | Russian Area Studies on Study Abroad | 1-4 |
| SLAVIC 315 | Russian Language and Culture I | 2 |
| SLAVIC 316 | Russian Language and Culture II | 2 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 350 | Special Topics in Russian <br> Language, Literature, and Culture | 3 |


| SLAVIC 420 | Chekhov | 3-4 |
| :---: | :---: | :---: |
| SLAVIC 421 | Gogol | 3-4 |
| SLAVIC 422 | Dostoevsky | 3-4 |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |

## AREA STUDIES

Area studies courses help students focus their on a specific geographic regions. Students must choose one course from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN/ | Africa: An Introductory Survey | 4 |
| AFROAMER/ |  |  |
| ANTHRO/GEOG/ |  | $3-4$ |
| HISTORY/POLI SCI/ |  |  |
| SOC 277 |  | 3 |
| E A STDS/HISTORY/ | Introduction to East Asian |  |
| POLI SCI 255 | Civilizations | 4 |
| GEOG 340 | World Regions in Global Context |  |
| HISTORY 120 | Europe and the Modern World 1815 <br> to the Present | $3-4$ |


| HISTORY 142 | History of South Asia to the Present | 3-4 |
| :---: | :---: | :---: |
| HISTORY 201 | The Historian's Craft (Portraying China) | 3-4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/ EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY/ <br> SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/LCA 458 | History of Southeast Asia Since $1800$ | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 253 | Russia: An Interdisciplinary Survey | 4 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey | 4 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all INTL ST courses and other courses in the major
2.000 GPA on 15 upper-level major credits, taken in residence

15 credits in the major, taken on the UW-Madison campus ${ }^{3}$
3 Major courses designated Intermediate and Advanced level are considered upper level.

## OPTIONS IN THE MAJOR

- International Studies: Culture in an Age of Globalization (p. 830)
- International Studies: Global Security (p. 848)
- International Studies: Politics and Policy in the Global Economy (p. 863)

Each option in the major requires 35 credits. Students select one Area Studies course (above), and the option-specific requirements for Core, Issues, and Elective classes (below). ${ }^{4}$

4
A maximum four courses from a single SUBJECT may be applied to the 35 credits in the major. This excludes INTL ST courses and courses cross-listed in INTL ST. For example: A student with five POLI SCI courses that could apply to the major will see only four of those courses applying in the international studies major. (However, if one of those POLI SCI courses is also cross-listed in INTL ST, that course will not count against the limit, and thus, all five POLI SCI courses will apply in the major). The degree audit (DARS) enforces this limitation.

Though some courses are identified as acceptable for two or more requirements, a course may meet only one requirement. For example, a course that could count in either Option Core or Option Issues will meet only one of those requirements, based on which requirement needs that course to become satisfied. The degree audit (DARS) determines the best scenario.

## DISTINCTION IN THE MAJOR

Students not enrolled in the Honors Program may apply for Distinction in the Major. Criteria include:

1. A 3.500 grade point average in the major
2. Completion of a Senior Thesis, Senior Seminar, or "substantial extra work" in an advanced course in the major
3. A letter of recommendation from a member of the UW-Madison faculty to the international studies advising staff (submitted three weeks prior to the date of graduation).

## HONORS IN THE MAJOR

Students may declare Honors in the International Studies Major in consultation with the International Studies advisor(s). They must declare prior to enrollment in their Senior Honors Thesis (typically second semester of junior year).

## HONORS IN THE INTERNATIONAL STUDIES MAJOR REQUIREMENTS

To earn Honors in the Major in International Studies, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in major courses
- Complete 16 upper-level $^{1}$ major credits, taken for Honors, with individual grades of B or better in each course ${ }^{2}$
- Complete a two-semester Senior Honors Thesis, for a total of 6 credits, or two Senior Seminars, with grades of B or better; choose from:


## Code <br> Title <br> Credits

Senior Honors Thesis (2 courses):

| AFRICAN 681 | Senior Honors Thesis |
| :--- | :--- |
| \& AFRICAN 682 | and Senior Honors Thesis |


| E A STDS 681 \& E A STDS 682 | Senior Honors Thesis and Senior Honors Thesis |
| :---: | :---: |
| E ASIAN 681 \& E ASIAN 682 | Senior Honors Thesis and Senior Honors Thesis |
| ECON 681 <br> \& ECON 682 | Senior Honors Thesis and Senior Honors Thesis |
| FRENCH 681 <br> \& FRENCH 682 | Senior Honors Thesis and Senior Honors Thesis |
| GERMAN 681 \& GERMAN 682 | Senior Honors Thesis-First Semester and Senior Honors Thesis-Second Semester |
| HISTORY 681 <br> \& HISTORY 682 | Senior Honors Thesis and Senior Honors Thesis |
| INTL ST 681 \& INTL ST 682 | Senior Honors Thesis and Senior Honors Thesis |
| POLI SCI 681 <br> \& POLI SCI 682 | Senior Honors Thesis and Senior Honors Thesis |
| PORTUG 681 <br> \& PORTUG 682 | Senior Honors Thesis and Senior Honors Thesis |
| SLAVIC 681 <br> \& SLAVIC 682 | Senior Honors Thesis and Senior Honors Thesis |
| SPANISH 681 <br> \& SPANISH 682 | Senior Honors Thesis and Senior Honors Thesis |
| Senior Seminar (2 courses): |  |
| INTL ST 601 | Topics in Global Security |
| INTL ST 602 | Topics in Politics and Policy in the Global Economy |
| INTL ST 603 | Topics in Culture in the Age of Globalization |
| INTL ST 604 | Topics in Global Environment |
| 1 All intermediate are considered <br> 2 A maximum of 2 Abroad may cou | All intermediate- and advanced-level courses counting in the major are considered upper level. |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Interdisciplinarity) analyzing contemporary political, economic, security and cultural realities globally from multi-disciplinary perspectives, ideally including humanities, social sciences, humanitarian, and sometimes natural science approaches.
2. (Depth of knowledge) mastering at the undergraduate generalist level major issues related to key themes in International Studies (e.g. culture, global security and political economy) by taking 15 credits in one particular theme area.
3. (Regional (studies) grounding) understanding the social, political, economic and cultural forces and conditions that have given rise to the unity and diversity of a specific region of the world today.
4. (Language knowledge) mastering at the undergraduate generalist level a particular facet of life in one or more region of the world by studying a foreign language to at least the advanced (5th semester) level.
5. (Analytical skills) demonstrating the ability to think critically and analytically, the capacity to write clearly and effectively, and the ability to identify and evaluate research methods and outcomes.

## ADVISING AND CAREERS

## INTERNATIONAL STUDIES MAJOR ADVISING STAFF

International studies majors have a wide variety of academic advising and career resources and support. Academic advising is essential to a successful undergraduate experience. For this reason, the international studies major has a professional advisor, a peer advisor, and a career advisor. We recommend that you meet with your advisor at least once per semester to track progress toward your degree, explore study abroad options, and begin the career exploration process. The IS major offers walk-in advising, advising workshops, and scheduled appointments. Students exploring the IS major should plan to attend an Intro to the IS Major workshop (http://www.ismajor.wisc.edu/about/ news-and-events/upcoming-workshop-dates). To learn more about academic advising information, please visit the IS Major website (http:// www.ismajor.wisc.edu/about/current-students/academic-advising).

Students should also begin the career advising process early. The international studies major offers a 1-credit career class designed for sophomores or juniors. Students are strongly encouraged to meet with both the IS career advisor and SuccessWorks at the College of Letters \& Science, and to apply for internship opportunities-both domestically and via International Internship Programs or the Washington DC Internship Program. The IS major also maintains a list of career events (http:// www.ismajor.wisc.edu/about/news-and-events/career-and-internshipevents) across campus that will benefit undergraduate students, hosts career workshops, and has a transition checklist to help students prepare for post-undergraduate life. For more information, please visit our website (http://www.ismajor.wisc.edu/about/current-students/careers).

Molly Donnellan, Academic Advisor
Csanád Siklós, Ph.D., Academic Advisor
Joel Clark, Career Advisor

## LETTERS \& SCIENCE CAREER RESOURCES

The program encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks (https://careers.Is.wisc.edu) at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

The international studies major is directed by Dr. Jo Ellen Fair, Professor of African Cultural Studies.

The advisors for the international studies major are Dr. Csanád Siklós and Molly Donnellan.

The career advisor is Dr. Joel Clark.

## WISCONSIN EXPERIENCE

## STUDY ABROAD

International studies majors are strongly encourage to study abroad. The International Studies Major website (http://www.ismajor.wisc.edu/about/ current-students/study-abroad) provides information about how to plan your experience abroad.

## INTERNSHIP ABROAD

International studies majors are strongly encourage to study abroad. Please review information on the International Studies Major website (http://www.ismajor.wisc.edu/about/current-students/ internships) and the International Internship Program website (http:// internships.international.wisc.edu) about opporunities.

## UNDERGRADUATE RESEARCH

The international studies major encourages students to become engaged in undergraduate research. There are numerous programs (https:// teachlearn.provost.wisc.edu/initiatives-and-programs/undergraduateresearch) that provide research opportunities for undergraduates at UWMadison including:

- Hilldale Undergraduate/Faculty Research Fellowships (https://awards.advising.wisc.edu/all-scholarships/hilldale-undergraduatefaculty-research-fellowship)
- McNair Scholars (http://grad.wisc.edu/mcnair)
- Summer Research Programs (https://grad.wisc.edu/diversity/srop)
- Undergraduate Research Scholars (https://urs.Is.wisc.edu)
- The Wisconsin Idea Undergraduate Fellowship Program (https:// morgridge.wisc.edu/students/wisconsin-idea-fellowships)


## INTERNATIONAL STUDIES: CULTURE IN AN AGE OF GLOBALIZATION

## REQUIREMENTS

## INTRODUCTORY REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| Complete the 5th Unit of a Foreign Language (see course list below) ${ }^{1}$ |  |  |
| Select one of the following: |  | 4-8 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| A AE 215 <br> \& ECON 102 | Introduction to Agricultural and Applied Economics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment ${ }^{2}$ |  |
| Total Credits |  | 7-12 |
| ESL 118 Academic Writing II substitutes for the Foreign Languag requirement. <br> 2 ECON 111 requires placement in MATH 221 or higher is limited enrollment. |  |  |
|  |  |  |
| 5th Unit of Foreign Language Course List |  |  |
| Code | Title | Credits |
| AFRICAN 435 | Advanced Studies in Swahili Language-Grammar | 3 |
| AFRICAN 436 | Advanced Studies in Swahili Language-Readings | 3 |
| AFRICAN/ <br> LCA LANG 445 | Readings in Advanced Arabic Texts | 3 |
| AFRICAN 475 | Fifth Semester Yoruba | 3 |
| AFRICAN 476 | Sixth Semester Yoruba | 3 |
| AFRICAN 493 | Fifth Semester, A Language of Southern Africa | 3 |


| AFRICAN 494 | Sixth Semester, A Language of Southern Africa | 3 |
| :---: | :---: | :---: |
| AFRICAN 495 | Fifth Semester, A Language of Northern Africa | 3 |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa | 3 |
| AFRICAN 497 | Fifth Semester, A Language of West Africa | 3 |
| AFRICAN 498 | Sixth Semester, A Language of West Africa | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 301 | Fifth Semester Chinese | 4 |
| E ASIAN 302 | Sixth Semester Chinese | 4 |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 335 | Intermediate Japanese Conversation | 3 |
| E ASIAN 347 | Fifth Semester Korean | 3 |
| E ASIAN 348 | Sixth Semester Korean | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 |
| E ASIAN 402 | Eighth Semester Chinese | 3 |
| E ASIAN 403 | Seventh Semester Japanese | 3 |
| E ASIAN 404 | Eighth Semester Japanese | 3 |
| E ASIAN 405 | Seventh Semester Korean | 3 |
| E ASIAN 406 | Eighth Semester Korean | 3 |
| E ASIAN 431 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 432 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 501 | Fifth-year Chinese | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ <br> INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |


| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 | GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
|  |  |  | GERMAN 379 | Study Abroad in Dutch Linguistics | 2-5 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 | GERMAN 410 | Kultur 1648-1918 | 3-4 |
|  |  |  | GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 | GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 | GERMAN 632 | A Theme in German Literature | 3 |
|  |  |  | GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
|  |  |  | GERMAN 677 | Seminar in German Culture Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 | GREEK 401 | Greek Drama | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 | GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| FRENCH/ITALIAN/ PORTUG/ <br> SPANISH 429 | Introduction to the Romance Languages | 3 | GREEK 505 | Elementary Prose Composition | 3 |
|  |  |  | GREEK 510 | Homer | 3 |
|  |  |  | GREEK 511 | Hesiod | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 | GREEK 512 | Greek Lyric Poets | 3 |
|  |  |  | GREEK 520 | Greek Comedy | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 | GREEK 521 | Greek Tragedy | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 | GREEK 532 | Thucydides | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 | GREEK 541 | Plato | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 | GREEK 551 | Attic Orators | 3 |
|  |  |  | GREEK 560 | Hellenistic Greek | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 | GREEK 564 | Plutarch | 3 |
|  |  |  | HEBR-MOD/ | Introduction to Hebrew Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 | JEWISH 301 |  |  |
|  |  |  | HEBR-MOD/ | Introduction to Hebrew Literature | 3 |
| FRENCH 590 | Advanced Phonetics | 3 | JEWISH 302 |  |  |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 | HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 | HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 | HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry | 3 |
| GERMAN 225 | Composition and Conversation I | 3 | HEBR-BIB/ | Biblical Texts, Poetry | 3 |
| GERMAN 226 | Composition and Conversation II | 3-4 | JeWISH 51 |  |  |
| GERMAN 235 | Dutch Conversation and | 3 | HEBR-BIB 701 | Aramaic I | 3 |
|  | Composition |  | HEBR-BIB 702 | Aramaic II | 3 |
| GERMAN 249 | Intermediate German - Speaking and Listening | 3 | HEBR-BIB 703 | Ugaritic Texts | 3 |
|  |  |  | HEBR-BIB 704 | Canaanite Dialects | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 | HEBR-BIB 705 | Syriac I | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 | HEBR-BIB 706 | Syriac II | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 | HEBR-BIB 723 | Classical Hebrew Linguistics: | 3 |
| GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 |  | Historical and Descriptive |  |
|  |  |  | HEBR-BIB 751 | The Book of Isaiah | 3 |
| GERMAN 313 | Third Semester Dutch for Graduate Students | 3 | ITALIAN 230 | Modern Italian Culture | 3 |
|  |  |  | ITALIAN 311 | Advanced Italian Language | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 | ITALIAN 312 | Writing Workshop | 3 |
| GERMAN 337 | Advanced Composition \& Conversation | 3-4 | ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| GERMAN 351 | Introduction to German Linguistics | 3-4 | ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| GERMAN 352 | Topics in German Linguistics | 3-4 |  |  |  |
| GERMAN 367 | Study Abroad in German Literature | 2-5 | ITALIAN 423 | Corso Di Stilistica Applicata | 3 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 | ITALIAN/FRENCH/ | Introduction to the Romance | 3 |
| GERMAN 369 | Study Abroad in German Linguistics | 2-5 | PORTUG/ <br> SPANISH 429 | Languages |  |


| ITALIAN 450 | Special Topics in Italian Literature | 3 | LCA LANG 557 | Fifth Semester Tibetan | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 | LCA LANG 558 | Sixth Semester Tibetan | 4 |
|  |  |  | LCA LANG 563 | Fifth Semester Persian | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 | LCA LANG 564 | Sixth Semester Persian | 3 |
|  |  |  | LCA LANG 571 | Fifth Semester Urdu | 3-4 |
| ITALIAN 601 | L'Ottocento | 3 | LCA LANG 572 | Sixth Semester Urdu | 3-4 |
| ITALIAN 621 | II Settecento | 3 | LCA LANG 601 | Seventh Semester Asian Language | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 | LCA LANG 602 | Eighth Semester Asian Language | 3 |
| ITALIAN 635 | II Romanzo Italiano | 3 | LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| ITALIAN 636 | Il Romanzo Italiano | 3 | LCA LANG 617 | Thai Poetry | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 | LCA LANG 618 | Thai Prose Literature: The Short | 3 |
| ITALIAN 651 | Il Rinascimento | 3 |  | Story |  |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 | LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| ITALIAN/ <br> MEDIEVAL 660 | Dante's Divina Commedia | 3 | LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| ITALIAN/ MEDIEVAL 671 | II Duecento | 3 | LCA LANG 648 | Advanced Readings in Pali Literature | 3 |
| JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature | 3 | LCA LANG 653 | Advanced Readings in Hindi Language | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 | LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 | LCA LANG 671 | Advanced Readings in Urdu Language | 3 |
| LATIN 505 | Elementary Prose Composition | 3 | LCA LANG 675 | Advanced Readings in Sanskrit | 3 |
| LCA LANG 501 | Fifth Semester Asian Language | 3 | LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| LCA LANG 503 | Fifth Semester Burmese | 3 | PORTUG 225 | Third Year Conversation and | 3 |
| LCA LANG 504 | Sixth Semester Burmese | 3 |  | Composition |  |
| LCA LANG 505 | Fifth Semester Filipino | 3 | PORTUG 226 | Third Year Conversation and | 3 |
| LCA LANG 506 | Sixth Semester Filipino | 3 |  | Composition |  |
| LCA LANG 507 | Fifth Semester Hmong | 3 | PORTUG 311 | Fourth Year Composition and | 3 |
| LCA LANG 508 | Sixth Semester Hmong | 3 |  | Conversation |  |
| LCA LANG 509 | Fifth Semester Indonesian | 3 | PORTUG 312 | Fourth Year Composition and | 3 |
| LCA LANG 510 | Sixth Semester Indonesian | 3 |  |  |  |
| LCA LANG 513 | Fifth Semester Khmer | 3 | SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| LCA LANG 514 | Sixth Semester Khmer | 3 | SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| LCA LANG 515 | Fifth Semester Lao | 3 | SCAND ST 271 | Readings in Danish Literature | 3-4 |
| LCA LANG 516 | Sixth Semester Lao | 3 | SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to | 3-4 |
| LCA LANG 517 | Fifth Semester Thai | 3 |  | $1900$ |  |
| LCA LANG 518 | Sixth Semester Thai | 3 | SCAND ST 374 | Masterpieces of Scandinavian | 3-4 |
| LCA LANG 519 | Fifth Semester Vietnamese | 3 |  | Literature: the Twentieth Century |  |
| LCA LANG 520 | Sixth Semester Vietnamese | 3 | SCAND ST 375 | The Writings of Hans Christian | 3-4 |
| LCA LANG/ | Advanced Summer Immersion | 8 |  | Andersen |  |
| AFRICAN 527 | Arabic |  | SCAND ST 401 | Contemporary Scandinavian | 3 |
| LCA LANG 528 | Advanced Summer Immersion | 8 |  | Languages |  |
|  | Persian |  | SCAND ST 419 | Scandinavian Children's Literature | 4 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 | SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| LCA LANG 531 | Fifth Semester Kazak | 3 | SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| LCA LANG 532 | Sixth Semester Kazak | 3 | SCAND ST 423 | The Drama of August Strindberg | 4 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 | SCAND ST 424 | Nineteenth-Century Scandinavian | 3-4 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |  | Fiction |  |
| LCA LANG 553 | Fifth Semester Hindi | 3-4 | SCAND ST 425 | Knut Hamsun and the 20th Century | 4 |
| LCA LANG 554 | Sixth Semester Hindi | 3-4 |  | Norwegian Novel |  |


| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| :---: | :---: | :---: |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SLAVIC 275 | Third Year Russian I | 3-4 |
| SLAVIC 276 | Third Year Russian II | 3-4 |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 309 | Russian Area Studies on Study Abroad | 1-4 |
| SLAVIC 315 | Russian Language and Culture I | 2 |
| SLAVIC 316 | Russian Language and Culture II | 2 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 350 | Special Topics in Russian <br> Language, Literature, and Culture | 3 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 421 | Gogol | 3-4 |
| SLAVIC 422 | Dostoevsky | 3-4 |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |


| SPANISH 462 | Spanish American Theater and Drama | 3 |
| :---: | :---: | :---: |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |

## AREA STUDIES

Area studies courses help students focus their on a specific geographic regions. Students must choose one course from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey | 4 |
| E A STDS/HISTORY/ POLISCI 255 | Introduction to East Asian Civilizations | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY 201 | The Historian's Craft (Portraying China) | 3-4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |


| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| :---: | :---: | :---: |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/LCA 458 | History of Southeast Asia Since $1800$ | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC/GEOG/ <br> HISTORY/ <br> POLI SCI 253 | Russia: An Interdisciplinary Survey | 4 |
| SLAVIC/GEOG/ <br> HISTORY/ <br> POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey | 4 |

## CULTURE IN THE AGE OF GLOBALIZATION

In this option, majors investigate cross-cultural interactions at different levels: local, national, and transnational. Students engage in such issues as cosmopolitanism; international and global flows of images, ideas, and people; questions of identity; changing assumptions of what it means to be indigenous and foreign; globalization and technology; and the impact of globalization on cultures.

## Culture Core <br> Two courses from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN 405 | Topics in African Cultural Studies (The Problem of Whiteness) | 3 |
| AFRICAN 669 | Special Topics (Celebrity Culture) | 3 |
| AFRICAN 403 | Theories of African Cultural Studies | 3 |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| INTL ST 403 | Topics in Culture in the Age of Globalization | 3-4 |
| INTL ST 503 | Study Abroad Topics in Culture in the Age of Globalization | 1-6 |
| INTL ST 603 | Topics in Culture in the Age of Globalization | 1-4 |
| INTL ST 620 | Topics in International Studies (Global Social Networks) | 1-4 |
| JOURN 620 | International Communication | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LINGUIS/ | Language and Culture | 3-4 |


| PSYCH 428 | Introduction to Cultural Psychology | $3-4$ |
| :--- | :--- | ---: |
| SOC 626 | Social Movements | 3 |
| THEATRE/ENGL 577 | Postcolonial Theatre: Drama, <br>  <br>  <br>  <br>  <br>  <br>  <br> Theory and Performance in the <br> Global South | 3 |

## Culture Issues

15 credits from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN 230 | Introduction to Yoruba Life and <br> Culture | 3 |
| AFRICAN/ | African and African-American |  |
| AFROAMER/ | Linkages: An Introduction <br> HISTORY/ <br> POLI SCI 297 | 4 |
| AFRICAN 300 | African Literature in Translation <br> (Arabic Fiction \& Falsehood) | 3 |
| AFRICAN 300 | African Literature in Translation <br> (Contemp Arabic Lit \& Cinema) <br> Islam: Religion and Culture | 3 |
| AFRICAN/LCA/ | Is | $3-4$ |


| RELIG ST 370 |  |  |
| :--- | :--- | :--- |
| AFRICAN 412 | Contemporary African Fiction |  |

AFRICAN/ Contemporary African and 3-4

| AFROAMER 413 | Caribbean Drama |
| :--- | :--- |
| AFRICAN/ | African/Francophone Film |

FRENCH 440
AFRICAN/ Lusophone African Literature

| PORTUG 451 |  |
| :--- | :--- |
| AFRICAN 453 |  |


| AFRICAN/ | Oral Traditions and the Written | 3-4 |
| :--- | :--- | :--- |
| FOLKLORE 471 | Word |  |


| AFRICAN 500 | Language and Society in Africa | $3-4$ |
| :--- | :--- | ---: |
| AFROAMER/ | Introduction to African Art and | 3 |


| ART HIST 241 | Architecture | 3 |
| :--- | :--- | :--- |
| AFROAMER/ | Introduction to Afro-American Art |  |


| ART HIST 242 |  |  |
| :--- | :--- | :--- |
| AFROAMER/ | Latin America: An Introduction |  |

ANTHRO/C\&E SOC/

GEOG/HISTORY/
LACIS/POLI SCI/
SOC/SPANISH 260

| AFROAMER 265 | African-American Autobiography | 3 |
| :--- | :--- | :--- |
| AFROAMER/ | Artistic/Cultural Images of Black | 3 |


| GEN\&WS 267 | Women |  |
| :--- | :--- | :--- |
| AFROAMER 271 | Selected Topics in African American | 3 |

AFROAMER 272 Race and American Politics from 3
the New Deal to the New Right
Science, Medicine, and Race: A 3

| AFROAMER/ | Science, Medicine, and Race: A | 3 |
| :--- | :--- | :--- |
| HIST SCI/ | History |  |
| MED HIST 275 |  |  |

GEOG/HISTORY/
POLI SCI/SOC 277

| AFROAMER/ AFRICAN/HISTORY/ | African and African-American Linkages: An Introduction | 4 | AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POLI SCI 297 |  |  | AFROAMER/ | History of the Civil Rights | 3 |
| AFROAMER 302 | Undergraduate Studies in Afro- | 3 | HISTORY 628 | Movement in the United States |  |
|  | American History |  | AFROAMER 631 | Colloquium in Afro-American | 3 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |  | History |  |
| AFROAMER/ MUSIC 308 | Black Music (1920-Present): Rhythm Section and Combos | 2 | AFROAMER/ ART HIST 643 | Selected Topics in African Diaspora Art History | 3 |
| AFROAMER/ MUSIC 309 | Black Music (1920-Present): <br> Vocalist/Trombone/Misc Instrumental | 2 | AFROAMER 669 | Interdisciplinary Studies in the Arts | 1-4 |
|  |  |  | AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| AFROAMER/ <br> MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 | AFROAMER/ ENGL 672 | Selected Topics in Afro-American Literature | 3 |
| AFROAMER/ MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 | AFROAMER 673 | Selected Topics in Afro-American Society | 3 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 | AFROAMER/ ART 674 | Selected Topics on Afro-American Artists | 3 |
|  |  |  | AFROAMER 675 | Selected Topics in Afro-American | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |  | Culture |  |
|  | Afro-American History to 1900 | 3-4 | AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 | AFROAMER 678 | Modern/Contemporary Art of Nigeria and the African Diaspora | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 | ANTHRO 300 | Cultural Anthropology. Theory and Ethnography | 3 |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society | 3 | ANTHRO 327 | Peoples of the Andes Today | 3 |
|  |  |  | ANTHRO 330 | Topics in Ethnology (SE Asia) | 3-4 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 | ANTHRO 330 | Topics in Ethnology (Brazil) | 3-4 |
| AFROAMER 337 |  |  | ANTHRO 350 | Political Anthropology | 3-4 |
| AFROAMER 338 | The Black Arts Movement | 3 | ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 | ANTHRO 358 | Anthropology of China | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 | ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |
| AFROAMER 469 | Interdisciplinary Studies in the Arts | 1-4 | ANTHRO 490 | Undergraduate Seminar | 3 |
| AFROAMER 501 | 19th Century Afro-American Literature | 3 | ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
|  |  |  | ART HIST 350 | 19th Century Painting in Europe | 3-4 |
| AFROAMER/ MUSIC 509 | Seminar in Afro-American Music History and Criticism | 3 | ART HIST 351 | 20th Century Art in Europe | 3-4 |
|  |  |  | ART HIST 354 | Cross-Cultural Arts Around the | 3-4 |
| AFROAMER/ | African American Political Theory | 3-4 |  | Atlantic Rim: 1800 to the Present |  |
| POLI SCI 519 |  |  | ART HIST 358 | European Architecture: The Modern | 3-4 |
| AFROAMER/HDFS/ | African American Families | 3 |  | Movements |  |
| SOC WORK 521 |  |  | ART HIST 371 | Chinese Painting | 3-4 |
| AFROAMER/ | Race, American Medicine and Public Health | 3 | ART HIST 372 | Arts of Japan | 3-4 |
| HIST SCI/ <br> MED HIST 523 |  |  | ART HIST 411 | Topics in Asian Art (Modern \& Contemporary) | 3-4 |
| AFROAMER 525 | Major Authors | 3 | ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |
| AFROAMER/ | History of African American | 3 | ART HIST 479 | Art and History in Africa | 3-4 |
| ED POL 567 | Education |  | ASIAN 253 | Japanese Popular Culture | 3 |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature | 3 | ASIAN 300 | Topics in Asian Studies (Sexuality in South Asia) | 3 |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) | 3 | ASIAN 300 | Topics in Asian Studies (Indian Traditions in Modern Age) | 3 |
|  |  |  | ASIAN 355 | Modern Japanese Literature | 3 |


| ASIAN 403 | Southeast Asian Literature | 3 |
| :---: | :---: | :---: |
| ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 |
| C\&E SOC/SOC 245 | Technology and Society | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |
| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| COM ARTS 346 | Critical Internet Studies | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 352 | Film History to 1960 | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ <br> RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 455 | French Film | 3 |
| COM ARTS 456 | Russian and Soviet Film | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| COM ARTS/ ITALIAN 460 | Italian Film | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 557 | Contemporary Media Industries | 3 |
| COM ARTS 577 | Dynamics of Online Relationships | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms (Global DetectivesFiction and Film) | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms (Calling Planet Earth) | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms (Intro, Comics \& Graphic Novels) | 3 |
| COMP LIT 375 | Literature and Related Disciplines | 3-4 |
| COMP LIT 379 | Literature and Ethnic Experience | 3-4 |
| DS/LAND ARC 639 | Culture and Built Environment | 3 |
| E A STDS/ <br> EASIAN 300 | Humanities Topics in East Asian Studies (Korean Culture) | 1-3 |
| $\begin{aligned} & \text { E A STDS/ } \\ & \text { E ASIAN } 300 \end{aligned}$ | Humanities Topics in East Asian Studies (Survey of Tibetan Buddhism) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Korean) | 1-3 |
| E ASIAN 301 | Fifth Semester Chinese (Contemporary Chinese Society) | 4 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL 340 | Comparative Education | 3 |
| ED POL/ ANTHRO 570 | Anthropology and Education | 3 |
| ED POL/ HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |


| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings | 3 |
| :---: | :---: | :---: |
| ENGL 352 | Modernist Poetry | 3 |
| ENGL 353 | British Literature since 1900 | 3 |
| ENGL 453 | Topic in British Literature and Culture since 1900 | 3 |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |
| ENGL/THEATRE 575 | British Drama, 1914 to Present | 3 |
| FOLKLORE/ AFRICAN 270 | The Hero and Trickster in African Oral Traditions | 3 |
| FOLKLORE/LCA 279 | Introduction to Turkish Folk Literature | 3 |
| FOLKLORE/ ANTHRO 344 | Anthropological Approaches to Folklore | 3 |
| FOLKLORE 510 | Folklore Theory | 3 |
| FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| FOLKLORE 560 | Folklore in a Digital Age | 3 |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| FRENCH 240 | Immigration and Expression | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer Film) | 1-3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) | 1-3 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| GEN\&WS/HISTORY/ LCA 472 | Women in Turkish Society | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |


| GEOG 358 | Human Geography of Southeast | 3 | HISTORY 335 | Korean History, 1945 to present |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Asia |  |  |  |  |


| JOURN 620 | International Communication | 4 |
| :---: | :---: | :---: |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LIS 201 | The Information Society | 4 |
| LCA 311 | Modern Indian Literatures | 3 |
| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| LCA 361 | Survey of Indonesian Cultures | 3 |
| LCA/RELIG ST 402 | Thought of Gandhi | 3 |
| LCA/ART HIST 428 | Visual Cultures of South Asia | 3 |
| LCA 441 | Language and Society in Southeast Asia | 3 |
| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LCA 630 | Proseminar. Studies in Cultures of Asia (Everyday: Lives, Spaces) | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| LINGUIS/ ANTHRO 430 | Language and Culture | 3-4 |
| LITTRANS 203 | Survey of 19th and 20th Century Russian Literature in Translation I | 4 |
| LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation II | 4 |
| LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 220 | Chekhov in Translation | 3-4 |
| LITTRANS 222 | Dostoevsky in Translation | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust in Poland) | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |


| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) (German Literature) | 3 |
| :---: | :---: | :---: |
| LITTRANS 301 | Modern Indonesian Literature in Translation | 3 |
| LITTRANS 304 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Dutch Lit: Travel \& Migration) | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Occupation, Holocaust, Memory) | 3 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen | 3-4 |
| LITTRANS 338 | In Translation: Knut Hamsun and the 20th Century Norwegian Novel | 3-4 |
| LITTRANS 343 | In Translation: The Woman in Scandinavian Literature | 3-4 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Evangelion) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Japanese Ghost Stories) | 3 |
| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation | 3 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| POLI SCI 363 | Literature and Politics | 3-4 |
| PORTUG/ GEN\&WS 450 | Brazillian Women Writers | 3 |
| PORTUG 640 | Topics in Luso-Brazilian Literature (LusoAfroBrazillian Studies) | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | 3-4 |
| RELIG ST/ ANTHRO 343 | Anthropology of Religion | 3-4 |
| RELIG ST/ HISTORY 379 | Islam in Iran | 3 |
| RELIG ST/HISTORY/ LCA 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |
| RELIG ST/ POLI SCI 618 | Political Islam | 3-4 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |


| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| :---: | :---: | :---: |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST/ <br> HISTORY 432 | History of Scandinavia Since 1815 | 3 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SCAND ST 635 | Survey of Scandinavian Literature: 1800-1890 | 3 |
| SLAVIC 242 | Literatures and Cultures of Eastern Europe | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| $\begin{aligned} & \text { SLAVIC/ } \\ & \text { RELIG ST } 325 \end{aligned}$ | Eastern Christianity/Russian Orthodoxy in a Global Context | 3 |
| SLAVIC 405 | Women in Russian Literature | 3-4 |
| SLAVIC 434 | Contemporary Russian Culture | 3 |
| SLAVIC 439 | Russia Today in Literature and Film | 4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 449 | Istorija srpske i hrvatske literature | 3 |
| SLAVIC 454 | Moderna srpska i hrvatska literatura | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SOC 170 | Population Problems | 3-4 |
| SOC 496 | Topics in Sociology (Intercultural Dialogues) | 1-3 |
| SOC 496 | Topics in Sociology (Soc, Cul, Pol Contemporary Russia) | 1-3 |
| SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/LCA/ <br> RELIG ST 634 | Social Structure of India | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC 646 | Race and Ethnic Relations | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |


| SPANISH 460 | Literatura Hispanoamericana | 3 |
| :---: | :---: | :---: |
| SPANISH 460 | Literatura Hispanoamericana (Latin American Neo-Vanguards) | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Documentary Film and Non-Fiction Writing) | 3 |
| THEATRE 327 | History of Costume for the Stage | 3 |
| THEATRE 351 | Fundamentals of Asian Stage Discipline | 3 |
| THEATRE 420 | Theatre and Society | 3 |
| THEATRE 424 | Contemporary World Theatre and Dramatic Literature | 3 |
| THEATRE 522 | Experimental Drama: The Theatre of Europe 1850-the Present | 3 |
| THEATRE 526 | The Theatres of China and Japan | 3 |
| THEATRE/ SLAVIC 532 | History of Russian Theatre | 3 |
| THEATRE/ENGL 577 | Postcolonial Theatre: Drama, Theory and Performance in the Global South | 3 |

## Electives

Students typically take three or four elective courses in the major. These courses can come from Issues lists of different options or they can be additional Issues classes within their own option. Students must take enough elective credits to attain the required 35 total credits in the major. Choose from:
Code Title Credits

A A E/ENVIR ST 244 The Environment and the Global 3
Economy
A A E 319 The International Agricultural 3
Economy
A A E/AGRONOMY/ World Hunger and Malnutrition 3
INTER-AG/
NUTR SCI 350
A A E/ECON 421 Economic Decision Analysis 4
A A E/ECON 473 Economic Growth and Development 3

A A E/ECON 474 Economic Problems of Developing 3
Areas
A A E/ECON 477 Agricultural and Economic 3
Development in Africa
A A E/ECON/ Natural Resource Economics 3
F\&W ECOL 531
A A E/M HR 540 Intellectual Property Rights, 3
Innovation and Technology
A A E/CIV ENGR/ Energy Markets 3
ENVIR ST/
URB R PL 561

| AFRICAN 230 | Introduction to Yoruba Life and Culture | 3 |
| :---: | :---: | :---: |
| AFRICAN/ AFROAMER/ HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFRICAN 300 | African Literature in Translation | 3 |
| AFRICAN 303 | African Literature and Visual Culture | 3 |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture | 3-4 |
| AFRICAN 405 | Topics in African Cultural Studies (The Problem of Whiteness) | 3 |
| AFRICAN 412 | Contemporary African Fiction | 3-4 |
| AFRICAN/ AFROAMER 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFRICAN/ <br> FRENCH 440 | African/Francophone Film | 3 |
| AFRICAN/ PORTUG 451 | Lusophone African Literature | 3 |
| AFRICAN 453 | Modern African Literature in English | 3-4 |
| AFRICAN/ <br> FOLKLORE 471 | Oral Traditions and the Written Word | 3-4 |
| AFRICAN 500 | Language and Society in Africa | 3-4 |
| AFRICAN 609 | Advanced Topics in Global Black Music Studies | 3 |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture | 3 |
| AFROAMER/ ART HIST 242 | Introduction to Afro-American Art | 3 |
| AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/HISTORY/ <br> LACIS/POLI SCI/ <br> SOC/SPANISH 260 | Latin America: An Introduction | 3-4 |
| AFROAMER 265 | African-American Autobiography | 3 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women | 3 |
| AFROAMER 271 | Selected Topics in African American Culture | 3 |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 275 | Science, Medicine, and Race: A History | 3 |
| AFROAMER/ <br> AFRICAN/ANTHRO/ <br> GEOG/HISTORY/ <br> POLISCI/SOC 277 | Africa: An Introductory Survey | 4 |
| AFROAMER/ <br> AFRICAN/HISTORY/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |
| AFROAMER/ MUSIC 308 | Black Music (1920-Present): <br> Rhythm Section and Combos | 2 |


| AFROAMER/ MUSIC 309 | Black Music (1920-Present): <br> Vocalist/Trombone/Misc Instrumental | 2 |
| :---: | :---: | :---: |
| AFROAMER/ MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 |
| AFROAMER/ MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER 337 | The Harlem Renaissance | 3 |
| AFROAMER 338 | The Black Arts Movement | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| AFROAMER/ MUSIC 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| AFROAMER/ AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFROAMER/ ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |
| AFROAMER 456 | Soul Music and the African American Freedom Movement | 3 |
| AFROAMER 469 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 501 | 19th Century Afro-American Literature | 3 |
| AFROAMER/ MUSIC 509 | Seminar in Afro-American Music History and Criticism | 3 |
| AFROAMER/ POLI SCI 519 | African American Political Theory | 3-4 |
| AFROAMER/HDFS/ SOC WORK 521 | African American Families | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER 525 | Major Authors | 3 |
| AFROAMER/ ED POL 567 | History of African American Education | 3 |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature | 3 |


| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| :---: | :---: | :---: |
| AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement | 3 |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 |
| AFROAMER/ <br> ART HIST 643 | Selected Topics in African Diaspora Art History | 3 |
| AFROAMER 669 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| AFROAMER/ <br> ENGL 672 | Selected Topics in Afro-American Literature | 3 |
| AFROAMER 673 | Selected Topics in Afro-American Society | 3 |
| AFROAMER/ <br> ART 674 | Selected Topics on Afro-American Artists | 3 |
| AFROAMER 675 | Selected Topics in Afro-American Culture | 3 |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| AFROAMER 678 | Modern/Contemporary Art of Nigeria and the African Diaspora | 3 |
| AFROAMER/ GEN\&WS 679 | Visual Culture, Gender and Critical Race Theory | 3 |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| ANTHRO 327 | Peoples of the Andes Today | 3 |
| ANTHRO 330 | Topics in Ethnology (SE Asia) | 3-4 |
| ANTHRO 330 | Topics in Ethnology (Anthropology of Foodways) | 3-4 |
| ANTHRO 330 | Topics in Ethnology (Brazil) | 3-4 |
| ANTHRO 350 | Political Anthropology | 3-4 |
| ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| ANTHRO 358 | Anthropology of China | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
| ART HIST 350 | 19th Century Painting in Europe | 3-4 |
| ART HIST 351 | 20th Century Art in Europe | 3-4 |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present | 3-4 |
| ART HIST 358 | European Architecture: The Modern Movements | 3-4 |
| ART HIST 371 | Chinese Painting | 3-4 |
| ART HIST 372 | Arts of Japan | 3-4 |
| ART HIST 411 | Topics in Asian Art (Modern \& Contempor) | 3-4 |
| ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |


| ART HIST 479 | Art and History in Africa | 3-4 |
| :---: | :---: | :---: |
| ASIAN 253 | Japanese Popular Culture | 3 |
| ASIAN 300 | Topics in Asian Studies (Sexuality in South Asia) | 3 |
| ASIAN 300 | Topics in Asian Studies (Indian Traditions Modern Age) | 3 |
| ASIAN 403 | Southeast Asian Literature | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 |
| ATM OCN 100 | Weather and Climate | 3 |
| ATM OCN 101 | Weather and Climate | 4 |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems | 2-3 |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 |
| ATM OCN/ENVIR ST/ GEOG 528 | Past Climates and Climatic Change | 3 |
| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| BOTANY 240 | Plants and Humans | 3 |
| C\&E SOC/SOC 245 | Technology and Society | 3 |
| C\&E SOC/ENVIR ST/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |
| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| COM ARTS 346 | Critical Internet Studies | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 352 | Film History to 1960 | 3 |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ <br> RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 455 | French Film | 3 |
| COM ARTS 456 | Russian and Soviet Film | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| COM ARTS/ <br> ITALIAN 460 | Italian Film | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 557 | Contemporary Media Industries | 3 |
| COM ARTS 577 | Dynamics of Online Relationships | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms | 3 |
| COMP LIT 375 | Literature and Related Disciplines | 3-4 |
| COMP LIT 379 | Literature and Ethnic Experience | 3-4 |
| DS/LAND ARC 639 | Culture and Built Environment | 3 |
| E A STDS/ <br> EASIAN 300 | Humanities Topics in East Asian Studies (Intro to Korean Culture) | 1-3 |


| E A STDS/ <br> EASIAN 300 | Humanities Topics in East Asian Studies (Korean Culture) | 1-3 | ENVIR ST/N E 373 | Nuclear Energy and the Environment | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| E A STDS/ <br> EASIAN 300 | Humanities Topics in East Asian Studies (Survey of Tibetan Buddhism) | 1-3 | ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Food Systems, Sustainability, and Climate | 1-4 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 | ENVIR ST 400 | Change) | 1-4 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Korean) | 1-3 |  | Special Topics in the Environment: Biological Aspects of Envir St (Conserving Biodiversity) |  |
| E ASIAN 352 | Survey of Chinese Literature | 3 | ENVIR ST 401 | Special Topics: Environmental <br> Perspectives in the Physical <br> Sciences (Sustainability Science) | 1-4 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |  |  |  |
| ECON 330 | Money and Banking | 4 | ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (People,Environment) | 1-4 |
| ECON 364 | Survey of International Economics | 3-4 |  |  |  |
| ECON 464 | International Trade and Finance | 3-4 | ENVIR ST/ ECON/POLI SCI/ | Government and Natural Resources | 3-4 |
| ECON/HISTORY 466 | The American Economy Since 1865 | 3-4 |  |  |  |
| ECON 467 | International Industrial Organizations | 3-4 | URB R PL 449 |  | 3 |
|  |  |  | ENVIR ST/ | Introduction to Environmental Health |  |
| ECON 475 | Economics of Growth | 3-4 | POP HLTH 471 |  |  |
| ECON/AAE 567 | Public Finance in Less Developed Countries | 3 | ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 | ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 | ENVIR ST 539 | Air Resources Science and Policy | 3 |
| ED POL 340 | Comparative Education | 3 | ENVIR ST/ <br> SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| ED POL/ | Anthropology and Education | 3 |  |  |  |
| ANTHRO 570 |  |  | ENVIR ST/ | Green Politics: Global Experience, | 3 |
| ED POL/ | History of Radical and Experimental | 3 | URB R PL 668 | American Prospects |  |
| HISTORY 622 | Education in the US and UK |  | ENVIR ST/A A E/ | Energy Economics | 3 |
| ED POL 675 | Introduction to Comparative and International Education | 3 | ECON/URB R PL 671 |  |  |
|  |  |  | F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: Global Perspective and Policies | 3 | F\&W ECOL 410 | Principles of Silviculture | 3 |
|  |  |  | F\&W ECOL 450 | Communities and Forests | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings | 3 | F\&W ECOL/ ENVIR ST/ HISTORY 452 | World Forest History | 3 |
| ENGL 352 | Modernist Poetry | 3 |  |  |  |
| ENGL 353 | British Literature since 1900 | 3 | FOLKLORE/ | The Hero and Trickster in African | 3 |
| ENGL 453 | Topic in British Literature and Culture since 1900 | 3 | AFRICAN 270 | Oral Traditions |  |
|  |  |  | FOLKLORE/LCA 279 | Introduction to Turkish Folk | 3 |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |  | Literature |  |
|  |  |  | FOLKLORE/ | Anthropological Approaches to | 3 |
| ENGL/THEATRE 575 | British Drama, 1914 to Present | 3 | ANTHRO 344 | Folklore |  |
| ENVIR ST/ILS 126 | Principles of Environmental Science | 4 | FOLKLORE 510 | Folklore Theory | 3 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 | FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
|  |  |  | FOLKLORE 560 | Folklore in a Digital Age | 3 |
| ENVIR ST/ATM OCN/ | Global Warming: Science and Impacts | 3 | FRENCH 211 | French Interdisciplinary Studies | 3 |
| GEOG 332 |  |  | FRENCH 240 | Immigration and Expression | 3 |
| ENVIR ST/A A E/ <br> ECON 343 | Environmental Economics | 3-4 | FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 | FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| ENVIR ST/BSE 367 | Renewable Energy Systems | 3 |  |  |  |
| ENVIR ST/ M\&ENVTOX/ | Environmental Law, Toxic Substances, and Conservation | 2 | FRENCH 322 | Introduction to Literature of Modernity | 3 |


| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 | GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FRENCH 348 | Modernity Studies | 3 | GEOG/ENVIR ST/ | American Environmental History | 4 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 | HISTORY 460 |  |  |
|  |  |  | GEOG 475 | Topics in Geography | 1-4 |
| FRENCH 449 | Francophone Modernity Studies | 3 | GEOG/URB R PL 506 | Historical Geography of European | 3 |
| FRENCH 462 | French/Francophone Cultural | 3 |  | Urbanization |  |
|  | Studies Across the Centuries |  | GEOG 510 | Economic Geography | 4 |
| FRENCH 465 | French/Francophone Film | 3 | GEOG/ENVIR ST 534 | Environmental Governance: | 3 |
| FRENCH 467 | Aspects of Contemporary French | 3 |  | Markets, States and Nature |  |
|  | Literature |  | GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| FRENCH 472 | French/Francophone Literature and Women | 3 | GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 | GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 | GEOSCI/ | Survey of Oceanography | 3-4 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer Film) | 1-3 | ATM OCN 105 |  |  |
|  |  |  | GEOSCI/ | Environmental Geology | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) | 1-3 | ENVIR ST 106 |  |  |
|  |  |  | GEOSCI/ | Minerals as a Public Problem | 3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 | ENVIR ST 410 |  |  |
|  |  |  | $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 411 \end{aligned}$ | Energy Resources | 3 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 | GERMAN 245 | Topics in Dutch Life and Culture (Dutch Tolerance) | 3 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 | GERMAN 245 | Topics in Dutch Life and Culture (Low Lands or High Water) | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 | GERMAN 278 | Topics in German Culture (Kafka and Kafkaesque) | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 | GERMAN 278 | Topics in German Culture (Culture in 20th Century) | 3 |
| GEN\&WS/HISTORY/ <br> LCA 472 | Women in Turkish Society | 3 | GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 | GERMAN 325 | Topics in Dutch Literature (Bezetting, Holocaust) | 3 |
| GEOG 101 | Introduction to Human Geography | 4 | GERMAN 325 | Topics in Dutch Literature | 3 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |  | (lit:reizen,migratie) |  |
| GEOG/ENVIR ST 127 | Physical Systems of the | 5 | GERMAN 362 | Topics in German Literature (Musik) | 3-4 |
|  | Environment |  | GERMAN 362 | Topics in German Literature | 3-4 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |  | (Migration in deutscher) |  |
|  |  |  | GERMAN 372 | Topics in German Culture (Deutschsprachige Lieder) | 3-4 |
| GEOG 301 | Geography of Social Organization | 3 | GERMAN 372 | Topics in German Culture | 3-4 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |  | (Oesterreich) |  |
| GEOG 318 | Introduction to Geopolitics | 3 | GERMAN 372 | Topics in German Culture | 3-4 |
| GEOG 321 | Climatology | 3 |  | (Deutscher Film) |  |
| GEOG/ATM OCN/ <br> ENVIR ST/ | Climatic Environments of the Past | 3 | GERMAN 372 | Topics in German Culture (Green Germany) | 3-4 |
| GEOSCI 335 |  |  | GERMAN 372 | Topics in German Culture (China- | 3-4 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |  | German Point of View) |  |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 | GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 | GERMAN 445 | Topics in Dutch Culture (Lage landen of hoog water?) | 3-4 |
| GEOG 349 | Europe | 3 |  |  |  |
| GEOG 355 | Africa, South of the Sahara | 3 | JEWISH 510 | German-Jewish Culture Since the 18th Century | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |  |  |  |


| GERMAN/ COM ARTS 655 | German Film | 3 | HISTORY/LCA 458 | History of Southeast Asia Since $1800$ | 3-4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HIST SCI 337 | History of Technology | 3 | HISTORY 475 | European Social History, 1914- | 3-4 |
| HIST SCI 339 | Technology and Its Critics Since | 3 |  | Present |  |
|  | World War II |  | HISTORY 503 | Irish and Scottish Migrations | 3 |
| HIST SCI/ <br> ENVIR ST 353 | History of Ecology | 3 | HISTORY 514 | European Cultural History Since $1870$ | 3-4 |
| HIST SCI/HISTORY/ MED HIST 508 | Health, Disease and Healing II | 3-4 | HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HIST SCI/ENVIR ST/ MED HIST 513 | Environment and Health in Global Perspective | 3 | HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 | HORT 370 | World Vegetable Crops | 3 |
|  |  |  | ILS 371 | Interdisciplinary Studies | 3 |
| HISTORY 201 | The Historian's Craft (various) | 3-4 |  | Arts and Humanities (Tocqueville |  |
| HISTORY 221 | Explorations in American History <br> (H) (US-Latin Amer Relations) | 3-4 |  | Democracy) |  |
|  |  |  | INTL BUS 200 | International Business | 3 |
| HISTORY 223 | Explorations in European History <br> (H) (Commodity Culture in Europe) | 3-4 | INTL BUS/ GEN BUS 320 | Intercultural Communication in Business | 3 |
| HISTORY 223 | Explorations in European History <br> (H) (Wars of Religion Since 1914) | 3-4 | INTL BUS/A A E/ <br> ECON 462 | Latin American Economic Development | 3 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (South Asians in Diaspora) | 3 | INTL BUS 365 | Contemporary Topics (International Perspectives) | 1-3 |
|  |  |  | INTL ST 322 | Washington DC Semester in | 4 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (Pan-Asianism) | 3 |  | International Affairs Internship Seminar |  |
|  |  |  | INTL ST/ | Social Movements and Revolutions | 3-4 |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 | POLI SCI 325 | in Latin America |  |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 | $\begin{aligned} & \text { INTL ST/ } \\ & \text { POLI SCI } 327 \end{aligned}$ | Indian Politics in Comparative Perspective | 3 |
| HISTORY/GEOG/ | Introduction to Southeast Asia: Vietnam to the Philippines | 4 | INTL ST/ED POL 335 | Globalization and Education | 3 |
| LCA/POLI SCI/ SOC 244 |  |  | INTL ST/A A E 373 | Globalization, Poverty and Development | 3 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 | INTL ST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| HISTORY 319 | The Vietnam Wars | 3-4 | INTL ST 401 | Topics in Global Security | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 | INTL ST 402 | Topics in Politics and Policy in the | 3-4 |
| HISTORY/ | The Caribbean and its Diasporas | 3 |  | Global Economy |  |
| AFROAMER 347 |  |  | INTL ST 403 | Topics in Culture in the Age of | 3-4 |
| HISTORY 357 | The Second World War | 3-4 |  | Globalization |  |
| HISTORY/ | Women and Gender in Modern | 3-4 | INTL ST 404 | Topics in Global Environment | 3-4 |
| GEN\&WS 392 | Europe |  | INTL ST/ | Social Mobilization in Latin America | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 | POLISCI 423 |  |  |
|  |  |  | INTL ST/ | Contentious Politics | 3-4 |
| HISTORY 418 | History of Russia | 3-4 | POLI SCI 431 |  |  |
| HISTORY 419 | History of Soviet Russia | 3-4 | INTL ST/ | The Politics of Human Rights | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 | POLI SCI 434 |  |  |
|  |  |  | INTL ST/ | Political Inequality. Measures, | 3 |
| HISTORY/ <br> LEGAL ST 426 | The History of Punishment | 3-4 | POLI SCI 436 | Causes, Effects and Remedies |  |
|  |  |  | INTL ST/ | The Comparative Study of Genocide | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 | POLI SCI 439 |  |  |
|  |  |  | INTL ST 501 | Study Abroad Topics in Global | 1-6 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |  | Security |  |
|  |  |  | INTL ST 502 | Study Abroad Topics in Politics and | 1-6 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |  | Policy in the Global Economy |  |
| HISTORY/ <br> EA STDS 454 | Samurai: History and Image | 3-4 | INTL ST 503 | Study Abroad Topics in Culture in the Age of Globalization | 1-6 |


| INTL ST 504 | Study Abroad Topics in Global Environment | 1-6 |
| :---: | :---: | :---: |
| INTL ST 520 | Study Abroad Topics in International Studies | 1-6 |
| INTL ST/ GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| INTL ST 601 | Topics in Global Security | 1-4 |
| INTL ST 602 | Topics in Politics and Policy in the Global Economy | 1-4 |
| INTL ST 603 | Topics in Culture in the Age of Globalization | 1-4 |
| INTL ST 604 | Topics in Global Environment | 1-4 |
| INTL ST 620 | Topics in International Studies | 1-4 |
| INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 450 | Special Topics in Italian Literature (Modern Italian Drama) | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Culture) | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Political Fictn/Film in Italy) | 3 |
| ITALIAN/ COM ARTS 460 | Italian Film | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/ <br> HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| JEWISH/ <br> PHILOS 442 | Moral Philosophy and the Holocaust | 3 |
| JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education | 3 |
| JEWISH/ENGL 539 | Jewish Literatures in Diaspora | 3 |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | 3 |
| JEWISH/ <br> POLI SCI 665 | Israeli Politics and Society | 3-4 |
| JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| JOURN 618 | Mass Communication and Political Behavior | 4 |
| JOURN 620 | International Communication | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LIS 201 | The Information Society | 4 |
| LIS 661 | Information Ethics and Policy | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies (Labor in the Americas) | 1-4 |
| LCA 311 | Modern Indian Literatures | 3 |


| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| :---: | :---: | :---: |
| LCA 361 | Survey of Indonesian Cultures | 3 |
| LCA/RELIG ST 402 | Thought of Gandhi | 3 |
| LCA/ART HIST 428 | Visual Cultures of South Asia | 3 |
| LCA 441 | Language and Society in Southeast Asia | 3 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LCA 630 | Proseminar. Studies in Cultures of Asia (Everyday: Lives, Spaces) | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| LEGAL ST 409 | Human Rights in Law and Society | 3 |
| LEGAL ST/LIS 663 | Introduction to Cyberlaw | 3 |
| LINGUIS/ ANTHRO 430 | Language and Culture | 3-4 |
| LITTRANS 203 | Survey of 19th and 20th Century Russian Literature in Translation I | 4 |
| LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation II | 4 |
| LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 220 | Chekhov in Translation | 3-4 |
| LITTRANS 222 | Dostoevsky in Translation | 3-4 |
| LITTRANS 224 | Tolstoy in Translation | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust) | 3 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Russia \& Jews) | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |


| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) (German Lit) | 3 |
| :---: | :---: | :---: |
| LITTRANS 301 | Modern Indonesian Literature in Translation | 3 |
| LITTRANS 304 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Dutch Lit: Travel \& Migration) | 3 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen | 3-4 |
| LITTRANS 338 | In Translation: Knut Hamsun and the 20th Century Norwegian Novel | 3-4 |
| LITTRANS 343 | In Translation: The Woman in Scandinavian Literature | 3-4 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Evangelion) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Japanese Ghost Stories) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Writing the Environment) | 3 |
| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation | 3 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| MED HIST/ HIST SCI 668 | Topics in History of Medicine (Health, Disease \& Medicine) | 3 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| NUTR SCI/ AGRONOMY/ ENTOM 203 | Introduction to Global Health | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| PHYSICS/ <br> ENVIR ST 472 | Scientific Background to Global Environmental Problems | 3 |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 313 | Bargaining in the Global Economy | 3-4 |


| POLI SCI/ <br> INTL ST 325 | Social Movements and Revolutions in Latin America | 3-4 |
| :---: | :---: | :---: |
| POLI SCI/ <br> INTL ST 327 | Indian Politics in Comparative Perspective | 3 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 363 | Literature and Politics | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 390 | Study Abroad Topics in Political Science: International Relations | 1-4 |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| $\begin{aligned} & \text { POLI SCI/ } \\ & \text { INTL ST } 431 \end{aligned}$ | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI 460 | Topics in Political Philosophy ((Economic Inequality)) | 3-4 |
| POLI SCI 534 | Socialism and Transitions to the Market | 3-4 |
| POLI SCI 561 | Radical Political Theory | 3-4 |
| POLI SCI 601 | Proseminar: Topics in Political Science (Post-Conflict) | 3 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| POLI SCI/ JEWISH 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Political Economy) | 1-4 |
| PORTUG/ GEN\&WS 450 | Brazillian Women Writers | 3 |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| PORTUG 640 | Topics in Luso-Brazilian Literature (LusoAfroBrazilian Studies) | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | 3-4 |


| RELIG ST/ <br> ANTHRO 343 | Anthropology of Religion | 3-4 |
| :---: | :---: | :---: |
| RELIG ST/ HISTORY 379 | Islam in Iran | 3 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Indian Traditions Modern Age) | 3-4 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Belief \& Unbelief) | 3-4 |
| RELIG ST/HISTORY/ LCA 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |
| RELIG ST/ POLISCI 618 | Political Islam | 3-4 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST/ HISTORY 432 | History of Scandinavia Since 1815 | 3 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SCAND ST 635 | Survey of Scandinavian Literature: 1800-1890 | 3 |
| SLAVIC 242 | Literatures and Cultures of Eastern Europe | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC/ <br> RELIG ST 325 | Eastern Christianity/Russian Orthodoxy in a Global Context | 3 |
| SLAVIC 405 | Women in Russian Literature | 3-4 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 434 | Contemporary Russian Culture | 3 |
| SLAVIC 439 | Russia Today in Literature and Film | 4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 449 | Istorija srpske i hrvatske literature | 3 |
| SLAVIC 454 | Moderna srpska i hrvatska literatura | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SOC 170 | Population Problems | 3-4 |
| SOC 225 | Contemporary Chinese Society | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOC/C\&E SOC/ POP HLTH 380 | Contemporary Population Problems for Honors | 3 |


| SOC 496 | Topics in Sociology (Intercultural Dialogues) | 1-3 |
| :---: | :---: | :---: |
| SOC 496 | Topics in Sociology (The Soviet Jewish Experience) | 1-3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| $\begin{aligned} & \text { SOC/LCA/ } \\ & \text { RELIG ST } 634 \end{aligned}$ | Social Structure of India | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC 646 | Race and Ethnic Relations | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SOIL SCI/ <br> ATM OCN 132 | Earth's Water. Natural Science and Human Use | 3 |
| SOIL SCI/ENVIR ST/ GEOG 230 | Soil: Ecosystem and Resource | 3 |
| $\begin{aligned} & \text { SOIL SCI/ } \\ & \text { ENVIR ST } 324 \end{aligned}$ | Soils and Environmental Quality | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH/ <br> INTL BUS 329 | Spanish for Business | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana (Latin American Neo-Vanguards) | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Documentary Film) | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Minds and Machines) | 3 |
| SPANISH 468 | Topics in Hispanic Culture <br> (Anthropocene:Cult,Econ,Enviro) | 3 |



| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| :---: | :---: | :---: |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH/ITALIAN/ PORTUG/ <br> SPANISH 429 | Introduction to the Romance Languages | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 590 | Advanced Phonetics | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 |


| GERMAN 222 | Introduction to German Literature and Culture II | 3 |
| :---: | :---: | :---: |
| GERMAN 225 | Composition and Conversation I | 3 |
| GERMAN 226 | Composition and Conversation II | 3-4 |
| GERMAN 235 | Dutch Conversation and Composition | 3 |
| GERMAN 249 | Intermediate German - Speaking and Listening | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 |
| GERMAN 305 | Literatur des 20 . und 21. Jahrhunderts | 3-4 |
| GERMAN 313 | Third Semester Dutch for Graduate Students | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 |
| GERMAN 337 | Advanced Composition \& Conversation | 3-4 |
| GERMAN 351 | Introduction to German Linguistics | 3-4 |
| GERMAN 352 | Topics in German Linguistics | 3-4 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 |
| GERMAN 369 | Study Abroad in German Linguistics | 2-5 |
| GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
| GERMAN 379 | Study Abroad in Dutch Linguistics | 2-5 |
| GERMAN 410 | Kultur 1648-1918 | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| GERMAN 632 | A Theme in German Literature | 3 |
| GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |
| GREEK 401 | Greek Drama | 3 |
| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| GREEK 505 | Elementary Prose Composition | 3 |
| GREEK 510 | Homer | 3 |
| GREEK 511 | Hesiod | 3 |
| GREEK 512 | Greek Lyric Poets | 3 |
| GREEK 520 | Greek Comedy | 3 |
| GREEK 521 | Greek Tragedy | 3 |
| GREEK 532 | Thucydides | 3 |
| GREEK 541 | Plato | 3 |
| GREEK 551 | Attic Orators | 3 |
| GREEK 560 | Hellenistic Greek | 3 |
| GREEK 564 | Plutarch | 3 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |


| HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry | 3 |
| :---: | :---: | :---: |
| HEBR-BIB/ JEWISH 514 | Biblical Texts, Poetry | 3 |
| HEBR-BIB 701 | Aramaic I | 3 |
| HEBR-BIB 702 | Aramaic II | 3 |
| HEBR-BIB 703 | Ugaritic Texts | 3 |
| HEBR-BIB 704 | Canaanite Dialects | 3 |
| HEBR-BIB 705 | Syriac I | 3 |
| HEBR-BIB 706 | Syriac II | 3 |
| HEBR-BIB 723 | Classical Hebrew Linguistics: Historical and Descriptive | 3 |
| HEBR-BIB 751 | The Book of Isaiah | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 311 | Advanced Italian Language | 3 |
| ITALIAN 312 | Writing Workshop | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 423 | Corso Di Stilistica Applicata | 3 |
| ITALIAN/FRENCH/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages | 3 |
| ITALIAN 450 | Special Topics in Italian Literature | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 | II Settecento | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 |
| ITALIAN 635 | II Romanzo Italiano | 3 |
| ITALIAN 636 | Il Romanzo Italiano | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 651 | Il Rinascimento | 3 |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 671 | II Duecento | 3 |
| JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 |
| LATIN 505 | Elementary Prose Composition | 3 |
| LCA LANG 501 | Fifth Semester Asian Language | 3 |
| LCA LANG 503 | Fifth Semester Burmese | 3 |
| LCA LANG 504 | Sixth Semester Burmese | 3 |
| LCA LANG 505 | Fifth Semester Filipino | 3 |
| LCA LANG 506 | Sixth Semester Filipino | 3 |


| LCA LANG 507 | Fifth Semester Hmong | 3 |
| :---: | :---: | :---: |
| LCA LANG 508 | Sixth Semester Hmong | 3 |
| LCA LANG 509 | Fifth Semester Indonesian | 3 |
| LCA LANG 510 | Sixth Semester Indonesian | 3 |
| LCA LANG 513 | Fifth Semester Khmer | 3 |
| LCA LANG 514 | Sixth Semester Khmer | 3 |
| LCA LANG 515 | Fifth Semester Lao | 3 |
| LCA LANG 516 | Sixth Semester Lao | 3 |
| LCA LANG 517 | Fifth Semester Thai | 3 |
| LCA LANG 518 | Sixth Semester Thai | 3 |
| LCA LANG 519 | Fifth Semester Vietnamese | 3 |
| LCA LANG 520 | Sixth Semester Vietnamese | 3 |
| LCA LANG/ AFRICAN 527 | Advanced Summer Immersion Arabic | 8 |
| LCA LANG 528 | Advanced Summer Immersion Persian | 8 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 |
| LCA LANG 531 | Fifth Semester Kazak | 3 |
| LCA LANG 532 | Sixth Semester Kazak | 3 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |
| LCA LANG 553 | Fifth Semester Hindi | 3-4 |
| LCA LANG 554 | Sixth Semester Hindi | 3-4 |
| LCA LANG 557 | Fifth Semester Tibetan | 4 |
| LCA LANG 558 | Sixth Semester Tibetan | 4 |
| LCA LANG 563 | Fifth Semester Persian | 3 |
| LCA LANG 564 | Sixth Semester Persian | 3 |
| LCA LANG 571 | Fifth Semester Urdu | 3-4 |
| LCA LANG 572 | Sixth Semester Urdu | 3-4 |
| LCA LANG 601 | Seventh Semester Asian Language | 3 |
| LCA LANG 602 | Eighth Semester Asian Language | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| LCA LANG 648 | Advanced Readings in Pali Literature | 3 |
| LCA LANG 653 | Advanced Readings in Hindi Language | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 671 | Advanced Readings in Urdu Language | 3 |
| LCA LANG 675 | Advanced Readings in Sanskrit | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| PORTUG 225 | Third Year Conversation and Composition | 3 |
| PORTUG 226 | Third Year Conversation and Composition | 3 |


| PORTUG 311 | Fourth Year Composition and Conversation | 3 |
| :---: | :---: | :---: |
| PORTUG 312 | Fourth Year Composition and Conversation | 3 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 401 | Contemporary Scandinavian Languages | 3 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SLAVIC 275 | Third Year Russian I | 3-4 |
| SLAVIC 276 | Third Year Russian II | 3-4 |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 309 | Russian Area Studies on Study Abroad | 1-4 |
| SLAVIC 315 | Russian Language and Culture I | 2 |
| SLAVIC 316 | Russian Language and Culture II | 2 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 350 | Special Topics in Russian Language, Literature, and Culture | 3 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 421 | Gogol | 3-4 |


| SLAVIC 422 | Dostoevsky | 3-4 |
| :---: | :---: | :---: |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |

## AREA STUDIES

Area studies courses help students focus their on a specific geographic regions. Students must choose one course from:

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN/ | Africa: An Introductory Survey | 4 |
| AFROAMER/ |  |  |
| ANTHRO/GEOG/ |  | $3-4$ |
| HISTORY/POLI SCI/ |  |  |
| SOC 277 |  | 3 |
| E A STDS/HISTORY/ |  |  |
| POLI SCI 255 | Civilizations | 4 |
| GEOG 340 | World Regions in Global Context |  |
| HISTORY 120 | Europe and the Modern World 1815 <br> to the Present | The Middle East in the 20th Century |
| HISTORY 139 | The | $3-4$ |
| HISTORY 142 | History of South Asia to the Present | $3-4$ |


| HISTORY 201 | The Historian's Craft (Portraying China) | 3-4 |
| :---: | :---: | :---: |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EA STDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 253 | Russia: An Interdisciplinary Survey | 4 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey | 4 |

## GLOBAL SECURITY

In this option, majors explore conditions that challenge the ability of people and societies to survive. Students consider the causes of and solutions to political crises and violent conflicts in interstate, transnational, and domestic settings. Using historical and regional approaches, students develop a better understanding of the dilemmas the state and the global community face when confronted by threats to human rights, peace, and stability.

## Global Security Core

Two courses from:

## Code

## Title

ANTHRO 606 Ethnicity, Nations, and Nationalism

| HIST SCI/MED HIST/ | International Health and Global |  |
| :--- | :--- | ---: |
| POP HLTH 553 | Society |  |
| HISTORY/ | The History of Punishment | 3 |
| LEGAL ST 426 |  | $3-4$ |
| HISTORY 434 | American Foreign Relations, 1901 to <br> the Present | $3-4$ |
| INTL ST 401 | Topics in Global Security | $3-4$ |
| INTL ST/ | Contentious Politics | $3-4$ |
| POLI SCI 431 | Study Abroad Topics in Global <br> INTL ST 501 | Security |

## Global Security Issues

15 credits from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| A AE 319 | The International Agricultural Economy | 3 |
| A A E/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| A A E/ECON 473 | Economic Growth and Development in Southeast Asia | 3 |
| A A E/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| ANTHRO 330 | Topics in Ethnology | 3-4 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
| ASIAN 300 | Topics in Asian Studies (Gender and Sexuality) | 3 |


| $\begin{aligned} & \text { C\&E SOC/ENVIR ST/ } \\ & \text { SOC } 540 \end{aligned}$ | Sociology of International Development, Environment, and Sustainability | 3 |
| :---: | :---: | :---: |
| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| COM ARTS 310 | Topics in Rhetoric and Communication Science (Intercultural Comm \& Rhetoric) | 3 |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 573 | Rhetoric of Globalization and Transnationalism | 3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL 340 | Comparative Education | 3 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST/ <br> POP HLTH 560 | Health Impact Assessment of Global Environmental Change | 3 |
| ENVIR ST/ <br> SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| ENVIR ST/A A E/ ECON/URB R PL 671 | Energy Economics | 3 |
| F\&W ECOL/ ENVIR ST/ HISTORY 452 | World Forest History | 3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS/ <br> POLI SCI 429 | Gender and Politics in Comparative Perspective | 3-4 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |


| GEOG 358 | Human Geography of Southeast <br> Asia | 3 |
| :--- | :--- | ---: |
| GEOG 475 | Topics in Geography (International <br> Migration, Health, and Human <br> Rights) | $1-4$ |
| GEOG/URB R PL | 506 |  |
| Historical Geography of European |  |  |
| Urbanization |  |  |$\quad 3$


| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| :---: | :---: | :---: |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| ILS 371 | Interdisciplinary Studies in the Arts and Humanities (Political Economy \& Liberal) | 3 |
| INTL BUS/A A E/ ECON 462 | Latin American Economic Development | 3 |
| INTL ST 322 | Washington DC Semester in International Affairs Internship Seminar | 4 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |
| INTL ST 401 | Topics in Global Security | 3-4 |
| INTL ST/ <br> POLI SCI 431 | Contentious Politics | 3-4 |
| $\begin{aligned} & \text { INTL ST/ } \\ & \text { POLI SCI } 434 \end{aligned}$ | The Politics of Human Rights | 3-4 |
| INTL ST 501 | Study Abroad Topics in Global Security | 1-6 |
| INTL ST/ GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| INTL ST 601 | Topics in Global Security | 1-4 |
| INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| JOURN 618 | Mass Communication and Political Behavior | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| LCA 630 | Proseminar: Studies in Cultures of Asia (Human Rights in Asia) | 3 |
| LEGAL ST 409 | Human Rights in Law and Society | 3 |
| LEGALST/LIS 663 | Introduction to Cyberlaw | 3 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust in Poland) | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Occupation, Holocaust, Memory in Dutch Literature) | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| MED HIST/ <br> HIST SCI 668 | Topics in History of Medicine (Health, Disease \& Medicine) | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 334 | Russian Politics | 3-4 |

enough elective credits to attain the required 35 total credits in the major. Choose from:

## Code Title

| A A E/ENVIR ST 244 | The Environment and the Global |
| :--- | :--- | ---: |
|  | Economy |$\quad 3$


| AFROAMER/ | Latin America: An Introduction | 3-4 |
| :---: | :---: | :---: |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  |  |
| LACIS/POLI SCI/ |  |  |
| SOC/SPANISH 260 |  |  |
| AFROAMER 265 | African-American Autobiography | 3 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women | 3 |
| AFROAMER 271 | Selected Topics in African American Culture | 3 |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 275 | Science, Medicine, and Race: A History | 3 |
| AFROAMER/ <br> AFRICAN/ANTHRO/ <br> GEOG/HISTORY/ <br> POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| AFROAMER/ <br> AFRICAN/HISTORY/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |
| AFROAMER/ MUSIC 308 | Black Music (1920-Present): Rhythm Section and Combos | 2 |
| AFROAMER/ MUSIC 309 | Black Music (1920-Present): Vocalist/Trombone/Misc Instrumental | 2 |
| AFROAMER/ MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 |
| AFROAMER/ MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER 337 | The Harlem Renaissance | 3 |
| AFROAMER 338 | The Black Arts Movement | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |


| AFROAMER/ MUSIC 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| :---: | :---: | :---: |
| AFROAMER/ <br> AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFROAMER/ ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |
| AFROAMER 456 | Soul Music and the African American Freedom Movement | 3 |
| AFROAMER 469 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 501 | 19th Century Afro-American Literature | 3 |
| AFROAMER/ MUSIC 509 | Seminar in Afro-American Music History and Criticism | 3 |
| AFROAMER/ POLI SCI 519 | African American Political Theory | 3-4 |
| AFROAMER/HDFS/ SOC WORK 521 | African American Families | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER 525 | Major Authors | 3 |
| AFROAMER/ ED POL 567 | History of African American Education | 3 |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature | 3 |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement | 3 |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 |
| AFROAMER/ ART HIST 643 | Selected Topics in African Diaspora Art History | 3 |
| AFROAMER 669 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| AFROAMER/ ENGL 672 | Selected Topics in Afro-American Literature | 3 |
| AFROAMER 673 | Selected Topics in Afro-American Society | 3 |
| AFROAMER/ ART 674 | Selected Topics on Afro-American Artists | 3 |
| AFROAMER 675 | Selected Topics in Afro-American Culture | 3 |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical Perspectives in Black Women's Writings | 3 |
| AFROAMER 678 | Modern/Contemporary Art of Nigeria and the African Diaspora | 3 |
| AFROAMER/ GEN\&WS 679 | Visual Culture, Gender and Critical Race Theory | 3 |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| ANTHRO 327 | Peoples of the Andes Today | 3 |


| ANTHRO 330 | Topics in Ethnology (SE Asia) | 3-4 |
| :---: | :---: | :---: |
| ANTHRO 330 | Topics in Ethnology (Anthropology of Foodways) | 3-4 |
| ANTHRO 330 | Topics in Ethnology (Brazil) | 3-4 |
| ANTHRO 350 | Political Anthropology | 3-4 |
| ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| ANTHRO 358 | Anthropology of China | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
| ART HIST 350 | 19th Century Painting in Europe | 3-4 |
| ART HIST 351 | 20th Century Art in Europe | 3-4 |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present | 3-4 |
| ART HIST 358 | European Architecture: The Modern Movements | 3-4 |
| ART HIST 371 | Chinese Painting | 3-4 |
| ART HIST 372 | Arts of Japan | 3-4 |
| ART HIST 411 | Topics in Asian Art (Modern \& Contempor) | 3-4 |
| ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |
| ART HIST 479 | Art and History in Africa | 3-4 |
| ASIAN 253 | Japanese Popular Culture | 3 |
| ASIAN 300 | Topics in Asian Studies (Indian Traditions Modern Age) | 3 |
| ASIAN 300 | Topics in Asian Studies (Sexuality in South Asia) | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| ASIAN 403 | Southeast Asian Literature | 3 |
| ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 |
| ATM OCN 100 | Weather and Climate | 3 |
| ATM OCN 101 | Weather and Climate | 4 |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems | 2-3 |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 |
| ATM OCN/ENVIR ST/ GEOG 528 | Past Climates and Climatic Change | 3 |
| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| BOTANY 240 | Plants and Humans | 3 |
| C\&E SOC/SOC 245 | Technology and Society | 3 |
| $\begin{aligned} & \text { C\&E SOC/ENVIR ST/ } \\ & \text { SOC } 540 \end{aligned}$ | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |


| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| :---: | :---: | :---: |
| COM ARTS 310 | Topics in Rhetoric and Communication Science (Intercultural Comm \& Rhetoric) | 3 |
| COM ARTS 346 | Critical Internet Studies | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 352 | Film History to 1960 | 3 |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 455 | French Film | 3 |
| COM ARTS 456 | Russian and Soviet Film | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| COM ARTS/ ITALIAN 460 | Italian Film | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 557 | Contemporary Media Industries | 3 |
| COM ARTS 577 | Dynamics of Online Relationships | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms | 3 |
| COMP LIT 375 | Literature and Related Disciplines | 3-4 |
| COMP LIT 379 | Literature and Ethnic Experience | 3-4 |
| DS/LAND ARC 639 | Culture and Built Environment | 3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Intro to Korean Culture) | 1-3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Korean Culture) | 1-3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Survey of Tibetan Buddhism) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Korean) | 1-3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |
| ECON 330 | Money and Banking | 4 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON/HISTORY 466 | The American Economy Since 1865 | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON/AAE 567 | Public Finance in Less Developed Countries | 3 |
| ED POL 150 | Education and Public Policy <br> (Human Rights \& Education) | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 |
| ED POL 340 | Comparative Education | 3 |


| ED POL/ <br> ANTHRO 570 | Anthropology and Education | 3 |
| :---: | :---: | :---: |
| ED POL/ HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |
| ED POL 675 | Introduction to Comparative and International Education | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: Global Perspective and Policies | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings | 3 |
| ENGL 352 | Modernist Poetry | 3 |
| ENGL 353 | British Literature since 1900 | 3 |
| ENGL 453 | Topic in British Literature and Culture since 1900 | 3 |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |
| ENGL/THEATRE 575 | British Drama, 1914 to Present | 3 |
| ENVIR ST/ILS 126 | Principles of Environmental Science | 4 |
| ENVIR ST/GEOG 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 |
| ENVIR ST/A A E/ <br> ECON 343 | Environmental Economics | 3-4 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| ENVIR ST/BSE 367 | Renewable Energy Systems | 3 |
| ENVIR ST/ M\&ENVTOX/ PLPATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| ENVIR ST/N E 373 | Nuclear Energy and the Environment | 3 |
| ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Food Systems, Sustainability, and Climate Change) | 1-4 |
| ENVIR ST 400 | Special Topics in the Environment: <br> Biological Aspects of Envir St <br> (Conserving Biodiversity) | 1-4 |
| ENVIR ST 401 | Special Topics: Environmental <br> Perspectives in the Physical <br> Sciences (Sustainability Science) | 1-4 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (People,Environment) | 1-4 |
| ENVIR ST/ ECON/POLI SCI/ URB R PL 449 | Government and Natural Resources | 3-4 |
| ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST 539 | Air Resources Science and Policy | 3 |


| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| :---: | :---: | :---: |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| ENVIR ST/A A E/ ECON/URB R PL 671 | Energy Economics | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 450 | Communities and Forests | 3 |
| F\&W ECOL/ ENVIR ST/ HISTORY 452 | World Forest History | 3 |
| FOLKLORE/ AFRICAN 270 | The Hero and Trickster in African Oral Traditions | 3 |
| FOLKLORE/LCA 279 | Introduction to Turkish Folk Literature | 3 |
| FOLKLORE/ ANTHRO 344 | Anthropological Approaches to Folklore | 3 |
| FOLKLORE 510 | Folklore Theory | 3 |
| FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| FOLKLORE 560 | Folklore in a Digital Age | 3 |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| FRENCH 240 | Immigration and Expression | 3 |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer Film) | 1-3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) | 1-3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 |
| GEN\&WS/ AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |


| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| :---: | :---: | :---: |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS/HISTORY/ LCA 472 | Women in Turkish Society | 3 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG 321 | Climatology | 3 |
| $\begin{aligned} & \text { GEOG/ATM OCN/ } \\ & \text { ENVIR ST/ } \\ & \text { GEOSCI } 335 \end{aligned}$ | Climatic Environments of the Past | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes | 3 |
| GEOG/ENVIR ST/ <br> HISTORY 460 | American Environmental History | 4 |
| GEOG 475 | Topics in Geography | 1-4 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |
| GEOG 510 | Economic Geography | 4 |
| GEOG/ENVIR ST 534 | Environmental Governance: Markets, States and Nature | 3 |
| GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 |
| GEOSCI/ <br> ATM OCN 105 | Survey of Oceanography | 3-4 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 106 \end{aligned}$ | Environmental Geology | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 410 \end{aligned}$ | Minerals as a Public Problem | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 411 \end{aligned}$ | Energy Resources | 3 |
| GERMAN 245 | Topics in Dutch Life and Culture (Dutch Tolerance) | 3 |


| GERMAN 245 | Topics in Dutch Life and Culture <br> (Low Lands or High Water) | 3 | HISTORY 241 | Latin America from 1780 to 1940 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| INTL ST/ POLI SCI 327 | Indian Politics in Comparative Perspective | 3 | JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| INTL ST/ED POL 335 | Globalization and Education | 3 | JEWISH/ | Israeli Fiction in Translation | 3-4 |
| INTL ST/A A E 373 | Globalization, Poverty and Development | 3 | LITTRANS 367 |  |  |
|  |  |  | JEWISH/ | Eastern European Jews in the | 3-4 |
| INTL ST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 | HISTORY 416 | United States, 1880s-1930s |  |
|  |  |  | JEWISH/ | Moral Philosophy and the | 3 |
| INTL ST 401 | Topics in Global Security | 3-4 | PHILOS 442 | Holocaust |  |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy | 3-4 | JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education | 3 |
| INTL ST 403 | Topics in Culture in the Age of Globalization | 3-4 | JEWISH/ENGL 539 | Jewish Literatures in Diaspora | 3 |
|  |  |  | JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | 3 |
| INTL ST 404 | Topics in Global Environment | 3-4 |  |  |  |
| INTL ST/ POLI SCI 423 | Social Mobilization in Latin America | 3 | JEWISH/ <br> POLISCI 665 | Israeli Politics and Society | 3-4 |
| INTL ST/ POLI SCI 431 | Contentious Politics | 3-4 | JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| $\begin{aligned} & \text { INTL ST/ } \\ & \text { POLI SCI } 434 \end{aligned}$ | The Politics of Human Rights | 3-4 | JOURN 618 | Mass Communication and Political Behavior | 4 |
| INTL ST/ | The Comparative Study of Genocide | 3-4 | JOURN 620 | International Communication | 4 |
| POLI SCI 439 |  |  | JOURN 621 | Mass Communication in Developing | 4 |
| INTL ST 501 | Study Abroad Topics in Global Security | 1-6 |  | Nations |  |
|  |  |  | L I S 201 | The Information Society | 4 |
| INTL ST 502 | Study Abroad Topics in Politics and Policy in the Global Economy | 1-6 | LIS 661 | Information Ethics and Policy | 3 |
|  |  |  | LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies (Labor in the Americas) | 1-4 |
| INTL ST 503 | Study Abroad Topics in Culture in the Age of Globalization | 1-6 |  |  |  |
| INTL ST 504 | Study Abroad Topics in Global Environment | 1-6 | LCA 311 | Modern Indian Literatures | 3 |
|  |  |  | LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| INTL ST 520 | Study Abroad Topics in International Studies | 1-6 | LCA 361 | Survey of Indonesian Cultures | 3 |
|  |  |  | LCA/RELIG ST 402 | Thought of Gandhi | 3 |
| INTL ST/ GEN\&WS 535 | Women's Global Health and Human Rights | 3 | LCA/ART HIST 428 | Visual Cultures of South Asia | 3 |
| INTL ST 601 | Topics in Global Security | 1-4 | LCA 441 | Language and Society in Southeast Asia | 3 |
| INTL ST 602 | Topics in Politics and Policy in the Global Economy | 1-4 | LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| INTL ST 603 | Topics in Culture in the Age of Globalization | 1-4 | LCA 579 | Fiction and Ethnography in Turkey | 3 |
| INTL ST 604 | Topics in Global Environment | 1-4 | LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| INTL ST 620 | Topics in International Studies | 1-4 | LCA 630 | Proseminar: Studies in Cultures of Asia (Everyday: Lives, Spaces) | 3 |
| INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |  |  |  |
|  |  |  | LCA LANG 617 | Thai Poetry | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 | LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |  |  |  |
|  |  |  | LCA LANG 654 | Advanced Readings in Hindi | 3 |
| ITALIAN 450 | Special Topics in Italian Literature (Modern Italian Drama) | 3 |  | Literature |  |
|  |  |  | LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Culture) | 3 | LEGAL ST 409 | Human Rights in Law and Society | 3 |
|  |  |  | LEGAL ST/L I S 663 | Introduction to Cyberlaw | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Political Fictn/Film in Italy) | 3 | LINGUIS/ <br> ANTHRO 430 | Language and Culture | 3-4 |
| ITALIAN/ COM ARTS 460 | Italian Film | 3 | LITTRANS 203 | Survey of 19th and 20th Century Russian Literature in Translation I | 4 |
| ITALIAN 637 | La Poesia del Novecento | 3 | LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation II | 4 |


| LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| :---: | :---: | :---: |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 220 | Chekhov in Translation | 3-4 |
| LITTRANS 222 | Dostoevsky in Translation | 3-4 |
| LITTRANS 224 | Tolstoy in Translation | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust) | 3 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Russia \& Jews) | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |
| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) (German Lit) | 3 |
| LITTRANS 301 | Modern Indonesian Literature in Translation | 3 |
| LITTRANS 304 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Dutch Lit: Travel \& Migration) | 3 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen | 3-4 |
| LITTRANS 338 | In Translation: Knut Hamsun and the 20th Century Norwegian Novel | 3-4 |
| LITTRANS 343 | In Translation: The Woman in Scandinavian Literature | 3-4 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Evangelion) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Japanese Ghost Stories) | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Writing the Environment) | 3 |
| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation | 3 |


| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| :---: | :---: | :---: |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| MED HIST/ HIST SCI 668 | Topics in History of Medicine (Health, Disease \& Medicine) | 3 |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| NUTR SCI/ AGRONOMY/ ENTOM 203 | Introduction to Global Health | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| PHYSICS/ ENVIR ST 472 | Scientific Background to Global Environmental Problems | 3 |
| POLI SCI 313 | Bargaining in the Global Economy | 3-4 |
| POLI SCI/ INTL ST 325 | Social Movements and Revolutions in Latin America | 3-4 |
| POLI SCI/ INTL ST 327 | Indian Politics in Comparative Perspective | 3 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 363 | Literature and Politics | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 390 | Study Abroad Topics in Political Science: International Relations | 1-4 |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |


| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 538 | Politics and Policies in the European Union | 3-4 |
| POLI SCI 601 | Proseminar. Topics in Political Science (Post-Conflict) | 3 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| POLI SCI/ <br> JEWISH 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Political Economy) | 1-4 |
| PORTUG/ <br> GEN\&WS 450 | Brazillian Women Writers | 3 |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| PORTUG 640 | Topics in Luso-Brazilian Literature (LusoAfroBrazilian Studies) | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | 3-4 |
| RELIG ST/ <br> ANTHRO 343 | Anthropology of Religion | 3-4 |
| RELIG ST/ HISTORY 379 | Islam in Iran | 3 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Indian Traditions Modern Age) | 3-4 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Belief \& Unbelief) | 3-4 |
| RELIG ST/HISTORY/ LCA 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |
| RELIG ST/ <br> POLISCI 618 | Political Islam | 3-4 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST/ HISTORY 432 | History of Scandinavia Since 1815 | 3 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |


| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| :---: | :---: | :---: |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SCAND ST 635 | Survey of Scandinavian Literature: 1800-1890 | 3 |
| SLAVIC 242 | Literatures and Cultures of Eastern Europe | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC/ <br> RELIG ST 325 | Eastern Christianity/Russian Orthodoxy in a Global Context | 3 |
| SLAVIC 405 | Women in Russian Literature | 3-4 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 434 | Contemporary Russian Culture | 3 |
| SLAVIC 439 | Russia Today in Literature and Film | 4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 449 | Istorija srpske i hrvatske literature | 3 |
| SLAVIC 454 | Moderna srpska i hrvatska literatura | 3 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SOC 170 | Population Problems | 3-4 |
| SOC 225 | Contemporary Chinese Society | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOC/C\&E SOC/ <br> POP HLTH 380 | Contemporary Population Problems for Honors | 3 |
| SOC 496 | Topics in Sociology (Intercultural Dialogues) | 1-3 |
| SOC 496 | Topics in Sociology (The Soviet Jewish Experience) | 1-3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| SOC/LCA/ <br> RELIG ST 634 | Social Structure of India | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC 646 | Race and Ethnic Relations | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SOIL SCI/ <br> ATM OCN 132 | Earth's Water. Natural Science and Human Use | 3 |


| SOIL SCI/ENVIR ST/ GEOG 230 | Soil: Ecosystem and Reso | 3 |
| :---: | :---: | :---: |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH/ <br> INTL BUS 329 | Spanish for Business | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana (Latin American Neo-Vanguards) | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Documentary Film) | 3 |
| SPANISH 468 | Topics in Hispanic Culture (Minds and Machines) | 3 |
| SPANISH 468 | Topics in Hispanic Culture <br> (Anthropocene:Cult,Econ,Enviro) | 3 |
| THEATRE 327 | History of Costume for the Stage | 3 |
| THEATRE 351 | Fundamentals of Asian Stage Discipline | 3 |
| THEATRE 420 | Theatre and Society | 3 |
| THEATRE 424 | Contemporary World Theatre and Dramatic Literature | 3 |
| THEATRE 522 | Experimental Drama: The Theatre of Europe 1850-the Present | 3 |
| THEATRE 526 | The Theatres of China and Japan | 3 |
| THEATRE/ SLAVIC 532 | History of Russian Theatre | 3 |
| THEATRE/ENGL 577 | Postcolonial Theatre: Drama, Theory and Performance in the Global South | 3 |
| URB R PL/ECON/ REALEST 641 | Housing Economics and Policy | 3 |
| ZOOLOGY/BOTANY/ <br> ENVIR ST 260 | Introductory Ecology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENVIR ST } 315 \end{aligned}$ | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY/ENVIR ST/ <br> F\&W ECOL 360 | Extinction of Species | 3 |
| $\begin{aligned} & \text { ZOOLOGY/AN SCI/ } \\ & \text { F\&W ECOL } 520 \end{aligned}$ | Ornithology | 3 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |

ZOOLOGY/ Conservation Biology ..... 3

BOTANY/ENVIR ST/

F\&W ECOL 651

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all INTL ST courses and other courses in the major 2.000 GPA on 15 upper-level major credits, taken in residence

15 credits in the major, taken on the UW-Madison campus ${ }^{3}$
3 Major courses with Intermediate and Advanced level are considered upper level.

## INTERNATIONAL STUDIES: POLITICS AND POLICY IN THE GLOBAL ECONOMY

## REQUIREMENTS

## INTRODUCTORY REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| Complete the 5th Unit of a Foreign Language (see course list below) ${ }^{1}$ |  |  |
| Select one of the following: |  | 4-8 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| A A E 215 <br> \& ECON 102 | Introduction to Agricultural and Applied Economics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment ${ }^{2}$ |  |
| Total Credits |  | 7-12 |
| 1 ESL 118 Academic Writing II substitutes for the Foreign Language requirement. |  |  |
| $\begin{array}{ll} 2 & \text { ECON } 111 \mathrm{r} \\ & \text { enrollment. } \end{array}$ | s placement in MATH 221 or higher is |  |

## 5th Unit of Foreign Language Course List

Code Title Credits

AFRICAN 435 Advanced Studies in Swahili 3 Language-Grammar
AFRICAN 436 Advanced Studies in Swahili 3

Language-Readings
Readings in Advanced Arabic Texts 3
LCA LANG 445
AFRICAN 475 Fifth Semester Yoruba 3
AFRICAN 476 Sixth Semester Yoruba 3
AFRICAN 493 Fifth Semester, A Language of 3
Southern Africa
Sixth Semester, A Language of
Southern Africa

| AFRICAN 495 | Fifth Semester, A Language of Northern Africa | 3 |
| :---: | :---: | :---: |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa | 3 |
| AFRICAN 497 | Fifth Semester, A Language of West Africa | 3 |
| AFRICAN 498 | Sixth Semester, A Language of West Africa | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| E ASIAN 301 | Fifth Semester Chinese | 4 |
| E ASIAN 302 | Sixth Semester Chinese | 4 |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 335 | Intermediate Japanese Conversation | 3 |
| E ASIAN 347 | Fifth Semester Korean | 3 |
| E ASIAN 348 | Sixth Semester Korean | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 401 | Seventh Semester Chinese | 3 |
| E ASIAN 402 | Eighth Semester Chinese | 3 |
| E ASIAN 403 | Seventh Semester Japanese | 3 |
| E ASIAN 404 | Eighth Semester Japanese | 3 |
| E ASIAN 405 | Seventh Semester Korean | 3 |
| E ASIAN 406 | Eighth Semester Korean | 3 |
| E ASIAN 431 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 432 | Introduction to Chinese Linguistics | 3 |
| E ASIAN 501 | Fifth-year Chinese | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 573 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 574 | Readings in Classical Japanese Literature | 3 |
| E ASIAN 651 | History of Chinese Literature | 3 |
| E ASIAN 652 | History of Chinese Literature | 3 |
| FRENCH 227 | Exploring French: IntermediateLevel Course for Entering Students | 3 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 311 | Advanced Composition and Conversation | 3 |
| FRENCH 312 | Advanced Oral and Written Expression: Writing Across the Humanities | 3 |
| FRENCH/ <br> INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH/ INTL BUS 315 | Advanced Interdisciplinary Studies in Professional Communication | 3 |


| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| :---: | :---: | :---: |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 350 | Applied French Language Studies | 1-3 |
| FRENCH/ITALIAN/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages | 3 |
| FRENCH 430 | Readings in Medieval and Renaissance Literature | 3 |
| FRENCH 431 | Readings in Early Modern Literature | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 461 | French/Francophone Literary Studies Across the Centuries | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 590 | Advanced Phonetics | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 |
| GERMAN 225 | Composition and Conversation I | 3 |
| GERMAN 226 | Composition and Conversation II | 3-4 |
| GERMAN 235 | Dutch Conversation and Composition | 3 |
| GERMAN 249 | Intermediate German - Speaking and Listening | 3 |
| GERMAN 258 | Intermediate German-Reading | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 |
| GERMAN 303 | Literatur des 19. Jahrhunderts | 3-4 |
| GERMAN 305 | Literatur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 313 | Third Semester Dutch for Graduate Students | 3 |
| GERMAN 325 | Topics in Dutch Literature | 3 |
| GERMAN 337 | Advanced Composition \& Conversation | 3-4 |
| GERMAN 351 | Introduction to German Linguistics | 3-4 |
| GERMAN 352 | Topics in German Linguistics | 3-4 |
| GERMAN 367 | Study Abroad in German Literature | 2-5 |
| GERMAN 368 | Study Abroad in German Culture | 2-5 |
| GERMAN 369 | Study Abroad in German Linguistics | 2-5 |


| GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
| :---: | :---: | :---: |
| GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
| GERMAN 379 | Study Abroad in Dutch Linguistics | 2-5 |
| GERMAN 410 | Kultur 1648-1918 | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 625 | Letterkunde der Lage Landen | 3-4 |
| GERMAN 632 | A Theme in German Literature | 3 |
| GERMAN 645 | Cultuurkunde der Lage Landen | 3-4 |
| GERMAN 677 | Seminar in German Culture Studies | 3 |
| GREEK 401 | Greek Drama | 3 |
| GREEK 402 | Greek Drama and Lyric Poetry | 3 |
| GREEK 505 | Elementary Prose Composition | 3 |
| GREEK 510 | Homer | 3 |
| GREEK 511 | Hesiod | 3 |
| GREEK 512 | Greek Lyric Poets | 3 |
| GREEK 520 | Greek Comedy | 3 |
| GREEK 521 | Greek Tragedy | 3 |
| GREEK 532 | Thucydides | 3 |
| GREEK 541 | Plato | 3 |
| GREEK 551 | Attic Orators | 3 |
| GREEK 560 | Hellenistic Greek | 3 |
| GREEK 564 | Plutarch | 3 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry | 3 |
| HEBR-BIB/ JEWISH 514 | Biblical Texts, Poetry | 3 |
| HEBR-BIB 701 | Aramaic I | 3 |
| HEBR-BIB 702 | Aramaic II | 3 |
| HEBR-BIB 703 | Ugaritic Texts | 3 |
| HEBR-BIB 704 | Canaanite Dialects | 3 |
| HEBR-BIB 705 | Syriac I | 3 |
| HEBR-BIB 706 | Syriac II | 3 |
| HEBR-BIB 723 | Classical Hebrew Linguistics: Historical and Descriptive | 3 |
| HEBR-BIB 751 | The Book of Isaiah | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 311 | Advanced Italian Language | 3 |
| ITALIAN 312 | Writing Workshop | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 423 | Corso Di Stilistica Applicata | 3 |
| ITALIAN/FRENCH/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages | 3 |


| ITALIAN 450 | Special Topics in Italian Literature | 3 |
| :---: | :---: | :---: |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN 601 | L'Ottocento | 3 |
| ITALIAN 621 | II Settecento | 3 |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana | 3 |
| ITALIAN 635 | Il Romanzo Italiano | 3 |
| ITALIAN 636 | Il Romanzo Italiano | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| ITALIAN 651 | Il Rinascimento | 3 |
| ITALIAN/ MEDIEVAL 659 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 660 | Dante's Divina Commedia | 3 |
| ITALIAN/ MEDIEVAL 671 | II Duecento | 3 |
| JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature | 3 |
| LATIN 301 | Latin Literature of the Roman Republic | 3 |
| LATIN 302 | Latin Literature of the Roman Empire | 3 |
| LATIN 505 | Elementary Prose Composition | 3 |
| LCA LANG 501 | Fifth Semester Asian Language | 3 |
| LCA LANG 503 | Fifth Semester Burmese | 3 |
| LCA LANG 504 | Sixth Semester Burmese | 3 |
| LCA LANG 505 | Fifth Semester Filipino | 3 |
| LCA LANG 506 | Sixth Semester Filipino | 3 |
| LCA LANG 507 | Fifth Semester Hmong | 3 |
| LCA LANG 508 | Sixth Semester Hmong | 3 |
| LCA LANG 509 | Fifth Semester Indonesian | 3 |
| LCA LANG 510 | Sixth Semester Indonesian | 3 |
| LCA LANG 513 | Fifth Semester Khmer | 3 |
| LCA LANG 514 | Sixth Semester Khmer | 3 |
| LCA LANG 515 | Fifth Semester Lao | 3 |
| LCA LANG 516 | Sixth Semester Lao | 3 |
| LCA LANG 517 | Fifth Semester Thai | 3 |
| LCA LANG 518 | Sixth Semester Thai | 3 |
| LCA LANG 519 | Fifth Semester Vietnamese | 3 |
| LCA LANG 520 | Sixth Semester Vietnamese | 3 |
| LCA LANG/ AFRICAN 527 | Advanced Summer Immersion Arabic | 8 |
| LCA LANG 528 | Advanced Summer Immersion Persian | 8 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 |
| LCA LANG 531 | Fifth Semester Kazak | 3 |
| LCA LANG 532 | Sixth Semester Kazak | 3 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |
| LCA LANG 553 | Fifth Semester Hindi | 3-4 |
| LCA LANG 554 | Sixth Semester Hindi | 3-4 |


| LCA LANG 557 | Fifth Semester Tibetan | 4 |
| :---: | :---: | :---: |
| LCA LANG 558 | Sixth Semester Tibetan | 4 |
| LCA LANG 563 | Fifth Semester Persian | 3 |
| LCA LANG 564 | Sixth Semester Persian | 3 |
| LCA LANG 571 | Fifth Semester Urdu | 3-4 |
| LCA LANG 572 | Sixth Semester Urdu | 3-4 |
| LCA LANG 601 | Seventh Semester Asian Language | 3 |
| LCA LANG 602 | Eighth Semester Asian Language | 3 |
| LCA LANG 616 | Modern Thai Literature: The Novel | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| LCA LANG 648 | Advanced Readings in Pali Literature | 3 |
| LCA LANG 653 | Advanced Readings in Hindi Language | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 671 | Advanced Readings in Urdu Language | 3 |
| LCA LANG 675 | Advanced Readings in Sanskrit | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| PORTUG 225 | Third Year Conversation and Composition | 3 |
| PORTUG 226 | Third Year Conversation and Composition | 3 |
| PORTUG 311 | Fourth Year Composition and Conversation | 3 |
| PORTUG 312 | Fourth Year Composition and Conversation | 3 |
| SCAND ST 251 | Readings in Norwegian Literature | 3-4 |
| SCAND ST 261 | Readings in Swedish Literature | 3-4 |
| SCAND ST 271 | Readings in Danish Literature | 3-4 |
| SCAND ST 373 | Masterpieces of Scandinavian Literature: From the Middle Ages to 1900 | 3-4 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 401 | Contemporary Scandinavian Languages | 3 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |


| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| :---: | :---: | :---: |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST 433 | The Scandinavian Tale and Ballad | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 435 | The Icelandic Sagas | 4 |
| SCAND ST 496 | The Scandinavian Heritage in America | 3 |
| SLAVIC 275 | Third Year Russian I | 3-4 |
| SLAVIC 276 | Third Year Russian II | 3-4 |
| SLAVIC 277 | Third Year Polish I | 3 |
| SLAVIC 278 | Third Year Polish II | 3 |
| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| SLAVIC 307 | Study Abroad in Poland | 1-4 |
| SLAVIC 308 | Polish Culture and Area Studies on Study Abroad | 1-4 |
| SLAVIC 309 | Russian Area Studies on Study Abroad | 1-4 |
| SLAVIC 315 | Russian Language and Culture I | 2 |
| SLAVIC 316 | Russian Language and Culture II | 2 |
| SLAVIC 321 | Fourth Year Russian I | 4 |
| SLAVIC 322 | Fourth Year Russian II | 4 |
| SLAVIC 331 | Fourth Year Polish I | 3 |
| SLAVIC 332 | Fourth Year Polish II | 3 |
| SLAVIC 350 | Special Topics in Russian Language, Literature, and Culture | 3 |
| SLAVIC 420 | Chekhov | 3-4 |
| SLAVIC 421 | Gogol | 3-4 |
| SLAVIC 422 | Dostoevsky | 3-4 |
| SLAVIC 424 | Tolstoy | 3-4 |
| SLAVIC 440 | Soviet Literature | 3-4 |
| SLAVIC 472 | Historia literatury polskiej po roku 1863 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |


| SPANISH 462 | Spanish American Theater and Drama | 3 |
| :---: | :---: | :---: |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |

## AREA STUDIES

Area studies courses help students focus on specific geographic regions. Students must choose one course from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey | 4 |
| E A STDS/HISTORY/ POLI SCI 255 | Introduction to East Asian Civilizations | 3-4 |
| GEOG 340 | World Regions in Global Context | 3 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY 201 | The Historian's Craft (Portraying China) | 3-4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY/ <br> EA STDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |


| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| :---: | :---: | :---: |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 253 | Russia: An Interdisciplinary Survey | 4 |
| SLAVIC/GEOG/ HISTORY/ POLI SCI 254 | Eastern Europe: An Interdisciplinary Survey | 4 |

## POLITICS AND POLICY IN THE GLOBAL ECONOMY

This option offers a multidisciplinary survey of international economic and political institutions and transactions, as well as the policy issues pertaining to international commerce and trade, international finance and monetary relations, international macroeconomic policy coordination, U.S. trade imbalances, aid and development, and related environmental and natural resource problems.

## Politics and Policy Core

Two courses from:

| Code | Title | Credits |
| :---: | :---: | :---: |
| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 |
| A A E 319 | The International Agricultural Economy | 3 |
| A A E/ECON 474 | Economic Problems of Developing Areas | 3 |
| A A E/ECON 477 | Agricultural and Economic Development in Africa | 3 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON 475 | Economics of Growth | 3-4 |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 |
| INTL ST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTL ST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy | 3-4 |
| INTL ST 502 | Study Abroad Topics in Politics and Policy in the Global Economy | 1-6 |


| INTL ST 601 |  <br> Global Sys) | $1-4$ |
| :--- | :--- | ---: |
| INTL ST 602 | Topics in Politics and Policy in the <br> Global Economy | $1-4$ |
| LCA/ART HIST 621 | Mapping, Making, and Representing <br> Colonial Spaces | 3 |
| POLI SCI 313 | Bargaining in the Global Economy | $3-4$ |
| POLI SCI 350 | International Political Economy | $3-4$ |
| POLI SCI 351 | Politics of the World Economy | $3-4$ |
| POLI SCI 354 | International Institutions and World <br> Order | $3-4$ |
| POLI SCI 637 | Comparative Political Economy | $3-4$ |
| POLI SCI 652 | The Politics of Development | $3-4$ |
| POLI SCI 654 | Politics of Revolution |  |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ <br> Third World | $3-4$ |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| URB R PL/ | International Development and | 3 |
| GEN\&WS 644 | Gender | 3 |

## Politics and Policy Issues

15 credits from:


| COM ARTS 470 | Contemporary Political Discourse | 3 |
| :---: | :---: | :---: |
| CURRIC 366 | Internationalizing Educational Knowledge | 3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Contemporary Chinese Society) | 1-3 |
| ECON 330 | Money and Banking | 4 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 390 | Contemporary Economic Issues (Poverty, Inequality, \& Public Policy) | 3 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON/HISTORY 466 | The American Economy Since 1865 | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON/A AE 567 | Public Finance in Less Developed Countries | 3 |
| ECON 666 | Issues in International Finance | 3-4 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 |
| ED POL 340 | Comparative Education | 3 |
| ED POL/ HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |
| ED POL 675 | Introduction to Comparative and International Education | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: Global Perspective and Policies | 3 |
| ENVIR ST/GEOG 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| ENVIR ST 401 | Special Topics: Environmental Perspectives in the Physical Sciences (Sustainable Science) | 1-4 |
| ENVIR ST 401 | Special Topics: Environmental <br> Perspectives in the Physical Sciences (Sustainability, Science, Technology, and Policy) | 1-4 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies | 1-4 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST/ <br> SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| ENVIR ST/A A E/ ECON/URB R PL 671 | Energy Economics | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| GEN BUS 600 | Topics on Sustainable Business Practices | 3 |


| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 |
| :---: | :---: | :---: |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS/ POLI SCI 429 | Gender and Politics in Comparative Perspective | 3-4 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG 302 | Economic Geography: Locational Behavior | 4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG 475 | Topics in Geography (International Migration \& Health) | 1-4 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |
| GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 410 \end{aligned}$ | Minerals as a Public Problem | 3 |
| GEOSCI/ <br> ENVIR ST 411 | Energy Resources | 3 |
| HIST SCI 337 | History of Technology | 3 |
| HIST SCI 339 | Technology and Its Critics Since World War II | 3 |
| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 |
| HISTORY 201 | The Historian's Craft (Shanghai Life and Crime) | 3-4 |
| HISTORY 201 | The Historian's Craft (The Catholic Church) | 3-4 |
| HISTORY 201 | The Historian's Craft (UW-Latin Amer Relations) | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY/ GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| ILS 371 | Interdisciplinary Studies in the Arts and Humanities (Poli Econ \& Liberal) | 3 |
| INTL BUS 200 | International Business | 3 |


| INTL BUS/ GEN BUS 320 | Intercultural Communication in Business | 3 |
| :---: | :---: | :---: |
| INTL BUS 365 | Contemporary Topics (International Perspectives) | 1-3 |
| INTL BUS/M HR 403 | Global Issues in Management | 3 |
| INTL BUS/A AE/ ECON 462 | Latin American Economic Development | 3 |
| INTL ST 322 | Washington DC Semester in International Affairs Internship Seminar | 4 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |
| INTL ST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTL ST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy | 3-4 |
| INTL ST 502 | Study Abroad Topics in Politics and Policy in the Global Economy | 1-6 |
| INTL ST/ GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| INTL ST 602 | Topics in Politics and Policy in the Global Economy | 1-4 |
| INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| JEWISH/ <br> POLISCI 665 | Israeli Politics and Society | 3-4 |
| JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| JOURN 618 | Mass Communication and Political Behavior | 4 |
| JOURN 620 | International Communication | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LIS 661 | Information Ethics and Policy | 3 |
| LCA/POLI SCI 326 | Politics of South Asia | 3-4 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| LEGAL ST/LIS 663 | Introduction to Cyberlaw | 3 |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| NUTR SCI/ AGRONOMY/ <br> ENTOM 203 | Introduction to Global Health | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 313 | Bargaining in the Global Economy | 3-4 |
| POLI SCI 321 | Latin-American Politics | 3-4 |
| POLI SCI 322 | Politics of Southeast Asia | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |


| POLI SCI 351 | Politics of the World Economy | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 |
| POLI SCI 401 | Selected Topics in Political Science (Political Economy) | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI 460 | Topics in Political Philosophy (Economic Inequality) | 3-4 |
| POLI SCI 460 | Topics in Political Philosophy (Economy, Politics, Society) | 3-4 |
| POLI SCI 534 | Socialism and Transitions to the Market | 3-4 |
| POLI SCI 561 | Radical Political Theory | 3-4 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Pol Sci: CmpartvPo) | 1-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Comparative Politics) | 1-4 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| RELIG ST/ <br> POLI SCI 618 | Political Islam | 3-4 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SOC 225 | Contemporary Chinese Society | 3 |
| SOC/C\&E SOC/ <br> POP HLTH 380 | Contemporary Population Problems for Honors | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SPANISH/ <br> INTL BUS 329 | Spanish for Business | 3 |
| URB R PL/ECON/ REALEST 641 | Housing Economics and Policy | 3 |

## Electives

Students typically take three or four elective courses in the major. These courses can come from Issues lists for different options or they can be
additional Issues classes within their own option. Students must take enough elective credits to attain the required 35 total credits in the major. Choose from:
Code Title Credits

A A E/ENVIR ST 244 The Environment and the Global 3
Economy

| A A E 319 | The International Agricultural <br> Economy | 3 |
| :--- | :--- | ---: |
| A A E/AGRONOMY/ | World Hunger and Malnutrition | 3 |

INTER-AG/
NUTR SCI 350
A A E/ECON 421 Economic Decision Analysis 4

A A E/ECON 473 Economic Growth and Development 3
in Southeast Asia

| A A E/ECON 474 | Economic Problems of Developing <br> Areas | 3 |
| :--- | :--- | ---: |
| A A E/ECON 477 | Agricultural and Economic <br> Development in Africa | 3 |
| A A E/ECON/ | Natural Resource Economics | 3 |
| F\&W ECOL 531 | Intellectual Property Rights, | 3 |

A A E/CIV ENGR/ Energy Markets 3

ENVIR ST/
URB R PL 561
AFRICAN 230 Introduction to Yoruba Life and 3
AFRICAN/ African and African-American 4

AFROAMER/ Linkages: An Introduction
HISTORY/
POLI SCI 297

| AFRICAN 300 | African Literature in Translation | 3 |
| :--- | :--- | :--- |
| AFRICAN 303 | African Literature and Visual Culture | 3 |

AFRICAN/LCA/ Islam: Religion and Culture 3-4

RELIG ST 370

| AFRICAN 405 | Topics in African Cultural Studies <br> (The Problem of Whiteness) |
| :--- | :--- |

AFRICAN 412 Contemporary African Fiction 3-4
AFRICAN/ Contemporary African and 3-4

AFROAMER 413 Caribbean Drama
AFRICAN/ African/Francophone Film 3
FRENCH 440
AFRICAN/ Lusophone African Literature 3
PORTUG 451
AFRICAN 453 Modern African Literature in English 3-4
AFRICAN/ Oral Traditions and the Written 3-4
$\begin{array}{lll}\text { FOLKLORE 471 } & \text { Word } & \\ \text { AFRICAN } 500 & \text { Language and Society in Africa }\end{array}$
AFRICAN 609 Advanced Topics in Global Black 3
AFROAMER/ Music Studies $\quad$ Introduction to African Art and 3

| ART HIST 241 | Architecture |
| :--- | :--- |
| AFROAMER/ | Introduction to Afro-American Art |

ART HIST 242

| AFROAMER/ | Latin America: An Introduction | 3-4 |
| :---: | :---: | :---: |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  |  |
| LACIS/POLI SCI/ |  |  |
| SOC/SPANISH 260 |  |  |
| AFROAMER 265 | African-American Autobiography | 3 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women | 3 |
| AFROAMER 271 | Selected Topics in African American Culture | 3 |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 275 | Science, Medicine, and Race: A History | 3 |
| AFROAMER/ <br> AFRICAN/ANTHRO/ <br> GEOG/HISTORY/ <br> POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| AFROAMER/ <br> AFRICAN/HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |
| AFROAMER/ MUSIC 308 | Black Music (1920-Present): <br> Rhythm Section and Combos | 2 |
| AFROAMER/ MUSIC 309 | Black Music (1920-Present): <br> Vocalist/Trombone/Misc Instrumental | 2 |
| AFROAMER/ MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 |
| AFROAMER/ MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER 337 | The Harlem Renaissance | 3 |
| AFROAMER 338 | The Black Arts Movement | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |


| AFROAMER/ MUSIC 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| :---: | :---: | :---: |
| AFROAMER/ AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFROAMER/ ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |
| AFROAMER 456 | Soul Music and the African American Freedom Movement | 3 |
| AFROAMER 469 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 501 | 19th Century Afro-American Literature | 3 |
| AFROAMER/ MUSIC 509 | Seminar in Afro-American Music History and Criticism | 3 |
| AFROAMER/ POLI SCI 519 | African American Political Theory | 3-4 |
| AFROAMER/HDFS/ SOC WORK 521 | African American Families | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER 525 | Major Authors | 3 |
| AFROAMER/ ED POL 567 | History of African American Education | 3 |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature | 3 |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| AFROAMER/ GEN\&WS 625 | Gender, Race and the Civil Rights Movement | 3 |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 |
| AFROAMER/ ART HIST 643 | Selected Topics in African Diaspora Art History | 3 |
| AFROAMER 669 | Interdisciplinary Studies in the Arts | 1-4 |
| AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| AFROAMER/ ENGL 672 | Selected Topics in Afro-American Literature | 3 |
| AFROAMER 673 | Selected Topics in Afro-American Society | 3 |
| AFROAMER/ ART 674 | Selected Topics on Afro-American Artists | 3 |
| AFROAMER 675 | Selected Topics in Afro-American Culture | 3 |
| AFROAMER/ GEN\&WS 677 | Critical and Theoretical <br> Perspectives in Black Women's Writings | 3 |
| AFROAMER 678 | Modern/Contemporary Art of Nigeria and the African Diaspora | 3 |
| AFROAMER/ GEN\&WS 679 | Visual Culture, Gender and Critical Race Theory | 3 |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| ANTHRO 327 | Peoples of the Andes Today | 3 |


| ANTHRO 330 | Topics in Ethnology (SE Asia) | 3-4 |
| :---: | :---: | :---: |
| ANTHRO 330 | Topics in Ethnology (Anthropology of Foodways) | 3-4 |
| ANTHRO 330 | Topics in Ethnology (Brazil) | 3-4 |
| ANTHRO 350 | Political Anthropology | 3-4 |
| ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| ANTHRO 358 | Anthropology of China | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |
| ANTHRO 490 | Undergraduate Seminar (Culture and Health in Africa) | 3 |
| ANTHRO 606 | Ethnicity, Nations, and Nationalism | 3-4 |
| ART HIST 350 | 19th Century Painting in Europe | 3-4 |
| ART HIST 351 | 20th Century Art in Europe | 3-4 |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present | 3-4 |
| ART HIST 358 | European Architecture: The Modern Movements | 3-4 |
| ART HIST 371 | Chinese Painting | 3-4 |
| ART HIST 372 | Arts of Japan | 3-4 |
| ART HIST 411 | Topics in Asian Art (Modern \& Contempor) | 3-4 |
| ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |
| ART HIST 479 | Art and History in Africa | 3-4 |
| ASIAN 253 | Japanese Popular Culture | 3 |
| ASIAN 300 | Topics in Asian Studies (Indian Traditions Modern Age) | 3 |
| ASIAN 300 | Topics in Asian Studies (Sexuality in South Asia) | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| ASIAN 403 | Southeast Asian Literature | 3 |
| ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 |
| ATM OCN 100 | Weather and Climate | 3 |
| ATM OCN 101 | Weather and Climate | 4 |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems | 2-3 |
| ATM OCN/ ENVIR ST 520 | Bioclimatology | 3 |
| ATM OCN/ENVIR ST/ GEOG 528 | Past Climates and Climatic Change | 3 |
| ATM OCN/ ENVIR ST 535 | Atmospheric Dispersion and Air Pollution | 3 |
| BOTANY 240 | Plants and Humans | 3 |
| C\&E SOC/SOC 245 | Technology and Society | 3 |
| C\&E SOC/ENVIR ST/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC/ URB R PL 617 | Community Development | 3 |


| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| :---: | :---: | :---: |
| COM ARTS 310 | Topics in Rhetoric and Communication Science (Intercultural Comm \& Rhetoric) | 3 |
| COM ARTS 346 | Critical Internet Studies | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 352 | Film History to 1960 | 3 |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| COM ARTS 372 | Rhetoric of Campaigns and Revolutions | 3 |
| COM ARTS/ RELIG ST 374 | The Rhetoric of Religion | 3 |
| COM ARTS 455 | French Film | 3 |
| COM ARTS 456 | Russian and Soviet Film | 3 |
| COM ARTS 458 | Global Media Cultures | 3 |
| COM ARTS/ <br> ITALIAN 460 | Italian Film | 3 |
| COM ARTS 470 | Contemporary Political Discourse | 3 |
| COM ARTS 557 | Contemporary Media Industries | 3 |
| COM ARTS 577 | Dynamics of Online Relationships | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural Literary Forms | 3 |
| COMP LIT 375 | Literature and Related Disciplines | 3-4 |
| COMP LIT 379 | Literature and Ethnic Experience | 3-4 |
| DS/LAND ARC 639 | Culture and Built Environment | 3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Intro to Korean Culture) | 1-3 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies (Korean Culture) | 1-3 |
| E A STDS/ E ASIAN 300 | Humanities Topics in East Asian Studies (Survey of Tibetan Buddhism) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Two Koreas) | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (Korean) | 1-3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |
| ECON 330 | Money and Banking | 4 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON/HISTORY 466 | The American Economy Since 1865 | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON/A A E 567 | Public Finance in Less Developed Countries | 3 |
| ED POL 150 | Education and Public Policy (Human Rights \& Education) | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 |
| ED POL 340 | Comparative Education | 3 |


| ED POL/ <br> ANTHRO 570 | Anthropology and Education | 3 |
| :---: | :---: | :---: |
| ED POL/ HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |
| ED POL 675 | Introduction to Comparative and International Education | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: Global Perspective and Policies | 3 |
| ENGL/ <br> LITTRANS 223 | Vladimir Nabokov: Russian and American Writings | 3 |
| ENGL 352 | Modernist Poetry | 3 |
| ENGL 353 | British Literature since 1900 | 3 |
| ENGL 453 | Topic in British Literature and Culture since 1900 | 3 |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |
| ENGL/THEATRE 575 | British Drama, 1914 to Present | 3 |
| ENVIR ST/ILS 126 | Principles of Environmental Science | 4 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 |
| ENVIR ST/A A E/ <br> ECON 343 | Environmental Economics | 3-4 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| ENVIR ST/BSE 367 | Renewable Energy Systems | 3 |
| ENVIR ST/ M\&ENVTOX/ PLPATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| ENVIR ST/N E 373 | Nuclear Energy and the Environment | 3 |
| ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Food Systems, Sustainability, and Climate Change) | 1-4 |
| ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Conserving Biodiversity) | 1-4 |
| ENVIR ST 401 | Special Topics: Environmental Perspectives in the Physical Sciences (Sustainability Science) | 1-4 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies <br> (People,Environment) | 1-4 |
| ENVIR ST/ ECON/POLI SCI/ URB R PL 449 | Government and Natural Resources | 3-4 |
| ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST 539 | Air Resources Science and Policy | 3 |


| ENVIR ST/ <br> SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| :---: | :---: | :---: |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| ENVIR ST/A A E/ ECON/URB R PL 671 | Energy Economics | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 450 | Communities and Forests | 3 |
| F\&W ECOL/ ENVIR ST/ HISTORY 452 | World Forest History | 3 |
| FOLKLORE/ <br> AFRICAN 270 | The Hero and Trickster in African Oral Traditions | 3 |
| FOLKLORE/LCA 279 | Introduction to Turkish Folk Literature | 3 |
| FOLKLORE/ ANTHRO 344 | Anthropological Approaches to Folklore | 3 |
| FOLKLORE 510 | Folklore Theory | 3 |
| FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| FOLKLORE 560 | Folklore in a Digital Age | 3 |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| FRENCH 240 | Immigration and Expression | 3 |
| FRENCH/ INTL BUS 313 | Professional Communication and Culture in the Francophone World | 3 |
| FRENCH/ INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 |
| FRENCH 348 | Modernity Studies | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |
| FRENCH 449 | Francophone Modernity Studies | 3 |
| FRENCH 462 | French/Francophone Cultural Studies Across the Centuries | 3 |
| FRENCH 465 | French/Francophone Film | 3 |
| FRENCH 467 | Aspects of Contemporary French Literature | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 |
| GEN\&WS/ENGL 250 | Women in Literature | 3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Queer Film) | 1-3 |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities (Virginia Woolf) | 1-3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society (Women and Change in Africa) | 1-3 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |


| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| :---: | :---: | :---: |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS/HISTORY/ LCA 472 | Women in Turkish Society | 3 |
| GEN\&WS/ POLI SCI 429 | Gender and Politics in Comparative Perspective | 3-4 |
| GEN\&WS/ URB R PL 644 | International Development and Gender | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG 321 | Climatology | 3 |
| $\begin{aligned} & \text { GEOG/ATM OCN/ } \\ & \text { ENVIR ST/ } \\ & \text { GEOSCI } 335 \end{aligned}$ | Climatic Environments of the Past | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 349 | Europe | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes | 3 |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History | 4 |
| GEOG 475 | Topics in Geography | 1-4 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |
| GEOG 510 | Economic Geography | 4 |
| GEOG/ENVIR ST 534 | Environmental Governance: Markets, States and Nature | 3 |
| GEOG/ENVIR ST 537 | Culture and Environment | 4 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 |
| GEOSCI/ <br> ATM OCN 105 | Survey of Oceanography | 3-4 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 106 \end{aligned}$ | Environmental Geology | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 410 \end{aligned}$ | Minerals as a Public Problem | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ENVIR ST } 411 \end{aligned}$ | Energy Resources | 3 |


| GERMAN 245 | Topics in Dutch Life and Culture (Dutch Tolerance) | 3 |
| :---: | :---: | :---: |
| GERMAN 245 | Topics in Dutch Life and Culture (Low Lands or High Water) | 3 |
| GERMAN 278 | Topics in German Culture (Kafka and Kafkaesque) | 3 |
| GERMAN 278 | Topics in German Culture (Culture in 20th Century) | 3 |
| GERMAN 305 | Literatur des 20 . und 21 . Jahrhunderts | 3-4 |
| GERMAN 325 | Topics in Dutch Literature (Bezetting, Holocaust) | 3 |
| GERMAN 325 | Topics in Dutch Literature (lit:reizen,migratie) | 3 |
| GERMAN 362 | Topics in German Literature (Musik) | 3-4 |
| GERMAN 362 | Topics in German Literature (Migration in deutscher) | 3-4 |
| GERMAN 372 | Topics in German Culture (Deutschsprachige Lieder) | 3-4 |
| GERMAN 372 | Topics in German Culture (Oesterreich) | 3-4 |
| GERMAN 372 | Topics in German Culture (Deutscher Film) | 3-4 |
| GERMAN 372 | Topics in German Culture (Green Germany) | 3-4 |
| GERMAN 372 | Topics in German Culture (ChinaGerman Point of View) | 3-4 |
| GERMAN 411 | Kultur des 20. und 21. Jahrhunderts | 3-4 |
| GERMAN 445 | Topics in Dutch Culture (Lage landen of hoog water?) | 3-4 |
| GERMAN/ JEWISH 510 | German-Jewish Culture Since the 18th Century | 3 |
| GERMAN/ COM ARTS 655 | German Film | 3 |
| HIST SCI 337 | History of Technology | 3 |
| HIST SCI 339 | Technology and Its Critics Since World War II | 3 |
| HIST SCI/ ENVIR ST 353 | History of Ecology | 3 |
| HIST SCI/HISTORY/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HIST SCI/ENVIR ST/ MED HIST 513 | Environment and Health in Global Perspective | 3 |
| HIST SCI/MED HIST/ POP HLTH 553 | International Health and Global Society | 3 |
| HISTORY 201 | The Historian's Craft (various) | 3-4 |
| HISTORY 221 | Explorations in American History <br> (H) (US-Latin Amer Relations) | 3-4 |
| HISTORY 223 | Explorations in European History <br> (H) (Commodity Culture in Europe) | 3-4 |
| HISTORY 223 | Explorations in European History <br> (H) (Wars of Religion Since 1914) | 3-4 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (South Asians in Diaspora) | 3 |


| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) (Pan-Asianism) | 3 |
| :---: | :---: | :---: |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY/ GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY/ <br> E A STDS 454 | Samurai: History and Image | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY 503 | Irish and Scottish Migrations | 3 |
| HISTORY 514 | European Cultural History Since 1870 | 3-4 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| ILS 371 | Interdisciplinary Studies in the Arts and Humanities (Tocqueville Democracy) | 3 |
| INTL BUS 200 | International Business | 3 |
| INTL BUS/ GEN BUS 320 | Intercultural Communication in Business | 3 |
| INTL BUS/A A E/ ECON 462 | Latin American Economic Development | 3 |
| INTL BUS 365 | Contemporary Topics (International Perspectives) | 1-3 |


| INTL ST 322 | Washington DC Semester in International Affairs Internship Seminar | 4 |
| :---: | :---: | :---: |
| INTL ST/ POLI SCI 325 | Social Movements and Revolutions in Latin America | 3-4 |
| INTL ST/ POLI SCI 327 | Indian Politics in Comparative Perspective | 3 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |
| INTLST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTLST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| INTL ST 401 | Topics in Global Security | 3-4 |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy | 3-4 |
| INTL ST 403 | Topics in Culture in the Age of Globalization | 3-4 |
| INTL ST 404 | Topics in Global Environment | 3-4 |
| INTL ST/ POLI SCI 423 | Social Mobilization in Latin America | 3 |
| INTL ST/ POLI SCI 431 | Contentious Politics | 3-4 |
| INTL ST/ <br> POLI SCI 434 | The Politics of Human Rights | 3-4 |
| INTL ST/ <br> POLI SCI 436 | Political Inequality: Measures, Causes, Effects and Remedies | 3 |
| INTL ST/ POLI SCI 439 | The Comparative Study of Genocide | 3-4 |
| INTL ST 501 | Study Abroad Topics in Global Security | 1-6 |
| INTL ST 502 | Study Abroad Topics in Politics and Policy in the Global Economy | 1-6 |
| INTL ST 503 | Study Abroad Topics in Culture in the Age of Globalization | 1-6 |
| INTL ST 504 | Study Abroad Topics in Global Environment | 1-6 |
| INTL ST 520 | Study Abroad Topics in International Studies | 1-6 |
| INTL ST/ GEN\&WS 535 | Women's Global Health and Human Rights | 3 |
| INTL ST 601 | Topics in Global Security | 1-4 |
| INTL ST 602 | Topics in Politics and Policy in the Global Economy | 1-4 |
| INTL ST 603 | Topics in Culture in the Age of Globalization | 1-4 |
| INTL ST 604 | Topics in Global Environment | 1-4 |
| INTL ST 620 | Topics in International Studies | 1-4 |
| INTL ST 622 | Washington DC Sem in International Affairs Seminar | 4 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN 450 | Special Topics in Italian Literature (Modern Italian Drama) | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Culture) | 3 |


| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language (Political Fictn/Film in Italy) | 3 |
| :---: | :---: | :---: |
| ITALIAN/ COM ARTS 460 | Italian Film | 3 |
| ITALIAN 637 | La Poesia del Novecento | 3 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/ <br> HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| JEWISH/ <br> PHILOS 442 | Moral Philosophy and the Holocaust | 3 |
| JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education | 3 |
| JEWISH/ENGL 539 | Jewish Literatures in Diaspora | 3 |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | 3 |
| JEWISH/ <br> POLI SCI 665 | Israeli Politics and Society | 3-4 |
| JOURN/COM ARTS/ LSC 617 | Health Communication in the Information Age | 3 |
| JOURN 618 | Mass Communication and Political Behavior | 4 |
| JOURN 620 | International Communication | 4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| L I S 201 | The Information Society | 4 |
| LIS 661 | Information Ethics and Policy | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies (Labor in the Americas) | 1-4 |
| LCA 311 | Modern Indian Literatures | 3 |
| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| LCA 361 | Survey of Indonesian Cultures | 3 |
| LCA/RELIG ST 402 | Thought of Gandhi | 3 |
| LCA/ART HIST 428 | Visual Cultures of South Asia | 3 |
| LCA 441 | Language and Society in Southeast Asia | 3 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| LCA/ART HIST 621 | Mapping, Making, and Representing Colonial Spaces | 3 |
| LCA 630 | Proseminar: Studies in Cultures of Asia (Everyday: Lives, Spaces) | 3 |
| LCA LANG 617 | Thai Poetry | 3 |
| LCA LANG 618 | Thai Prose Literature: The Short Story | 3 |
| LCA LANG 654 | Advanced Readings in Hindi Literature | 3 |
| LCA LANG 677 | Advanced Readings in Tibetan | 3 |
| LEGAL ST 409 | Human Rights in Law and Society | 3 |
| LEGAL ST/L I S 663 | Introduction to Cyberlaw | 3 |


| LINGUIS/ <br> ANTHRO 430 | Language and Culture | 3-4 |
| :---: | :---: | :---: |
| LITTRANS 203 | Survey of 19th and 20th Century Russian Literature in Translation I | 4 |
| LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation II | 4 |
| LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 220 | Chekhov in Translation | 3-4 |
| LITTRANS 222 | Dostoevsky in Translation | 3-4 |
| LITTRANS 224 | Tolstoy in Translation | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Representing Holocaust) | 3 |
| LITTRANS 247 | Topics in Slavic Literatures in Translation (Russia \& Jews) | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| LITTRANS/ GEN\&WS 270 | German Women Writers in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |
| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) (German Lit) | 3 |
| LITTRANS 301 | Modern Indonesian Literature in Translation | 3 |
| LITTRANS 304 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 326 | Topics in Dutch Literature in Translation (Dutch Lit: Travel \& Migration) | 3 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen | 3-4 |
| LITTRANS 338 | In Translation: Knut Hamsun and the 20th Century Norwegian Novel | 3-4 |
| LITTRANS 343 | In Translation: The Woman in Scandinavian Literature | 3-4 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 373 | Topics in Japanese Literature (Evangelion) | 3 |


| LITTRANS 373 | Topics in Japanese Literature (Japanese Ghost Stories) | 3 |
| :---: | :---: | :---: |
| LITTRANS 373 | Topics in Japanese Literature (Writing the Environment) | 3 |
| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation | 3 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MED HIST 526 | Medical Technology and the Body | 3 |
| MED HIST/ HIST SCI 668 | Topics in History of Medicine (Health, Disease \& Medicine) | 3 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| NUTR SCI/ AGRONOMY/ ENTOM 203 | Introduction to Global Health | 3 |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics | 3-4 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 557 | Issues in Social Philosophy | 3 |
| PHYSICS/ ENVIR ST 472 | Scientific Background to Global Environmental Problems | 3 |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 313 | Bargaining in the Global Economy | 3-4 |
| POLI SCI/ <br> INTL ST 325 | Social Movements and Revolutions in Latin America | 3-4 |
| POLI SCI 330 | Political Economy of Development | 3 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 343 | Theories of International Security | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 363 | Literature and Politics | 3-4 |


| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 401 | Selected Topics in Political Science (Global Governance) | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/ <br> INTL ST 423 | Social Mobilization in Latin America | 3 |
| POLI SCI/ INTL ST 431 | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| $\begin{aligned} & \text { POLI SCI/ } \\ & \text { INTL ST } 434 \end{aligned}$ | The Politics of Human Rights | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| POLI SCI 460 | Topics in Political Philosophy (Economic Inequality) | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 534 | Socialism and Transitions to the Market | 3-4 |
| POLI SCI 538 | Politics and Policies in the European Union | 3-4 |
| POLI SCI 561 | Radical Political Theory | 3-4 |
| POLI SCI 601 | Proseminar: Topics in Political Science (Post-Conflict) | 3 |
| POLI SCI/ RELIG ST 618 | Political Islam | 3-4 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |
| POLI SCI 640 | Politics of Japan | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| POLI SCI 659 | Politics and Society: Contemporary Eastern Europe | 3-4 |
| POLI SCI/ASIAN 663 | South Asia and the Global System: Economy, Security \& Culture | 3-4 |
| POLI SCI/ JEWISH 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics (Political Economy) | 1-4 |
| PORTUG/ <br> GEN\&WS 450 | Brazillian Women Writers | 3 |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| PORTUG 640 | Topics in Luso-Brazilian Literature (LusoAfroBrazilian Studies) | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | 3-4 |
| RELIG ST/ ANTHRO 343 | Anthropology of Religion | 3-4 |
| RELIG ST/ HISTORY 379 | Islam in Iran | 3 |
| RELIG ST 400 | Topics in Religious Studies Humanities (Indian Traditions Modern Age) | 3-4 |



| THEATRE 522 | Experimental Drama: The Theatre of Europe 1850-the Present |
| :---: | :---: |
| THEATRE 526 | The Theatres of China and Japan |
| THEATRE/ SLAVIC 532 | History of Russian Theatre |
| THEATRE/ENGL 577 | Postcolonial Theatre: Drama, Theory and Performance in the Global South |
| URB R PL/ECON/ REAL EST 641 | Housing Economics and Policy |
| ZOOLOGY/BOTANY/ <br> ENVIR ST 260 | Introductory Ecology |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources |
| ZOOLOGY/ENVIR ST/ <br> F\&W ECOL 360 | Extinction of Species |
| ZOOLOGY/AN SCI/ <br> F\&W ECOL 520 | Ornithology |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology |
| ZOOLOGY/ <br> BOTANY/ENVIR ST/ <br> F\&W ECOL 651 | Conservation Biology |
| RESIDENCE AND QUALITY OF WORK |  |
| 2.000 GPA in all INTL ST courses and other courses in the major |  |
| 2.000 GPA on 15 upper-level major credits, taken in residence |  |
| 15 credits in the major, taken on the UW-Madison campus ${ }^{3}$ |  |
| 3 Major courses wit upper level. | th Intermediate and Advanced level are considered |

## LATIN AMERICAN, CARIBBEAN, AND IBERIAN STUDIES, B.A.

The Latin American, Caribbean, and Iberian Studies Program is one of the major U.S. centers for research about Latin America. This program is for those who seek a multidisciplinary education on Latin America, the Caribbean, Spain, and Portugal. It offers a wide range of courses in fields such as anthropology, business, economics, geography, history, journalism, music, political science, sociology, Spanish and Portuguese, and indigenous languages such as Yucatec Maya.

The aims of the Latin American, Caribbean, and Iberian studies major are to provide:

1. a broad exposure to Latin American, Caribbean, and Iberian studies by requiring students to take area and language content courses;
2. basic working knowledge in Spanish and/or Portuguese;
3. flexibility which allows students to take courses of interest, study abroad, and develop innovative academic projects; and
4. career-related advice and opportunities including volunteer work and internships with international organizations.

3 Students should contact the undergraduate advisor to determine which courses may satisfy major requirements. A minimum of 40 credits is required for the LACIS major. Upon declaration of the LACIS major, an assessment file is opened for each student which will include:

1. the development and submission of an "area of concentration,"
2. writing samples,
3. results of a language proficiency exam, and
4. an exit survey.

## HOW TO GET IN

Students should contact Sarah Ripp, the LACIS undergraduate advisor, at skripp@wisc.edu, to declare the major and to determine which courses may satisfy major requirements.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF ARTS DEGREE REQUIREMENTS

| Mathematics | Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement. |
| :---: | :---: |
| Foreign Language | - Complete the fourth unit of a foreign language; OR <br> - Complete the third unit of a foreign language and the second unit of an additional foreign language <br> Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR

| Code Title | Credits |
| :--- | ---: |
| Introductory Requirement |  |
| Select one of the following: ${ }^{1}$ | $3-4$ |


| POLI SCI/ | Latin America: An Introduction |  |
| :---: | :---: | :---: |
| AFROAMER/ |  |  |
| ANTHRO/ |  |  |
| C\&E SOC/GEOG/ |  |  |
| HISTORY/ |  |  |
| LACIS/SOC/ |  |  |
| SPANISH 260 |  |  |
| HISTORY 241 | Latin America from 1780 to 1940 |  |
| HISTORY 242 | Modern Latin America, 1898 to the Present |  |
| Language Requirement |  | 12-16 |
| Students must either complete or test out of the fourth semester of Spanish or Portuguese. |  |  |
| Students must also take an additional four courses in Spanish and/or Portuguese language, literature, and civilization above the 220 level. ${ }^{2}$ |  |  |
| ANTHRO 330 | Topics in Ethnology (Section 004) | 3-4 |
| LACIS/ANTHRO 361 | Elementary Quechua | 4 |
| LACIS/ANTHRO 362 | Elementary Quechua | 4 |
| LACIS/ANTHRO 363 | Intermediate Quechua | 4 |
| LACIS/ANTHRO 364 | Advanced Quechua | 4 |
| LACIS/ANTHRO 376 | First Semester Yucatec Maya | 4 |
| LACIS/ANTHRO 377 | Second Semester Yucatec Maya | 4 |
| PORTUG 207 | Portuguese for Business | 4 |
| PORTUG 221 | Introduction to Luso-Brazilian Literatures | 4 |
| PORTUG 225 | Third Year Conversation and Composition | 3 |
| PORTUG 226 | Third Year Conversation and Composition | 3 |
| PORTUG 230 | Brazil and Brazilians in the United States | 3 |
| PORTUG 299 | Directed Study | 1-3 |
| PORTUG 301 | Intensive Portuguese | 4 |
| PORTUG 302 | Intensive Portuguese | 4 |
| PORTUG 311 | Fourth Year Composition and Conversation | 3 |
| PORTUG 312 | Fourth Year Composition and Conversation | 3 |
| PORTUG 330 | History of the Portuguese Language | 3 |
| PORTUG 361 | Portuguese Civilization | 3 |
| PORTUG 362 | Brazilian Civilization | 3 |
| PORTUG 364 | Historical and Cultural Traditions of Brazil | 2 |
| PORTUG 411 | Survey of Portuguese Literature before 1825 | 3 |
| PORTUG 412 | Survey of Brazilian Literature before 1890 | 3 |
| PORTUG/ <br> FRENCH/ITALIAN/ <br> SPANISH 429 | Introduction to the Romance Languages | 3 |
| PORTUG/ <br> GEN\&WS 450 | Brazillian Women Writers | 3 |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature | 3 |


| PORTUG/ <br> GEN\&WS 460 | Carmen Miranda | 3 |
| :---: | :---: | :---: |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| PORTUG 468 | Survey of Brazilian Literature since 1890 | 3 |
| PORTUG 573 | Topics in Portuguese: Study Abroad | 1-6 |
| PORTUG 640 | Topics in Luso-Brazilian Literature | 3 |
| PORTUG 642 | Topics in Luso-Brazilian Culture | 3 |
| PORTUG 681 | Senior Honors Thesis | 3 |
| PORTUG 682 | Senior Honors Thesis | 3 |
| PORTUG 699 | Directed Study | 1-6 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 |
| SPANISH/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/HISTORY/ <br> LACIS/POLI SCI/ <br> SOC 260 | Latin America: An Introduction | 3-4 |
| SPANISH 299 | Directed Study | 1-3 |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 321 | The Structure of Modern Spanish | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 323 | Advanced Language Practice with Emphasis on Expository Writing | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 325 | Advanced Conversation | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH/ <br> INTL BUS 329 | Spanish for Business | 3 |
| SPANISH 331 | Spanish Applied Linguistics | 3 |
| SPANISH 359 | Spanish Business Area Studies | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH/ <br> MEDIEVAL 414 | Literatura de la Edad Media Castellana (ss. XII-XV) | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH/ <br> FRENCH/ITALIAN/ PORTUG 429 | Introduction to the Romance Languages | 3 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 446 | Topics in Spanish Linguistics | 3 |
| SPANISH 451 | Literature of the Eighteenth and Nineteenth Centuries | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |


| SPANISH 460 | Literatura Hispanoamericana | 3 |
| :---: | :---: | :---: |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture (The Beautiful Game, Human Rights: Argentina/Chile) | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |
| SPANISH 471 | Topics in Hispanic Literature | 3 |
| SPANISH 472 | Hispanic Screen Studies | 3 |
| SPANISH 473 | Study Abroad in Spanish Language Practice | 1-4 |
| SPANISH 474 | Study Abroad in Spanish Linguistics | 1-4 |
| SPANISH 475 | Study Abroad in Hispanic Literatures | 1-4 |
| SPANISH 476 | Study Abroad in Hispanic Cultures | 1-4 |
| SPANISH 501 | Survey of Spanish American Literature from the Discovery to Modernismo | 3 |
| SPANISH 502 | Survey of Spanish American Literature from Modernismo to the Present | 3 |
| SPANISH/ <br> MEDIEVAL 503 | Survey of Medieval Literature | 3 |
| SPANISH/ <br> MEDIEVAL 504 | Survey of Medieval Literature | 3 |
| SPANISH 505 | Advanced Survey of Spanish Literature | 3 |
| SPANISH 506 | Advanced Survey of Spanish Literature | 3 |
| SPANISH/ <br> MEDIEVAL 541 | Old Spanish | 3 |
| SPANISH 543 | Spanish Phonology | 3 |
| SPANISH 544 | Contemporary Issues in Applied Spanish Linguistics | 3 |
| SPANISH 545 | College Teaching of Spanish | 2 |
| SPANISH 548 | Structure of the Spanish Language: Morphology and Syntax | 3 |
| SPANISH 564 | Theory and Practice of Hispanic Theatre | 4 |
| SPANISH 627 | Historia de Teoria Literaria: de Platon AI Siglo XVIII | 3 |
| SPANISH 628 | Historia de Teoria Literaria: Siglos XIX-XX | 3 |
| SPANISH 630 | Topics in Hispanic Linguistics | 3 |
| SPANISH 681 | Senior Honors Thesis | 3 |


| SPANISH 682 | Senior Honors Thesis | 3 |
| :---: | :---: | :---: |
| SPANISH 691 | First Semester Senior Thesis | 3 |
| SPANISH 692 | Second Semester Senior Thesis | 3 |
| SPANISH 699 | Directed Study | 1-6 |
| Area of Concentration |  | 15-20 |
| Students must take at least five courses in an area of concentration that the student self-selects. |  |  |
| The concentration may anthropology etc.) or justice etc). The cour CAN NOT be Spanish courses. | ay be disciplinary (history, topical (poverty, gender, social ses in the area of concentration or Portuguese language or literature |  |


| A A E/ENVIR ST 244 | The Environment and the Global <br> Economy | 3 |
| :--- | :--- | ---: |
| A A E/AGRONOMY/ | World Hunger and Malnutrition |  |
| INTER-AG/ |  |  |$\quad$| NUTR SCI 350 | 3 |
| :--- | :--- |
| A A E/INTL ST 373 | Globalization, Poverty and <br> Development |

A A E/INTL ST 374 The Growth and Development of 3

| A A E 375 | Special Topics (LACIS-related topic <br> only) | $1-4$ |
| :--- | :--- | ---: |
| A A E/ECON/ | Latin American Economic |  |
| INTL BUS 462 | Development |  |
| AFRICAN/ Lusophone African Literature |  |  |
| PORTUG 451 |  | 3 |


| AFROAMER/ | Latin America: An Introduction | $3-4$ |
| :--- | :--- | ---: |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  |  |
| LACIS/POLI SCI/ |  | 3 |
| SOC/SPANISH 260 |  |  |
| AFROAMER/ | The Caribbean and its Diasporas |  |
| HISTORY 347 |  |  |


| AFROAMER/ | Contemporary African and | 3-4 |
| :--- | :--- | :--- |
| AFRICAN 413 | Caribbean Drama |  |


| AFROAMER/ | Selected Topics in African Diaspora | 3 |
| :--- | :--- | :--- |
| ART HIST 643 | Art History (LACIS related topic) |  |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |

AN SCI/DY SCI 370 Livestock Production and Health in 3

|  | Agricultural Development | 3 |
| :--- | :--- | ---: |
| ANTHRO 102 | Archaeology and the Prehistoric <br> World | 3 |
| ANTHRO 104 | Cultural Anthropology and Human <br> Diversity | 3 |
| ANTHRO 212 | Principles of Archaeology |  |
| ANTHRO 237 | Cut 'n' Mix: Music, Race, and Culture <br> in the Caribbean | 3 |
| ANTHRO/ | Latin America: An Introduction | $3-4$ |

AFROAMER/
C\&E SOC/GEOG/
HISTORY/LACIS/
POLI SCI/SOC/
SPANISH 260
ANTHRO 310

ANTHRO 322

Topics in Archaeology (LACIS
related content)
The Origins of Civilization
3

| ANTHRO 327 | Peoples of the Andes Today | 3 |
| :---: | :---: | :---: |
| ANTHRO/LACIS 361 | Elementary Quechua | 4 |
| ANTHRO/LACIS 362 | Elementary Quechua | 4 |
| ANTHRO/LACIS 363 | Intermediate Quechua | 4 |
| ANTHRO/LACIS 364 | Advanced Quechua | 4 |
| ANTHRO 490 | Undergraduate Seminar (LACIS related topic) | 3 |
| ART HIST 390 | Pre-Columbian Art | 3-4 |
| ART HIST 500 | Proseminar. Special Topics in Art History (LACIS related content) | 3 |
| BOTANY 400 | Plant Systematics | 4 |
| BOTANY/AMER IND/ <br> ANTHRO 474 | Ethnobotany | 3-4 |
| CHICLA/ <br> POLI SCI 231 | Politics in Multi-Cultural Societies | 3-4 |
| CHICLA 301 | Chicana/o and Latina/o History | 3 |
| CHICLA/ HISTORY 461 | The American West tol 850 | 3-4 |
| CHICLA 530 | Advanced Topics in Chicana/o and Latina/o Studies | 1-4 |
| C\&E SOC/SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| C\&E SOC/F\&W ECOL/ <br> SOC 248 | Environment, Natural Resources, and Society | 3 |
| C\&E SOC/ENVIR ST/ GEOG 434 | People, Wildlife and Landscapes | 3 |
| C\&E SOC/SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| COMP LIT 202 | Introduction to Modern and Contemporary Literature | 3 |
| COMP LIT 205 | Intro to Comparative Study of Race \& Ethnicity, In \& Beyond the U.S. | 3 |
| COUN PSY 620 | Special Topics in Counseling and Guidance (LACIS related content) | 1-6 |
| CURRIC 243 | Practicum in World Languages $(\mathrm{K}-12)$ | 3 |
| CURRIC 375 | Proseminar (Internationalizing Education) | 1-3 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 448 | Human Resources and Economic Growth | 3-4 |
| ECON/A A E/ <br> INTL BUS 462 | Latin American Economic Development | 3 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON/A A E 474 | Economic Problems of Developing Areas | 3 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON/A A E 567 | Public Finance in Less Developed Countries | 3 |
| ENVIR ST 200 | Special Topics in Environmental Studies (LACIS related content) | 1-4 |
| ENVIR ST/C\&E SOC/ <br> GEOG 434 | People, Wildlife and Landscapes | 3 |


| ENVIR ST/ <br> F\&W ECOL/ HISTORY 452 | World Forest History | 3 |
| :---: | :---: | :---: |
| ENVIR ST/ATM OCN/ GEOG 528 | Past Climates and Climatic Change | 3 |
| F\&W ECOL 100 | Introduction to Forestry | 2 |
| F\&W ECOL 375 | Special Topics (LACIS related content) | 1-4 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 |
| F\&W ECOL/ BOTANY/ENVIR ST/ ZOOLOGY 651 | Conservation Biology | 3 |
| GEN\&WS 102 | Gender, Women, and Society in Global Perspective | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS/ PORTUG 450 | Brazillian Women Writers | 3 |
| GEN\&WS/ PORTUG 460 | Carmen Miranda | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG 104 | Introduction to Human Geography | 3 |
| GEOG/AFROAMER/ ANTHRO/C\&E SOC/ HISTORY/LACIS/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 348 | Latin America | 4 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY 329 | History of American Capitalism | 4 |
| HISTORY/CHICLA/ <br> LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ CHICLA 435 | Colony, Nation, and Minority. The Puerto Ricans' World | 3 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY/ CHICLA 461 | The American West tol850 | 3-4 |
| HISTORY 525 | The World and the West from 1492 | 3-4 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 555 | History of Brazil | 3-4 |
| HISTORY/HIST SCI/ MED HIST 564 | Disease, Medicine and Public Health in the History of Latin America and the Caribbean | 3 |


| HIST SCI/HISTORY/ | Disease, Medicine and Public | 3 |
| :---: | :---: | :---: |
| MED HIST 564 | Health in the History of Latin |  |
|  | America and the Caribbean |  |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 374 | Tropical Horticulture | 2 |
| ILS 209 | Introduction to Global Cultures | 3 |
| ILS 401 | Global Cultures Capstone Seminar (LACIS related content) | 3 |
| INTL BUS/ <br> GEN BUS 320 | Intercultural Communication in Business | 3 |
| INTL BUS/ SPANISH 329 | Spanish for Business | 3 |
| INTL BUS/M HR 403 | Global Issues in Management | 3 |
| INTL BUS/ MARKETNG 420 | Global Marketing Strategy | 3 |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| INTL ST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTL ST 402 | Topics in Politics and Policy in the Global Economy (LACIS related topic) | 3-4 |
| INTL ST 603 | Topics in Culture in the Age of Globalization (LACIS related content) | 1-4 |
| JOURN 621 | Mass Communication in Developing Nations | 4 |
| LACIS/AFROAMER/ ANTHRO/C\&E SOC/ GEOG/HISTORY/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| LACIS 681 | Senior Honors Thesis | 3 |
| LACIS 682 | Senior Honors Thesis | 3 |
| LACIS 698 | Directed Study | 1-6 |
| LACIS 699 | Directed Study | 1-6 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 252 | Spanish Literary Masterpieces in Translation | 3 |
| MEDIEVAL/ <br> SPANISH 414 | Literatura de la Edad Media Castellana (ss. XII-XV) | 3 |
| MEDIEVAL/ <br> SPANISH 503 | Survey of Medieval Literature | 3 |
| MEDIEVAL/ <br> SPANISH 504 | Survey of Medieval Literature | 3 |
| MEDIEVAL/ <br> SPANISH 541 | Old Spanish | 3 |
| MED HIST 559 | Topics in Ethics and History of Medicine | 3 |
| MED HIST/HIST SCI/ | Disease, Medicine and Public | 3 |
| HISTORY 564 | Health in the History of Latin America and the Caribbean |  |
| MUSIC 270 | Ensemble-Guitar | 1 |


| MUSIC 340 | Pedagogy | 1-2 |
| :---: | :---: | :---: |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC 469 | Interdisciplinary Studies in the Arts | 1-4 |
| MUSIC 572 | Advanced Ensemble-Classical Guitar | 1 |
| POLI SCI/ <br> CHICLA 231 | Politics in Multi-Cultural Societies | 3-4 |
| POLI SCI 321 | Latin-American Politics | 3-4 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI/CHICLA/ HISTORY/LACIS 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 400 | Topics in Political Science | 1-4 |
| POLI SCI 401 | Selected Topics in Political Science | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |
| POLI SCI/ <br> INTL ST 423 | Social Mobilization in Latin America | 3 |
| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| POLI SCI/ <br> INTLST 431 | Contentious Politics | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POP HLTH 644 | Interdisciplinary Perspectives on Global Health and Disease | 1 |
| POP HLTH 660 | Communicating Public Health Information Effectively | 1 |
| PORTUG 361 | Portuguese Civilization | 3 |
| PORTUG 362 | Brazilian Civilization | 3 |
| PORTUG 364 | Historical and Cultural Traditions of Brazil | 2 |
| SOC/C\&E SOC 222 | Food, Culture, and Society | 3 |
| SOC/AFROAMER/ <br> ANTHRO/C\&E SOC/ GEOG/HISTORY/ LACIS/POLI SCI/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| SOC/CHICLA 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |



## AREA OF CONCENTRATION

Students must take at least five courses with a minimum of 25 percent Latin American, Caribbean, and/or Iberian content in an area of concentration that the student self-selects. The concentration may be disciplinary (history, anthropology, etc.) or topical (poverty, gender, social justice, etc.). The courses in the area of concentration cannot be Spanish or Portuguese language or literature courses. Study abroad courses often satisfy major requirements, but students should consult with the advisor before and during the study abroad program to ensure that the credits transfer. Courses for the concentration can be chosen from the LACIS Master Course List, or the LACIS-Approved Course List published each semester-both lists are available on the LACIS website. Note: These lists may not reflect all current offerings.

## NOTES

Students are encouraged to register in this major by the beginning of the junior year. Those considering a major in Latin American, Caribbean, and Iberian studies should consult the undergraduate advisor as early as possible in their academic career since a number of L\&S requirements in humanities and social sciences may be met by courses in Latin American, Caribbean, and Iberian studies. Students who enter the university without previous training in Spanish or Portuguese are urged to begin language study in the freshman year.

## SAMPLE PROGRAMS

The following list illustrates examples of "area of concentration" programs selected by Latin American, Caribbean, and Iberian studies majors:

- History and Culture Emphasis
- Environment and Development Emphasis
- Media and Politics Emphasis
- Gender Studies and Human Rights Emphasis


## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all LACIS and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in LACIS, taken on the UW-Madison campus
1 Courses in SPANISH and PORTUG and major courses in ANTHRO numbered 300 and higher are considered upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Latin American, Caribbean, and Iberian Studies Major in consultation with the LACIS undergraduate advisor.

## HONORS IN THE LATIN AMERICAN, CARIBBEAN, AND IBERIAN STUDIES MAJOR REQUIREMENTS

To earn Honors in the Major in LACIS, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA for all major courses
- Complete 18 credits, taken for Honors, with individual grades of B or better, to include:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following LACIS Introductory Course taken for Honors: |  | 3-4 |
| LACIS/ <br> AFROAMER/ <br> ANTHRO/ <br> C\&E SOC/GEOG/ <br> HISTORY/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction |  |
| HISTORY 241 | Latin America from 1780 to 1940 |  |
| HISTORY 242 | Modern Latin America, 1898 to the Present |  |
| Senior Capstone Seminar taken for Honors: |  | 1-4 |
| INTL ST 603 | Topics in Culture in the Age of Globalization |  |
| Select one of the following Research Experiences: |  | 6 |
| LACIS 681 <br> \& LACIS 682 | Senior Honors Thesis and Senior Honors Thesis |  |
| A two-semester research-based alternative |  |  |
| Additional LACIS Honors to achieve 18 credits |  |  |

## UNIVERSITY DEGREE REQUIREMENTS

$\left.\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\ \text { students must earn a minimum of } 120 \text { degree credits. } \\ \text { The requirements for some programs may exceed } 120 \\ \text { degree credits. Students should consult with their college }\end{array} \\ \text { or department advisor for information on specific credit } \\ \text { requirements. }\end{array}\right\}$

## LEARNING OUTCOMES

1. (Interdisciplinarity) analyzing contemporary political, economic, and cultural realities in the LACIS regions from multi-disciplinary perspectives, ideally including humanities, social sciences and sometimes natural science approaches.
2. (Depth of knowledge) mastering at the undergraduate expert level a particular disciplinary (e.g. history, anthropology etc.) or topical (e.g poverty, gender, social justice etc.) theme in the LACIS regions by taking five courses in an area of concentration.
3. (Historical and cultural grounding) understanding the historical, political, and cultural forces and conditions that have given rise to the unity and diversity in LACIS regions today.
4. (Language knowledge) mastering at the undergraduate generalist level a particular facet of life in one or more LACIS regions by studying a foreign language to the advanced (3rd year) level and beyond.
5. (Analytical skills) demonstrating the ability to think critically and analytically, the capacity to write clearly and effectively, and the ability to identify and evaluate research methods and outcomes.

## ADVISING AND CAREERS

Students should contact Sarah Ripp, the LACIS undergraduate advisor, at skripp@wisc.edu, to determine which courses may satisfy major requirements.

Students are encouraged to seek the assistance of SuccessWorks at the College of Letters \& Science early in their academic career. Take advantage of all the services offered such as mock interviews, resume and cover letter review sessions, career preparation workshops, and so on.

Students interested in international internships should contact the International Internships Program (http:// internships.international.wisc.edu) office.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

The Latin American, Caribbean, and Iberian Studies (LACIS) teaching staff consists of all faculty (https://lacis.wisc.edu/people/affiliated-facuty) who teach Latin American, Caribbean, and Iberian language and area content courses.

## WISCONSIN EXPERIENCE

As a regional center within the Institute for Regional and International Studies, we support and enhance international and global awareness in our student communities and inspire informed thinking about the complexities of our world. We encourage our students to connect to international networks and our regional communities through our program's lecture series, film screenings, and varied outreach events and activities. We encourage our students to study abroad, do international internships, learn foreign languages, and expect them to gain an interdisciplinary grounding in global and regional affairs. We provide resources and expertise on our world area to students, and prospective students, and more broadly to $\mathrm{K}-12$ teachers and students, postsecondary educators and graduate students, businesses, the media, the military, the community at large, and anyone else who is interested.

## RESOURCES AND SCHOLARSHIPS

Undergraduate students (from any major or discipline) can apply to receive one-time funds (https://lacis.wisc.edu/funding/forundergraduates) for internships or volunteer programs in Latin America, the Caribbean, the Iberian Peninsula. Domestic programs will be considered if the work is related to the LACIS field of study. The internships and volunteer programs will be carried out in public institutions, or well-established NGOs. Students from any nationality
and citizenship are eligible to apply. Please note that preference is given to declared LACIS majors. Please check with the LACIS undergraduate advisor, Sarah Ripp (https://lacis.wisc.edu/staff/ripp-sara), about your plans before submitting an application to ensure it meets our criteria. Read post-internship reports from former grant recipients. We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https://iris.wisc.edu/funding).

## LATIN AMERICAN, CARIBBEAN, AND IBERIAN STUDIES, B.S.

The Latin American, Caribbean, and Iberian Studies Program is one of the major U.S. centers for research about Latin America. This program is for those who seek a multidisciplinary education on Latin America, the Caribbean, Spain, and Portugal. It offers a wide range of courses in fields such as anthropology, business, economics, geography, history, journalism, music, political science, sociology, Spanish and Portuguese, and indigenous languages such as Yucatec Maya.

The aims of the Latin American, Caribbean, and Iberian studies major are to provide:

1. a broad exposure to Latin American, Caribbean, and Iberian studies by requiring students to take area and language content courses;
2. basic working knowledge in Spanish and/or Portuguese;
3. flexibility which allows students to take courses of interest, study abroad, and develop innovative academic projects; and
4. career-related advice and opportunities including volunteer work and internships with international organizations.

Students should contact the undergraduate advisor to determine which courses may satisfy major requirements. A minimum of 40 credits is required for the LACIS major. Upon declaration of the LACIS major, an assessment file is opened for each student which will include:

1. the development and submission of an "area of concentration,"
2. writing samples,
3. results of a language proficiency exam, and
4. an exit survey.

## HOW TO GET IN

Students should contact Sarah Ripp, the LACIS undergraduate advisor, at skripp@wisc.edu, to declare the major and to determine which courses may satisfy major requirements.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world.

Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4 - or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign <br> Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UW- <br> Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| Introductory Requirement |  |  |
| Select one of the following: ${ }^{1}$ |  | 3-4 |
| POLI SCI/ <br> AFROAMER/ <br> ANTHRO/ <br> C\&E SOC/GEOG/ <br> HISTORY/ <br> LACIS/SOC/ <br> SPANISH 260 | Latin America: An Introduction |  |
| HISTORY 241 | Latin America from 1780 to 1940 |  |
| HISTORY 242 | Modern Latin America, 1898 to the Present |  |
| Language Requiremen |  | 12-16 |
| Students must either complete or test out of the fourth semester of Spanish or Portuguese. |  |  |
| Students must also take an additional four courses in Spanish and/or Portuguese language, literature, and civilization above the 220 level. ${ }^{2}$ |  |  |
| ANTHRO 330 | Topics in Ethnology (Section 004) | 3-4 |
| LACIS/ANTHRO 361 | Elementary Quechua | 4 |
| LACIS/ANTHRO 362 | Elementary Quechua | 4 |
| LACIS/ANTHRO 363 | Intermediate Quechua | 4 |
| LACIS/ANTHRO 364 | Advanced Quechua | 4 |
| LACIS/ANTHRO 376 | First Semester Yucatec Maya | 4 |
| LACIS/ANTHRO 377 | Second Semester Yucatec Maya | 4 |
| PORTUG 207 | Portuguese for Business | 4 |
| PORTUG 221 | Introduction to Luso-Brazilian Literatures | 4 |
| PORTUG 225 | Third Year Conversation and Composition | 3 |
| PORTUG 226 | Third Year Conversation and Composition | 3 |
| PORTUG 230 | Brazil and Brazilians in the United States | 3 |
| PORTUG 299 | Directed Study | 1-3 |
| PORTUG 301 | Intensive Portuguese | 4 |
| PORTUG 302 | Intensive Portuguese | 4 |


| PORTUG 311 | Fourth Year Composition and Conversation | 3 | SPANISH 326 | Survey of Spanish American Literature | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PORTUG 312 | Fourth Year Composition and Conversation | 3 | SPANISH 327 | Introduction to Spanish Linguistics | 3 |
|  |  |  | SPANISH/ | Spanish for Business | 3 |
| PORTUG 330 | History of the Portuguese Language | 3 | INTL BUS 329 |  |  |
| PORTUG 361 | Portuguese Civilization | 3 | SPANISH 331 | Spanish Applied Linguistics | 3 |
| PORTUG 362 | Brazilian Civilization | 3 | SPANISH 359 | Spanish Business Area Studies | 3 |
| PORTUG 364 | Historical and Cultural Traditions of Brazil | 2 | SPANISH 361 | Spanish Civilization | 3 |
|  |  |  | SPANISH 363 | Spanish American Civilization | 3 |
| PORTUG 411 | Survey of Portuguese Literature before 1825 | 3 | SPANISH/ <br> MEDIEVAL 414 | Literatura de la Edad Media Castellana (ss. XII-XV) | 3 |
| PORTUG 412 | Survey of Brazilian Literature before 1890 | 3 | SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
|  |  |  | SPANISH/ | Introduction to the Romance | 3 |
| PORTUG/ <br> FRENCH/ITALIAN/ <br> SPANISH 429 | Introduction to the Romance Languages | 3 | FRENCH/ITALIAN/ | Languages |  |
|  |  |  | PORTUG 429 |  |  |
|  |  |  | SPANISH 435 | Cervantes | 3 |
| PORTUG/ GEN\&WS 450 | Brazillian Women Writers | 3 | SPANISH 446 | Topics in Spanish Linguistics | 3 |
|  |  |  | SPANISH 451 | Literature of the Eighteenth and | 3 |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature | 3 |  | Nineteenth Centuries |  |
| PORTUG/ GEN\&WS 460 |  | 3 | SPANISH 453 | Literature of the Twentieth Century | 3 |
|  | Carmen Miranda |  | SPANISH 460 | Literatura Hispanoamericana | 3 |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 | SPANISH 461 | The Spanish American Short Story | 3 |
|  |  |  | SPANISH 462 | Spanish American Theater and | 3 |
| PORTUG 468 | Survey of Brazilian Literature since$1890$ | 3 |  | Drama |  |
|  |  |  | SPANISH 463 | The Spanish American Novel | 3 |
| PORTUG 573 | Topics in Portuguese: Study Abroad | 1-6 | SPANISH 464 | Spanish American Poetry and Essay | 3 |
| PORTUG 640 | Topics in Luso-Brazilian Literature | 3 | SPANISH 465 | Literature and Film in Spanish | 3 |
| PORTUG 642 | Topics in Luso-Brazilian Culture | 3 |  | America |  |
| PORTUG 681 | Senior Honors Thesis | 3 | SPANISH 466 | Topics in Spanish American Literature | 1 |
| PORTUG 682 | Senior Honors Thesis | 3 | SPANISH 468 | 倍 | 3 |
| PORTUG 699 | Directed Study | 1-6 |  | Beautiful Game, Human Rights: |  |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |  | Argentina/Chile) |  |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 | SPANISH/ | Topics in Hispanic Cultures in the | 3 |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar | 3 | CHICLA 469 | U.S. |  |
|  |  |  | SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ | 3 |
| SPANISH/ | Latin America: An Introduction | 3-4 |  | Linguistics |  |
| AFROAMER/ |  |  | SPANISH 471 | Topics in Hispanic Literature | 3 |
| ANTHRO/C\&E SOC/ |  |  | SPANISH 472 | Hispanic Screen Studies | 3 |
| LACIS/POLI SCI/ SOC 260 |  |  | SPANISH 473 | Study Abroad in Spanish Language Practice | 1-4 |
| SPANISH 299 | Directed Study | 1-3 | SPANISH 474 | Study Abroad in Spanish Linguistics | 1-4 |
| SPANISH 311 | Advanced Language Practice | 3 | SPANISH 475 | Study Abroad in Hispanic Literatures | 1-4 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 | SPANISH 476 | Study Abroad in Hispanic Cultures | 1-4 |
| SPANISH 320 | Spanish Phonetics | 3 | SPANISH 501 | Survey of Spanish American | 3 |
| SPANISH 321 | The Structure of Modern Spanish | 3 |  | Modernismo |  |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 | SPANISH 502 | Survey of Spanish American | 3 |
| SPANISH 323 | Advanced Language Practice with Emphasis on Expository Writing | 3 |  | Literature from Modernismo to the Present |  |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 | SPANISH/ <br> MEDIEVAL 503 | Survey of Medieval Literature | 3 |
| SPANISH 325 | Advanced Conversation | 3 | SPANISH/ | Survey of Medieval Literature | 3 |
|  |  |  | MEDIEVAL 504 |  |  |



| CURRIC 243 | Practicum in World Languages (K-12) | 3 |
| :---: | :---: | :---: |
| CURRIC 375 | Proseminar (Internationalizing Education) | 1-3 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 448 | Human Resources and Economic Growth | 3-4 |
| ECON/A A E/ INTL BUS 462 | Latin American Economic Development | 3 |
| ECON 464 | International Trade and Finance | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON/A A E 474 | Economic Problems of Developing Areas | 3 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON/A A E 567 | Public Finance in Less Developed Countries | 3 |
| ENVIR ST 200 | Special Topics in Environmental Studies (LACIS related content) | 1-4 |
| ENVIR ST/C\&E SOC/ GEOG 434 | People, Wildlife and Landscapes | 3 |
| ENVIR ST/ <br> F\&W ECOL/ HISTORY 452 | World Forest History | 3 |
| ENVIR ST/ATM OCN/ GEOG 528 | Past Climates and Climatic Change | 3 |
| F\&W ECOL 100 | Introduction to Forestry | 2 |
| F\&W ECOL 375 | Special Topics (LACIS related content) | 1-4 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 |
| F\&W ECOL/ <br> BOTANY/ENVIR ST/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| GEN\&WS 102 | Gender, Women, and Society in Global Perspective | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS/ PORTUG 450 | Brazillian Women Writers | 3 |
| GEN\&WS/ PORTUG 460 | Carmen Miranda | 3 |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG 104 | Introduction to Human Geography | 3 |
| GEOG/AFROAMER/ ANTHRO/C\&E SOC/ HISTORY/LACIS/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 348 | Latin America | 4 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY 329 | History of American Capitalism | 4 |

HISTORY/CHICLA/ Labor in the Americas: US \& 3

| LACIS/POLI SCI 355 | Mexico in Comparative \& Historical <br>  <br>  <br> Perspective |  |
| :--- | :--- | :--- |
| HISTORY 403 | Immigration and Assimilation in <br>  <br> HISTORY 434 | American History |


| HISTORY/ | Colony, Nation, and Minority: The | 3 |
| :--- | :--- | ---: |
| CHICLA 435 | Puerto Ricans' World |  |
| HISTORY 441 | Revolution and Conflict in Modern <br> Latin America | $3-4$ |
| HISTORY/ | The American West to1850 | $3-4$ |


| HISTORY/ <br> CHICLA 461 | The American West to1850 | $3-4$ |
| :--- | :--- | :---: |
| HISTORY 525 | The World and the West from 1492 | $3-4$ |

HISTORY 533 Multi-Racial Societies in Latin 3-4

America
HISTORY 555 History of Brazil 3-4
HISTORY/HIST SCI/ Disease, Medicine and Public 3
MED HIST 564 Health in the History of Latin
America and the Caribbean
HIST SCI/HISTORY/ Disease, Medicine and Public 3
MED HIST 564 Health in the History of Latin
America and the Caribbean
HORT $370 \quad$ World Vegetable Crops 3
HORT 372 Colloquium in Organic Agriculture 1
HORT 374 Tropical Horticulture 2
ILS 209 Introduction to Global Cultures 3
ILS 401 Global Cultures Capstone Seminar 3
(LACIS related content)
INTL BUS/ Intercultural Communication in 3

GEN BUS 320 Business
INTL BUS/ Spanish for Business 3

SPANISH 329
INTL BUS/M H R 403 Global Issues in Management 3
INTL BUS/ Global Marketing Strategy 3

| MARKETNG 420 |  |  |
| :--- | :--- | :--- |
| INTL ST 101 | Introduction to International Studies |  |

INTL ST/A A E 373 Globalization, Poverty and 3
Development

| INTL ST 402 | Topics in Politics and Policy in the <br> Global Economy (LACIS related <br> topic) | $3-4$ |
| :--- | :--- | :---: |
| INTL ST 603 | Topics in Culture in the Age of | $1-4$ |


|  | Globalization (LACIS related <br> content) |  |
| :--- | :--- | :--- |
| JOURN 621 | Mass Communication in Developing | 4 |


| JOURN 621 | Mass Communication in Developing | 4 |
| :--- | :--- | ---: |
|  | Nations |  |
| LACIS/AFROAMER/ | Latin America: An Introduction | $3-4$ |

ANTHRO/C\&E SOC/
GEOG/HISTORY/
POLI SCI/SOC/
SPANISH 260
LACIS 440 Topics in Latin American, 1-4
Caribbean, and Iberian Studies

| LACIS 681 | Senior Honors Thesis | 3 |
| :--- | :--- | :--- |
| LACIS 682 | Senior Honors Thesis | 3 |


| LACIS 698 | Directed Study | 1-6 |
| :---: | :---: | :---: |
| LACIS 699 | Directed Study | 1-6 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 252 | Spanish Literary Masterpieces in Translation | 3 |
| MEDIEVAL/ <br> SPANISH 414 | Literatura de la Edad Media Castellana (ss. XII-XV) | 3 |
| MEDIEVAL/ <br> SPANISH 503 | Survey of Medieval Literature | 3 |
| MEDIEVAL/ SPANISH 504 | Survey of Medieval Literature | 3 |
| MEDIEVAL/ <br> SPANISH 541 | Old Spanish | 3 |
| MED HIST 559 | Topics in Ethics and History of Medicine | 3 |
| MED HIST/HIST SCI/ HISTORY 564 | Disease, Medicine and Public Health in the History of Latin America and the Caribbean | 3 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC 469 | Interdisciplinary Studies in the Arts | 1-4 |
| MUSIC 572 | Advanced Ensemble-Classical Guitar | 1 |
| POLI SCI/ CHICLA 231 | Politics in Multi-Cultural Societies | 3-4 |
| POLI SCI 321 | Latin-American Politics | 3-4 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI/CHICLA/ HISTORY/LACIS 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI 377 | Nuclear Weapons and World Politics | 3-4 |
| POLI SCI 400 | Topics in Political Science | 1-4 |
| POLI SCI 401 | Selected Topics in Political Science | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |
| POLI SCI/ <br> INTL ST 423 | Social Mobilization in Latin America | 3 |
| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POP HLTH 644 | Interdisciplinary Perspectives on Global Health and Disease | 1 |
| POP HLTH 660 | Communicating Public Health Information Effectively | 1 |
| PORTUG 361 | Portuguese Civilization | 3 |


| PORTUG 362 | Brazilian Civilization | 3 |
| :---: | :---: | :---: |
| PORTUG 364 | Historical and Cultural Traditions of Brazil | 2 |
| SOC/C\&E SOC 222 | Food, Culture, and Society | 3 |
| SOC/AFROAMER/ ANTHRO/C\&E SOC/ GEOG/HISTORY/ LACIS/POLI SCI/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| SOC/CHICLA 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 468 | Topics in Hispanic Culture (The Beautiful Game, Human Rights: Argentina/Chile) | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 545 | College Teaching of Spanish | 2 |
| URB R PL/ GEN\&WS 644 | International Development and Gender | 3 |
| URB R PL/ <br> ENVIR ST 668 | Green Politics: Global Experience, American Prospects | 3 |
| Breadth Requirement |  | 9-12 |
| Select three courses outside the area of concentration from the following: |  |  |
| Additional courses in Spanish and Portuguese language, literature and civilization over the 220 level (see courses listed under the language requirement above) |  |  |
| Courses in Quechua or Yucatec Maya (see courses listed under the language requirement above) |  |  |
| Additional LACIS courses outside the area of concentration(see courses listed above) |  |  |
| 1 The POLI SCI/AFROAMER/ANTHRO/C\&E SOC/GEOG/HISTORY/ LACIS/SOC/SPANISH 260 course is a 4-credit, interdepartmental course (crosslisted in anthropology, geography, history, political science, sociology, or Spanish). This course is generally available only in the spring semester. Students are encouraged to take this course as early as possible in their undergraduate careers. A student may also take HISTORY 241 or HISTORY 242 to satisfy this requirement. Occasionally, specially assigned courses will fulfill this requirement. |  |  |
| 2 With approval of the undergraduate advisor, courses in Yucatec Maya or Quechua may apply. |  |  |

## AREA OF CONCENTRATION

Students must take at least five courses with a minimum of 25 percent Latin American, Caribbean, and/or Iberian content in an area of concentration that the student self-selects. The concentration may be disciplinary (history, anthropology, etc.) or topical (poverty, gender, social justice, etc.). The courses in the area of concentration cannot be Spanish
or Portuguese language or literature courses. Study abroad courses often satisfy major requirements, but students should consult with the advisor before and during the study abroad program to ensure that the credits transfer. Courses for the concentration can be chosen from the LACIS Master Course List, or the LACIS-Approved Course List published each semester-both lists are available on the LACIS website. Note: These lists may not reflect all current offerings.

## NOTES

Students are encouraged to register in this major by the beginning of the junior year. Those considering a major in Latin American, Caribbean, and Iberian studies should consult the undergraduate advisor as early as possible in their academic career since a number of L\&S requirements in humanities and social sciences may be met by courses in Latin American, Caribbean, and Iberian studies. Students who enter the university without previous training in Spanish or Portuguese are urged to begin language study in the freshman year.

## SAMPLE PROGRAMS

The following list illustrates examples of "area of concentration" programs selected by Latin American, Caribbean, and Iberian studies majors:

- History and Culture Emphasis
- Environment and Development Emphasis
- Media and Politics Emphasis
- Gender Studies and Human Rights Emphasis


## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all LACIS and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$ 15 credits in LACIS, taken on the UW-Madison campus

1 Courses in SPANISH and PORTUG and major courses in ANTHRO numbered 300 and higher are considered upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Latin American, Caribbean, and Iberian Studies Major in consultation with the LACIS undergraduate advisor.

## HONORS IN THE LATIN AMERICAN, CARIBBEAN, AND IBERIAN STUDIES MAJOR REQUIREMENTS

To earn Honors in the Major in LACIS, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA for all major courses
- Complete 18 credits, taken for Honors, with individual grades of B or better, to include:


## Code Title

Select one of the following LACIS Introductory Course Credits taken for Honors:

3-4

| LACIS/ AFROAMER/ ANTHRO/ C\&E SOC/GEOG/ HISTORY/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction |  |
| :---: | :---: | :---: |
| HISTORY 241 | Latin America from 1780 to 1940 |  |
| HISTORY 242 | Modern Latin America, 1898 to the Present |  |
| Senior Capstone Seminar taken for Honors: |  | 1-4 |
| INTL ST 603 | Topics in Culture in the Age of Globalization |  |
| Select one of the following Research Experiences: |  | 6 |
| LACIS 681 <br> \& LACIS 682 | Senior Honors Thesis and Senior Honors Thesis |  |
| A two-semester research-based alternative |  |  |
| Additional LACIS Honors to achieve 18 credits |  |  |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Interdisciplinarity) analyzing contemporary political, economic, and cultural realities in the LACIS regions from multi-disciplinary perspectives, ideally including humanities, social sciences and sometimes natural science approaches.
2. (Depth of knowledge) mastering at the undergraduate expert level a particular disciplinary (e.g. history, anthropology etc.) or topical (e.g. poverty, gender, social justice etc.) theme in the LACIS regions by taking five courses in an area of concentration.
3. (Historical and cultural grounding) understanding the historical, political, and cultural forces and conditions that have given rise to the unity and diversity in LACIS regions today.
4. (Language knowledge) mastering at the undergraduate generalist level a particular facet of life in one or more LACIS regions by studying a foreign language to the advanced (3rd year) level and beyond.
5. (Analytical skills) demonstrating the ability to think critically and analytically, the capacity to write clearly and effectively, and the ability to identify and evaluate research methods and outcomes.

## ADVISING AND CAREERS

Students should contact Sarah Ripp, the LACIS undergraduate advisor, at skripp@wisc.edu, to determine which courses may satisfy major requirements.

Students are encouraged to seek the assistance of SuccessWorks at the College of Letters \& Science early in their academic career. Take advantage of all the services offered such as mock interviews, resume and cover letter review sessions, career preparation workshops, and so on.

Students interested in international internships should contact the International Internships Program (http://
internships.international.wisc.edu) office.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

The Latin American, Caribbean, and Iberian Studies (LACIS) teaching staff consists of all faculty (https://lacis.wisc.edu/people/affiliated-facuty) who teach Latin American, Caribbean, and Iberian language and area content courses.

## RESOURCES AND SCHOLARSHIPS

Undergraduate students (from any major or discipline) can apply to receive one-time funds (https://lacis.wisc.edu/funding/forundergraduates) for internships or volunteer programs in Latin America, the Caribbean, the Iberian Peninsula. Domestic programs
will be considered if the work is related to the LACIS field of study. The internships and volunteer programs will be carried out in public institutions, or well-established NGOs. Students from any nationality and citizenship are eligible to apply. Please note that preference is given to declared LACIS majors. Please check with the LACIS undergraduate advisor, Sarah Ripp (https://lacis.wisc.edu/staff/ripp-sara), about your plans before submitting an application to ensure it meets our criteria. Read post-internship reports from former grant recipients. We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https://iris.wisc.edu/funding).

## MIDDLE EAST STUDIES, CERTIFICATE

The Middle East studies certificate introduces undergraduate students to a multidisciplinary course of study that provides them with an informed overview of the history, civilizations, religions, politics, geographies, and economic factors that shape the cultural landscape of this dynamic and often volatile region.

The certificate provides in-depth training in a special area that may be particularly useful as students pursue careers in a variety of fields. These can include academia, law, public history, education, business, and even medicine, where they will practice their profession abroad or use their international experience to expand their understandings of these regions as they work with topics on or populations from diverse societies in the Middle East.

## HOW TO GET IN

Students interested in declaring the undergraduate certificate should contact the Middle East Studies Program office or the undergraduate advisor, Csanád Siklós, 262-5006; siklos@wisc.edu.

## REQUIREMENTS

The Middle East Studies Program offers an undergraduate certificate in Middle East studies. Requirements for the certificate include the interdisciplinary core course Introduction to the Middle East, which should be taken as early as possible in the sequence of courses for the certificate. The certificate requires 18 credits total.

## CERTIFICATE REQUIREMENTS

| Code Title |
| :--- |
| Core Course (select one): |
| INTL ST $266 \quad$ Introduction to the Middle East |
| Additional Courses |
| Select a second semester of a selected Middle Eastern |
| language |
| Select one course in history and social science (3 |
| credits) |
| Select one course in religion and culture ( 3 credits) |

Select additional courses in history and social science; religion and culture; or other electives (including up to 3 credits of advanced Middle Eastern language) to reach the 18 credit minimum for the certificate.

## MIDDLE EASTERN LANGUAGE COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| HEBR-MOD 102 | Second Semester Hebrew | 4 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| AFRICAN 322 | Second Semester Arabic | 5 |
| AFRICAN 323 | Third Semester Arabic | 4 |
| AFRICAN 324 | Fourth Semester Arabic | 4 |
| AFRICAN/ LCA LANG 445 | Readings in Advanced Arabic Texts | 3 |
| AFRICAN/ LCA LANG 446 | Readings in Advanced Arabic Texts | 3 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri | 3 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri | 3 |
| LCA LANG 563 | Fifth Semester Persian | 3 |
| LCA LANG 564 | Sixth Semester Persian | 3 |
| LCA LANG 631 | Advanced Readings in Turkic Languages | 3 |
| LCA LANG 644 | Readings in Otoman Turkish and Chagatay | 3 |
| LCA LANG/ AFRICAN 327 | Elementary Summer Immersion Arabic | 8 |
| LCA LANG 328 | Elementary Summer Immersion Persian | 8 |
| LCA LANG 329 | Elementary Summer Immersion Turkish | 8 |
| LCA LANG 340 | Second Semester Turkish | 4 |
| LCA LANG 364 | Second Semester Persian | 4 |
| LCA LANG/ AFRICAN 427 | Intermediate Summer Immersion Arabic | 8 |
| LCA LANG 428 | Intermediate Summer Immersion Persian | 8 |
| LCA LANG 429 | Intermediate Summer Immersion Turkish | 8 |
| LCA LANG/ AFRICAN 527 | Advanced Summer Immersion Arabic | 8 |
| LCA LANG 528 | Advanced Summer Immersion Persian | 8 |
| LCA LANG 529 | Advanced Summer Immersion Turkish | 8 |

## HISTORY AND SOCIAL SCIENCE COURSES

| Code | Title |
| :--- | :--- |
| AFRICAN/ | Readings in Advanced Arabic Texts |
| LCA LANG 445 |  |


| AFRICAN/ LCA LANG 446 | Readings in Advanced Arabic Texts | 3 |
| :---: | :---: | :---: |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY/ <br> RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| HISTORY/ <br> JEWISH 220 | Introduction to Modern Jewish History | 4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ <br> JEWISH 373 | Modern Political History of the Jews: 1655-1919 | 4 |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/ RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| HISTORY 500 | Reading Seminar in History | 3 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| INTL ST 320 | Contemporary Issues in International Studies (When topic is Middle East-related) | 1-4 |
| INTL ST 401 | Topics in Global Security | 3-4 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 401 | Selected Topics in Political Science | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI/ RELIG ST 618 | Political Islam | 3-4 |
| POLI SCI/ <br> JEWISH 665 | Israeli Politics and Society | 3-4 |
| CURRIC 375 | Proseminar | 1-3 |
| HISTORY/GEN\&WS/ <br> LCA 472 | Women in Turkish Society | 3 |
| HISTORY 600 | Advanced Seminar in History When section topic is Middle East-related | 3 |
| HISTORY 111 | Culture \& Society in the Ancient Mediterranean | 3-4 |
| JEWISH 233 | Elementary Topics in Jewish Studies: Social Sciences | 3-4 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |

## RELIGION AND CULTURE COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| AFRICAN/LCA/ | Islam: Religion and Culture | $3-4$ |
| RELIG ST 370 | History of Western Art I: From |  |
| ART HIST 201 | Pyramids to Cathedrals |  |
| ART HIST 413 | Art and Architecture in the Age of <br> the Caliphs | 4 |
| ART HIST/LCA 428 | Visual Cultures of South Asia | 3 |


| ART HIST 440 | Art and Power in the Arab World | 3 |
| :---: | :---: | :---: |
| ART HIST 500 | Proseminar: Special Topics in Art History | 3 |
| ASIAN 300 | Topics in Asian Studies | 3 |
| CLASSICS/ ART HIST 304 | The Art and Archaeology of Ancient Rome | 3-4 |
| CLASSICS/JEWISH/ RELIG ST 346 | Jewish Literature of the GrecoRoman Period | 3 |
| CLASSICS 370 | Classical Mythology | 3 |
| CLASSICS/ JEWISH 451 | Biblical Archaeology | 3 |
| CLASSICS/HISTORY/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| COMP LIT 500 | The Comparative In and Beyond Comparative Literature | 3 |
| FOLKLORE/ MUSIC 103 | Introduction to Music Cultures of the World | 2 |
| HEBR-BIB 103 | Elementary Biblical Hebrew, I | 4 |
| HEBR-BIB 104 | Elementary Biblical Hebrew, II | 4 |
| HEBR-BIB 303 | Elementary Biblical Hebrew, I | 3 |
| HEBR-BIB 304 | Elementary Biblical Hebrew, II | 3 |
| HEBR-BIB 323 | Intermediate Biblical Hebrew, I | 4 |
| HEBR-BIB 324 | Intermediate Biblical Hebrew, II | 4 |
| HEBR-BIB/ <br> CLASSICS/JEWISH/ <br> LITTRANS/ <br> RELIG ST 332 | Prophets of the Bible | 4 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| INTL ST 310 | International Learning Community Seminar (When topic is Middle Eastrelated) | 1-3 |
| JEWISH/ <br> LITTRANS 318 | Modern Jewish Literature | 3-4 |
| JEWISH 343 | Israeli Fiction in Translation | 3-4 |
| JEWISH/CLASSICS/ RELIG ST 346 | Jewish Literature of the GrecoRoman Period | 3 |
| JEWISH 356 | Jerusalem, Holy City of Conflict and Desire | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| LCA/RELIG ST 206 | Introduction to the Qur'an | 4 |
| LCA/FOLKLORE 279 | Introduction to Turkish Folk Literature | 3 |
| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| LCA/RELIG ST 444 | Introduction to Sufism (Islamic Mysticism) | 3 |
| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |


| LITTRANS/ JEWISH 318 | Modern Jewish Literature | 3-4 |
| :---: | :---: | :---: |
| RELIG ST 101 | Religion in Global Perspective | 3 |
| RELIG ST/ HISTORY 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| RELIG ST/LCA 206 | Introduction to the Qur'an | 4 |
| RELIG ST/ HISTORY 230 | Judaism, Christianity, and Islam: Braided Histories | 3 |
| ART HIST 305 | History of Islamic Art and Architecture | 3 |
| ART HIST/ RELIG ST 373 | Great Cities of Islam | 3 |
| HISTORY/ RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| AFRICAN 300 | African Literature in Translation | 3 |
| JEWISH 230 | Elementary Topics in Jewish Literature | 3-4 |
| JEWISH 231 | Elementary Topics in Jewish History | 3-4 |
| JEWISH 232 | Elementary Topics in Jewish Philosophy and the Arts | 3-4 |

## ADDITIONAL COURSES (ELECTIVES)

3 credits of advanced language may be used toward the requirement.

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN/ LCA LANG 445 | Readings in Advanced Arabic Texts 1 | 3 |
| AFRICAN/ <br> LCA LANG 446 | Readings in Advanced Arabic Texts 1 | 3 |
| AFRICAN 669 | Special Topics | 3 |
| ANTHRO 322 | The Origins of Civilization | 3 |
| ANTHRO/ <br> RELIG ST 343 | Anthropology of Religion | 3-4 |
| ANTHRO/ <br> LINGUIS 430 | Language and Culture | 3-4 |
| CLASSICS 376 | Love Poetry of the Ancient Mediterranean | 3 |
| CLASSICS/HISTORY/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| CLASSICS 602 | The Ancient Mediterranean City | 3 |
| FRENCH 211 | French Interdisciplinary Studies | 3 |
| HISTORY/ <br> MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| GEN\&WS/ <br> AFROAMER 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| HISTORY/ <br> MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 |
| HISTORY/GEN\&WS/ LCA 472 | Women in Turkish Society | 3 |
| HISTORY/HIST SCI/ <br> MED HIST/ <br> MEDIEVAL/ <br> S\&A PHM 562 | Byzantine Medicine and Pharmacy | 3 |


| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 227 | Introduction to Biblical Literature (in English) | 4 |
| :---: | :---: | :---: |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/PHILOS/ RELIG ST 435 | Jewish Philosophy from Antiquity to the Seventeenth Century | 3 |
| LCA 100 | Introduction to Cultures of Asia | 3 |
| LCA/FOLKLORE 279 | Introduction to Turkish Folk Literature | 3 |
| LCA 314 | Literatures of Central Asia | 3 |
| LCA/RELIG ST/ SOC 614 | Social Structures of Muslim Societies | 3 |
| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| LCA 610 | Proseminar: Introduction to Turkic Linguistics | 3 |
| LCA LANG 539 | Fifth Semester Turkish and Azeri ${ }^{1}$ | 3 |
| LCA LANG 540 | Sixth Semester Turkish and Azeri ${ }^{1}$ | 3 |
| LCA LANG 563 | Fifth Semester Persian ${ }^{1}$ | 3 |
| LCA LANG 564 | Sixth Semester Persian ${ }^{1}$ | 3 |
| LCA LANG 631 | Advanced Readings in Turkic Languages ${ }^{1}$ | 3 |
| LCA LANG 644 | Readings in Otoman Turkish and Chagatay ${ }^{1}$ | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| RELIG ST 400 | Topics in Religious Studies Humanities | 3-4 |
| RELIG ST 401 | Topics in Religious Studies - Social Studies | 3-4 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature ${ }^{1}$ | 3 |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature ${ }^{1}$ | 3 |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I ${ }^{1}$ | 3 |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II ${ }^{1}$ | 3 |
| AFRICAN 495 | Fifth Semester, A Language of Northern Africa | 3 |
| AFRICAN 496 | Sixth Semester, A Language of Northern Africa | 3 |

1 Course counts as Advanced Language.

## RESIDENCE AND QUALITY OF WORK

9 credits, counting toward the certificate, taken in residence
A cumulative 2.000 GPA for all courses counting toward the certificate

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Historical and Cultural Grounding) understanding the historical, political, and cultural forces and conditions that have given rise to the unity and diversity in the region today.
2. (Multi-disciplinarity) analyzing contemporary political, economic, and cultural realities in the region from at least two disciplinary perspectives, ideally including humanities, social sciences and sometimes natural science approaches.
3. (Depth of knowledge) mastering at the undergraduate generalist level a particular facet of life in the region by taking courses on a particular subregion or country, or by studying a regional language, or by taking at least two courses on the region in one discipline.

## ADVISING AND CAREERS

Advising for the certificate is run by the Institute for Regional and International Studies (IRIS). The IRIS Assistant Director for Students and Curriculum can assist you in developing your plan of study for the certificate, track progress toward your certificate, explore study abroad and international internship options, and begin the career exploration process. We offer walk-in advising, advising workshops, and scheduled appointments. We strongly encourage students to begin career exploration early on and to make use of the many resources available on campus.

Resources:

- Language and International Directions Advising (http:// www.languages.wisc.edu/languageadvising) (Language Institute)
- International Internship Program (http://
internships.international.wisc.edu)


## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

[^34]see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)

- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Middle East Studies Program Steering Committee: El Nossery, Layoun, Pruitt, Quraishi-Landes, Shelef.

## WISCONSIN EXPERIENCE

As a regional center within the Institute for Regional and International Studies, we support and enhance international and global awareness in our student communities and inspire informed thinking about the complexities of our world. We encourage our students to connect to international networks and our regional communities through our program's lecture series, film screenings, and varied outreach events and activities. We encourage our students to study abroad, do international internships, and learn foreign languages, and we expect them to gain an interdisciplinary grounding in global and regional affairs. We provide resources and expertise on our world area to students, and prospective students, and more broadly to K-12 teachers and students, postsecondary educators and graduate students, businesses, the media, the military, the community at large, and anyone else who is interested.

## RESOURCES AND SCHOLARSHIPS

Information about funding through the Middle East Studies Program is available on our website (https://mideast.wisc.edu/funding-resources). We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https://iris.wisc.edu/funding).

## RUSSIAN, EAST EUROPEAN, AND CENTRAL ASIAN STUDIES, CERTIIICATE

(For information on a major in Russian language and literature, Russian language and civilization, or Polish language and literature, see Slavic Languages and Literature (http://slavic.Iss.wisc.edu/new_web).)

The undergraduate certificate program in Russian, East European, and Central Asian studies seeks to provide undergraduate students with area knowledge of the societies and cultures of the peoples of Eastern Europe and Eurasia, drawing on the disciplines of anthropology, communication arts, economics, folklore, geography, history, language and literature, law, political science, and sociology. The certificate can be a valuable addition to a major in business, economics, education, geography, history, international studies, political science, Slavic languages and literature, and other departments.

Applicants must fulfill the UW-Madison requirements for an established major in their school or college and achieve a minimum GPA of 2.5 in all courses they wish to count toward the certificate. Courses may not be taken on a pass/fail basis. At least two years of a Slavic, East European,
or Central Asian language are strongly recommended for the certificate, but are not formally required.

## HOW TO GET IN

Students interested in declaring the undergraduate certificate should contact the Center for Russia, East Europe and Central Asia (CREECA) office or the undergraduate advisor, Csanád Siklós, 262-5006; siklos@wisc.edu.

## REQUIREMENTS

Certificate students must complete successfully seven courses for the certificate:

## Code

Title
Credits
Select one interdisciplinary course (Group I)
Select three courses in history and the social sciences representing at least two different SUBJECTS (Group II)
Select three courses in literature and the arts (Group III)
Students who complete more than one course in Group I may count the additional courses toward fulfillment of Group II or III. Language courses do not count toward the certificate.

Students are encouraged to consult with the certificate advisor and declare the certificate as early as possible in their college careers in order to select an academically focused group of courses. The certificate will be awarded following successful graduation.

## COURSES

## GROUP 1-INTERDISCIPLINARY

| Code | Title | Credits |
| :--- | :--- | ---: |
| HISTORY/POLI SCI/ | Russia: An Interdisciplinary Survey | 4 |
| GEOG/SLAVIC 253 |  | 4 |
| HISTORY/POLI SCI/ | Eastern Europe: An Interdisciplinary |  |
| GEOG/SLAVIC 254 | Survey | 3 |
| LCA/HISTORY 265 | An Introduction to Central Asia: <br>  <br>  <br> From the Silk Route to Afghanistan |  |

## GROUP II-HISTORY AND THE SOCIAL SCIENCES

## Agricultural and Applied Economics

Code Title Credits
A A E/ENVIR ST 244 The Environment and the Global 3 Economy

A A E/INTL ST 373 Globalization, Poverty and 3 Development

| A A E/INTL ST 374 | The Growth and Development of <br> Nations in the Global Economy | 3 |
| :--- | :--- | :--- |
| A A E/ECON 474 | Economic Problems of Developing <br> Areas | 3 |

1 When topic is Russia, Eastern Europe, or Central Asia

## Anthropology

Code
ANTHRO 369

Title
Peoples and Cultures of Central and Eastern Europe

Credits

| ANTHRO 606 | Ethnicity, Nations, and Nationalism 1 | 3-4 |
| :---: | :---: | :---: |
| 1 When topic is Russia, Eastern Europe, or Central Asia |  |  |
| Economics |  |  |
| Code | Title | Credits |
| ECON 364 | Survey of International Economics ${ }^{1}$ | 3-4 |
| ECON 464 | International Trade and Finance | 3-4 |
| 1 When topic is Russia, Eastern Europe, or Central Asia |  |  |
| Geography |  |  |
| Code | Title | Credits |
| GEOG 318 | Introduction to Geopolitics ${ }^{1}$ | 3 |
| GEOG 353 | Russia and the NIS-Topical Analysis | 3 |

1 When topic is Russia, Eastern Europe, or Central Asia

| History |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| HISTORY 200 | Historical Studies ${ }^{1}$ | 3 |
| HISTORY 201 | The Historian's Craft ${ }^{1}$ | 3-4 |
| HISTORY 223 | Explorations in European History $(\mathrm{H})^{1}$ | 3-4 |
| HISTORY/ <br> MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL 314 | Problems in Byzantine History and Civilization ${ }^{1}$ | 3-4 |
| HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY/ JEWISH 373 | Modern Political History of the Jews: 1655-1919 | 4 |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY/ <br> JEWISH 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| HISTORY 417 | History of Russia | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| HISTORY/GEN\&WS/ <br> LCA 472 | Women in Turkish Society | 3 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |


| HISTORY 500 | Reading Seminar in History ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| HISTORY/CURRIC/ JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| HISTORY/JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| HISTORY/HIST SCI/ <br> MED HIST/ <br> MEDIEVAL/ <br> S\&A PHM 562 | Byzantine Medicine and Pharmacy | 3 |
| HISTORY 600 | Advanced Seminar in History ${ }^{1}$ | 3 |
| HISTORY 270 | Eastern Europe since 1900 | 3-4 |
| When topic is Russia, Eastern Europe, or Central Asia |  |  |
| Jewish Studies |  |  |
| Code | Title | Credits |
| JEWISH 490 | Topics in Jewish Studies ${ }^{1}$ | 3 |
| 1 When topic is Russia, Eastern Europe, or Central Asia |  |  |
| Journalism and Mass Communication |  |  |
| Code | Title | Credits |
| JOURN 620 | International Communication ${ }^{1}$ | 4 |
| JOURN 621 | Mass Communication in Developing Nations ${ }^{1}$ | 4 |

1 When topic is Russia, Eastern Europe, or Central Asia

## Gender \& Women's Studies

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN\&WS/ | African American Women's Activism | 3 |
| AFROAMER 624 | (19th \& 20th Centuries) |  |

Political Science

| Code | Title | Credits |
| :--- | :--- | ---: |
| POLI SCI 120 | Politics Around the World | 4 |
| POLI SCI 340 | The European Union: Politics and <br> Political Economy | $3-4$ |
| POLI SCI 351 | Politics of the World Economy | $3-4$ |
| POLI SCI 401 | Selected Topics in Political Science | $3-4$ |
| POLI SCI/ | The Comparative Study of Genocide | $3-4$ |
| INTL ST 439 | The Challenge of Democratization | $3-4$ |
| POLI SCI 421 | Socialism and Transitions to the | $3-4$ |
| POLI SCI 534 | Market | $3-4$ |
| POLI SCI 432 | Comparative Legal Institutions | $3-4$ |
| POLI SCI/ | Political Islam ${ }^{1}$ |  |
| RELIG ST 618 | Russian Politics | $3-4$ |
| POLI SCI 334 | Politics and Society: Contemporary | $3-4$ |
| POLI SCI 659 | Eastern Europe |  |

[^35]

| LITTRANS 455 | Modern Serbian and Croatian Literature in Translation | 3 |
| :---: | :---: | :---: |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| 1 When topic is Russia, Eastern Europe, or Central Asia |  |  |
| Scandinavian Studies |  |  |
| Code | Title | Credits |
| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| SCAND ST/ MEDIEVAL 444 | Kalevala and Finnish Folk-Lore | 4 |


| Slavic Languages and Literature |  |
| :--- | :--- |
| Code | Title |


| SLAVIC 242 | Literatures and Cultures of Eastern | 3 |
| :--- | :--- | :--- |
| SLAVIC 245 | Europe |  |
| Topics in Slavic Literatures | 3 |  |


| SLAVIC 285 | Slavic Culture in Context: An Honors <br> Course |
| :--- | :--- |


| SLAVIC 302 | Zarys historii literatury polskiej | 3 |
| :--- | :--- | :--- |
| SLAVIC/ | Eastern Christianity/Russian | 3 |
| RELIG ST 325 | Orthodoxy in a Global Context |  |


| SLAVIC 342 | Uvod u srpsku i hrvatsku literaturu | 3 |
| :--- | :--- | :--- |
| SLAVIC 350 | Special Topics in Russian <br> Language, Literature, and Culture | 3 |


| SLAVIC 405 | Women in Russian Literature | $3-4$ |
| :--- | :--- | ---: |
| SLAVIC 420 | Chekhov | $3-4$ |


| SLAVIC 421 | Gogol | $3-4$ |
| :--- | :--- | :--- |
| SLAVIC 422 | Dostoevsky | $3-4$ |


| SLAVIC 424 | Tolstoy | $3-4$ |
| :--- | :--- | ---: |
| SLAVIC 439 | Russia Today in Literature and Film | 4 |


| SLAVIC 440 | Soviet Literature | $3-4$ |
| :--- | :--- | ---: |
| SLAVIC 449 | Istoriia srpske i hrvatske literature | 3 |


| SLAVIC 454 | Moderna srpska i hrvatska literatura | 3 |
| :--- | :--- | :--- |
| SLAVIC 470 | Historia literatury polskiej do roku | 3 |


| SLAVIC 472 | Historia literatury polskiej po roku <br> 1863 | 3 |
| :--- | :--- | ---: |
| SLAVIC/ | History of Russian Theatre | 3 |
| THEATRE 532 |  |  |
| SLAVIC 699 | Directed Study $^{1}$ | $1-6$ |

1 When topic is Russia, Eastern Europe, or Central Asia

## Theatre and Drama

Code Title Credits

THEATRE/
History of Russian Theatre
Credits
3
SLAVIC 532

## RESIDENCE AND QUALITY OF WORK

11 credits, counting toward the certificate, taken in residence
A cumulative 2.500 GPA for all coursework counting toward the certificate

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Regional Understanding) Demonstrate an understanding of the cultural, political, economic, social, and historical factors that have shaped the development of societies in Eurasia, Russia, and East and Central Europe.
2. (Multi-disciplinarity) Analyze the historical, political, economic, social, and cultural realities in the region from at least two disciplinary perspectives, including both humanities and social sciences approaches.

## ADVISING AND CAREERS

Advising for the certificate is administered by the Institute for Regional and International Studies (IRIS). The IRIS assistant director for students and curriculum can assist you in developing your plan of study for the certificate, track progress toward your certificate, explore study abroad and international internship options, and begin the careerexploration process. We offer walk-in advising, advising workshops, and scheduled appointments. We strongly encourage students to begin career exploration early on and to make use of the many resources available on campus.

## Resources:

- Language and International Directions Advising (http:// www.languages.wisc.edu/languageadvising) (Language Institute)
- International Internship Program (http:// internships.international.wisc.edu)


## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Faculty: Belodubrovskaya, Brenner, Buenger, Chamberlain, Ciancia, Dale, Danaher, Derin, Dolinin, DuBois, Evans-Romaine, Filipowicz, Gehlbach, Gerber, Hendley, Herrera, Hirsch, Johnson, Kaiser, Kepley, Lapina, Livanos, Longinovic, McDonald, Michels, Miernowska, Neville, Radeloff, Reynolds, Schamiloglu, Shevelenko, Tishler, Tumarkin, van de Water, Wink, Yudkoff

## WISCONSIN EXPERIENCE

As a regional center within the Institute for Regional and International Studies, we support and enhance international and global awareness in our student communities and inspire informed thinking about the complexities of our world. We encourage our students to connect to international networks and our regional communities through our program's lecture series, film screenings, and varied outreach events and activities. We encourage our students to study abroad, do international internships, learn foreign languages, and expect them to gain an interdisciplinary grounding in global and regional affairs. We provide resources and expertise on our world area to students, and prospective students, and more broadly to K-12 teachers and students, postsecondary educators and graduate students, businesses, the media, the military, the community at large, and anyone else who is interested.

## RESOURCES AND SCHOLARSHIPS

Information about resources, scholarships, and other funding through the Center for Russia, East Europe, and Central Asia is available from our website (https://creeca.wisc.edu) on the Resources tab. We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https://iris.wisc.edu/funding).

## SOUTH ASIAN STUDIES, CERTIFICATE

## SOUTH ASIAN STUDIES CERTIFICATE PROGRAM

Undergraduates interested in cross-disciplinary study of South Asia (generally defined as the countries of Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka, and the Tibetan region) may earn a certificate in South Asian studies. The certificate can be a valuable addition to a major in anthropology, archeology, business, communications, economics, education, gender and women's studies, geography, history, international studies, journalism, languages and cultures of Asia, political science, zoology, and other departments. Completion of the certificate provides a concentration in the area through language and/or interdisciplinary training that provides enhanced career opportunities or increased preparation for graduate study

The certificate in South Asian studies can be partially fulfilled through completion of a study abroad program in India administered by International Academic Programs (http://www.studyabroad.wisc.edu).

## HOW TO GET IN

Students interested in declaring the undergraduate certificate should contact the Center for South Asia office (info@southasia.wisc.edu) or the undergraduate advisor, Csanád Siklós, 262-5006; siklos@wisc.edu.

## REQUIREMENTS

| 21 CREDITS, DISTRIBUTED AS FOLLOWS: |  |  |
| :---: | :---: | :---: |
| Introductory course |  |  |
| Code | Title | Credits |
| One course from: |  | 3 |
| HISTORY 142 | History of South Asia to the Present |  |
| HISTORY/GEOG/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period |  |
| LCA 100 | Introduction to Cultures of Asia |  |
| LCA/GEOG/ HISTORY/ POLI SCI/ SOC 252 | The Civilizations of India-Modern Period |  |
| LCA/ <br> RELIG ST 274 | Religion in South Asia |  |
| LCA/ <br> RELIG ST 357 | Literatures of Muslim Societies |  |
| LITTRANS 211 | Modern Indian Literatures in Traslation |  |

Area courses
Code
Title
Credits
9 credits from:
General Anthropology
ANTHRO 100
ANTHRO 102
Archaeology and the Prehistoric World

ANTHRO 310 Topics in Archaeology
ART HIST 305 History of Islamic Art and Architecture

ART HIST/ Visual Cultures of South Asia
LCA 428
ART HIST/ Cities of Asia
LCA 379
ART HIST $500 \quad$ Proseminar: Special Topics in Art History
ART HIST 515 Proseminar in Medieval Art
ART HIST/ Mapping, Making, and Representing
LCA 621 Colonial Spaces
ASIAN 300 Topics in Asian Studies
ASIAN AM 101 Introduction to Asian American Studies

ASIAN AM 240 Topics in Asian American Studies
ASIAN AM/ A Survey of Asian American
ENGL 270 Literature
ASIAN AM 540 Special Topics
ASIAN AM 560 Humanities Topics

| DS 642 | Taste |
| :---: | :---: |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization |
| FOLKLORE/ <br> LCA 374 | Indian Folklore |
| FOLKLORE/ GEN\&WS 468 | Feminism, Folklore and Comparative Literature |
| GEN\&WS 102 | Gender, Women, and Society in Global Perspective |
| GEN\&WS 310 | Special Topics in Gender, Women and the Humanities |
| GEN\&WS/ URB R PL 644 | International Development and Gender |
| GEOG 510 | Economic Geography |
| HISTORY 130 | An Introduction to World History |
| HISTORY 200 | Historical Studies |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) |
| HISTORY/ <br> LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan |
| HISTORY 434 | American Foreign Relations, 1901 to the Present |
| HISTORY 450 | Making of Modern South Asia |
| HISTORY 463 | Topics in South Asian History |
| HISTORY 600 | Advanced Seminar in History |
| INTL BUS 200 | International Business |
| INTL BUS 365 | Contemporary Topics |
| INTL BUS/ MARKETNG 420 | Global Marketing Strategy |
| INTL ST 101 | Introduction to International Studies |
| INTL ST 310 | International Learning Community Seminar |
| INTL ST 320 | Contemporary Issues in International Studies |
| JOURN 162 | Mass Media in Multicultural America |
| LCA 236 | Bascom Course |
| LCA 314 | Literatures of Central Asia |
| LCA/ <br> RELIG ST 367 | Jainism: Religion of Non-Violence |
| LCA/ <br> RELIG ST 357 | Literatures of Muslim Societies |
| LCA/ <br> RELIG ST 355 | Hinduism |
| LCA/POLI SCI 326 | Politics of South Asia |
| LCA 311 | Modern Indian Literatures |
| LCA/AFRICAN/ RELIG ST 370 | Islam: Religion and Culture |
| LCA/ <br> FOLKLORE 374 | Indian Folklore |
| LCA/ <br> ART HIST 379 | Cities of Asia |
| LCA/ <br> RELIG ST 402 | Thought of Gandhi |


| LCA/ <br> RELIG ST 421 | A Survey of Tibetan Buddhism |
| :---: | :---: |
| LCA/ <br> ART HIST 428 | Visual Cultures of South Asia |
| LCA/ENGL 478 | Indian Writers Abroad: Literature, Diaspora and Globalization |
| LCA/ <br> RELIG ST 626 | Gods and Goddesses of South Asia |
| LCA 630 | Proseminar. Studies in Cultures of Asia |
| LCA/LEGAL ST/ RELIG ST 628 | Hindu Law |
| LCA/ <br> RELIG ST 624 | Meditation in Indian Buddhism and Hinduism |
| LCA/ <br> RELIG ST 623 | Yoga: Methods and Goals |
| LCA/ <br> RELIG ST 620 | Proseminar. Studies in Religions of Asia |
| LCA LANG 301 | First Semester Asian Language |
| LCA LANG 302 | Second Semester Asian Language |
| LCA LANG 333 | First Semester Pashto |
| LCA LANG 334 | Second Semester Pashto |
| LCA LANG 337 | First Semester Sinhala |
| LCA LANG 338 | Second Semester Sinhala |
| LCA LANG 349 | First Semester Bengali |
| LCA LANG 350 | Second Semester Bengali |
| LCA LANG 351 | First Semester Gujarati |
| LCA LANG 352 | Second Semester Gujarati |
| LCA LANG 353 | First Semester Hindi |
| LCA LANG 354 | Second Semester Hindi |
| LCA LANG 359 | First Semester Marathi |
| LCA LANG 360 | Second Semester Marathi |
| LCA LANG 363 | First Semester Persian |
| LCA LANG 364 | Second Semester Persian |
| LCA LANG 365 | First Semester Tamil |
| LCA LANG 366 | Second Semester Tamil |
| LCA LANG 367 | First Semester Telugu |
| LCA LANG 368 | Second Semester Telugu |
| LCA LANG 369 | First Semester Modern Tibetan |
| LCA LANG 370 | Second Semester Modern Tibetan |
| LCA LANG 371 | First Semester Urdu |
| LCA LANG 372 | Second Semester Urdu |
| LCA LANG 375 | First Semester Sanskrit |
| LCA LANG 376 | Second Semester Sanskrit |
| LCA LANG 401 | Third Semester Asian Language |
| LCA LANG 402 | Fourth Semester Asian Language |
| LCA LANG 433 | Third Semester Pashto |
| LCA LANG 434 | Fourth Semester Pashto |
| LCA LANG 437 | Third Semester Sinhala |
| LCA LANG 438 | Fourth Semester Sinhala |
| LCA LANG 449 | Third Semester Bengali |
| LCA LANG 450 | Fourth Semester Bengali |
| LCA LANG 451 | Third Semester Gujarati |
| LCA LANG 452 | Fourth Semester Gujarati |


| LCA LANG 453 | Third Semester Hindi |
| :---: | :---: |
| LCA LANG 454 | Fourth Semester Hindi |
| LCA LANG 459 | Third Semester Marathi |
| LCA LANG 461 | Third Semester Nepali |
| LCA LANG 462 | Fourth Semester Nepali |
| LCA LANG 463 | Third Semester Persian |
| LCA LANG 464 | Fourth Semester Persian |
| LCA LANG 467 | Third Semester Telugu |
| LCA LANG 468 | Fourth Semester Telugu |
| LCA LANG 469 | Third Semester Modern Tibetan |
| LCA LANG 470 | Fourth Semester Modern Tibetan |
| LCA LANG 471 | Third Semester Urdu |
| LCA LANG 472 | Fourth Semester Urdu |
| LCA LANG 475 | Third Semester Sanskrit |
| LCA LANG 476 | Fourth Semester Sanskrit |
| LCA LANG 553 | Fifth Semester Hindi |
| LCA LANG 554 | Sixth Semester Hindi |
| LCA LANG 557 | Fifth Semester Tibetan |
| LCA LANG 558 | Sixth Semester Tibetan |
| LCA LANG 571 | Fifth Semester Urdu |
| LCA LANG 572 | Sixth Semester Urdu |
| LCA LANG 601 | Seventh Semester Asian Language |
| LCA LANG 602 | Eighth Semester Asian Language |
| LCA LANG 648 | Advanced Readings in Pali Literature |
| LCA LANG 653 | Advanced Readings in Hindi Language |
| LCA LANG 654 | Advanced Readings in Hindi Literature |
| LCA LANG 671 | Advanced Readings in Urdu Language |
| LCA LANG 675 | Advanced Readings in Sanskrit |
| LCA LANG 677 | Advanced Readings in Tibetan |
| LCA LANG 563 | Fifth Semester Persian |
| LEGAL ST/ HISTORY 502 | Law and Colonialism |
| LEGAL ST/ HISTORY 510 | Legal Pluralism |
| LITTRANS 214 | Literatures of Central Asia in Translation |
| NUTR SCI/A A E/ AGRONOMY/ INTER-AG 350 | World Hunger and Malnutrition |
| PHILOS/ <br> RELIG ST 261 | Introduction to the Philosophy of Religion |
| POP HLTH 644 | Interdisciplinary Perspectives on Global Health and Disease |
| POP HLTH 645 | Global Health Field Course |
| RELIG ST 200 | Introductory Topics in Religious Studies (Humanities) |
| RELIG ST/ <br> LCA 357 | Literatures of Muslim Societies |
| RELIG ST/ <br> LCA 444 | Introduction to Sufism (Islamic Mysticism) |


| RELIG ST 600 | Religion in Critical Perspective |  |
| :---: | :---: | :---: |
| RELIG ST/ <br> LCA 624 | Meditation in Indian Buddhism and Hinduism |  |
| THEATRE/ ENGL 577 | Postcolonial Theatre: Drama, Theory and Performance in the Global South |  |
| Total Credits |  | 9 |
| Disciplinary courses |  |  |
| Code | Title | Credits |
| 6 credits from: |  | 6 |
| ANTHRO 310 | Topics in Archaeology |  |
| ANTHRO/ <br> LINGUIS 430 | Language and Culture |  |
| ART HIST 411 | Topics in Asian Art |  |
| ENGL/LCA 478 | Indian Writers Abroad: Literature, Diaspora and Globalization |  |
| FOLKLORE/ LCA 374 | Indian Folklore |  |
| HISTORY 450 | Making of Modern South Asia |  |
| INTL BUS 200 | International Business |  |
| LCA/ <br> RELIG ST 274 | Religion in South Asia |  |
| LCA 311 | Modern Indian Literatures |  |
| LCA/POLI SCI 326 | Politics of South Asia |  |
| $\begin{aligned} & \text { LCA/ } \\ & \text { RELIG ST } 355 \end{aligned}$ | Hinduism |  |
| LCA/ <br> RELIG ST 357 | Literatures of Muslim Societies |  |
| LCA/ <br> RELIG ST 367 | Jainism: Religion of Non-Violence |  |
| LCA/AFRICAN/ <br> RELIG ST 370 | Islam: Religion and Culture |  |
| LCA/ <br> FOLKLORE 374 | Indian Folklore |  |
| LCA/ <br> RELIG ST 402 | Thought of Gandhi |  |
| LCA/RELIG ST/ SOC 614 | Social Structures of Muslim Societies |  |
| LCA/ <br> RELIG ST 620 | Proseminar. Studies in Religions of Asia |  |
| LCA/ <br> RELIG ST 623 | Yoga: Methods and Goals |  |
| LCA/ <br> RELIG ST 626 | Gods and Goddesses of South Asia |  |
| LCA 630 | Proseminar. Studies in Cultures of Asia |  |
| POLI SCI/ ASIAN 663 | South Asia and the Global System: Economy, Security \& Culture |  |
| RELIG ST/ <br> LCA 402 | Thought of Gandhi |  |
| RELIG ST/ <br> LCA 421 | A Survey of Tibetan Buddhism |  |
| RELIG ST/ LCA 626 | Gods and Goddesses of South Asia |  |


| THEATRE 619 | Special Topics in Theatre and Drama |  |
| :---: | :---: | :---: |
| Total Credits |  | 6 |
| Capstone Code | Title | Credits |
| 3 credits from: |  | 3 |
| ANTHRO 690 | Problems in Anthropology |  |
| COM ARTS 613 | Special Topics in Film |  |
| HISTORY 463 | Topics in South Asian History |  |
| LCA 600 | Capstone Seminar in Asian Humanities |  |
| LCA/RELIG ST/ SOC 614 | Social Structures of Muslim Societies |  |
| LCA/ <br> RELIG ST 620 | Proseminar. Studies in Religions of Asia |  |
| LCA 630 | Proseminar. Studies in Cultures of Asia |  |
| LCA 666 | Proseminar. Studies in Literatures of Asia |  |
| LCA/RELIG ST/ SOC 634 | Social Structure of India |  |
| POLI SCI/ <br> ASIAN 663 | South Asia and the Global System: Economy, Security \& Culture |  |
| LCA 699 | Directed Study |  |

## RESIDENCE \& QUALITY OF WORK

2.750 GPA in all certificate-approved courses

11 credits in the certificate must be taken in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Historical Grounding) understanding the historical, political, and cultural forces and conditions that have given rise to the unity and diversity in the region today.
2. (Multi-disciplinarity) analyzing contemporary political, economic, and cultural realities in the region from at least two disciplinary perspectives, ideally including humanities, social sciences and sometimes natural science approaches.
3. (Depth of knowledge) mastering at the undergraduate generalist level a particular facet of life in the region by taking courses on a particular subregion or country, or by studying a regional language, or by taking at least two courses on the region in one discipline.

## ADVISING AND CAREERS

Advising for the certificate is administered by the Institute for Regional and International Studies (IRIS). The IRIS assistant director for students and curriculum can assist you in developing your plan of study for
the certificate, track progress towards your certificate, explore study abroad and international internship options, and begin the career exploration process. We offer walk-in advising, advising workshops, and scheduled appointments. We strongly encourage students to begin career exploration early on and to make use of the many resources available on campus.

Contact the certificate advisor (Csanád Siklós, 262-5006; siklos@wisc.edu) to create a plan that includes a well-balanced selection of area studies and disciplinary courses and for approval of appropriate introductory and capstone seminar courses.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Center for South Asia Advisory Committee: Christine Garlough, Mark Kenoyer, Sundaram Gunasekaran, Stephen Young, Todd MichelsonAmbelang, Laura Hammond.

## WISCONSIN EXPERIENCE

As a regional center within the Institute for Regional and International Studies, we support and enhance international and global awareness in our student communities and inspire informed thinking about the complexities of our world. We encourage our students to connect to international networks and our regional communities through our program's lecture series, film screenings, and varied outreach events and activities. We encourage our students to study abroad, do international internships, learn foreign languages, and expect them to gain an interdisciplinary grounding in global and regional affairs. We provide resources and expertise on our world area to students, and prospective students, and more broadly to $\mathrm{K}-12$ teachers and students, postsecondary educators and graduate students, businesses, the media, the military, the community at large, and anyone else who is interested.

## RESOURCES AND SCHOLARSHIPS

Information about resources and scholarships through the Center for South Asia is available from our website (http://southasia.wisc.edu). We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https://iris.wisc.edu/funding).

## SOUTHEAST ASIAN STUDIES, CERTIFICATE

Students interested in more specialized study of the languages and literature of East Asia, South Asia, or Southeast Asia should see the Department of Asian Languages and Cultures, the Center for East Asian Studies, or the Center for South Asia; those interested in the study of languages and cultures of Central Asia should see the Center for Russian, East European, and Central Asian Studies. All questions pertaining to Southeast Asian studies at UW-Madison, should be addressed to the Center for Southeast Asian Studies (see box at right).

## CERTIFICATE IN SOUTHEAST ASIAN STUDIES

The undergraduate certificate in Southeast Asian studies is available to students working toward a baccalaureate degree in any of the University of Wisconsin-Madison schools and colleges. This certificate meets the needs of students choosing to focus on the Southeast Asia region (Brunei, Cambodia, East Timor, Indonesia, Laos, Malaysia, Myanmar/ Burma, Philippines, Singapore, Thailand, Vietnam) within their primary major, but not wishing to commit to the more rigorous language and area studies courses required for the B.A. in Asian Languages and Cultures (named option in Southeast Asia). Students select coursework reflecting their interests from classes offered through many university departments, and can work toward a variety of undergraduate majors. Upon earning the certificate, this emphasis is noted on the student's transcript. The certificate is of value to students wishing to demonstrate their knowledge of the Southeast Asian region either to potential employers or to graduate schools.

## HOW TO GET IN

Students interested in declaring the certificate in Southeast Asian studies should contact the program adviser Michael Cullinane, mmcullin@wisc.edu, 608-263-1755.

## REQUIREMENTS

## 15 CREDITS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Up to 6 credits of Language may count: | $0-6$ |  |
| LCA LANG 403 | Third Semester Burmese |  |
| LCA LANG 404 | Fourth Semester Burmese |  |
| LCA LANG 405 | Third Semester Filipino |  |
| LCA LANG 406 | Fourth Semester Filipino |  |
| LCA LANG 407 | Third Semester Hmong |  |

LCA LANG 408
LCA LANG 409
LCA LANG 410
LCA LANG 411
LCA LANG 412
LCA LANG 413
LCA LANG 414
LCA LANG 415
LCA LANG 416
LCA LANG 417
LCA LANG 418
LCA LANG 419
LCA LANG 420
LCA LANG 503
LCA LANG 504
LCA LANG 505
LCA LANG 506
LCA LANG 507
LCA LANG 508
LCA LANG 509
LCA LANG 510
LCA LANG 513
LCA LANG 514
LCA LANG 515
LCA LANG 516
LCA LANG 517
LCA LANG 518
LCA LANG 519
LCA LANG 520
Core courses:
A A E/
INTL ST 373
E ASIAN 520

ECON/A A E 473 Economic Growth and Development

FOLKLORE/
MUSIC 103
FOLKLORE/ MUSIC 402
GEOG/HISTORY/
LCA/POLI SCI/
SOC 244
GEOG 358

HISTORY/
RELIG ST 205
HISTORY/
ASIAN AM/
LCA 246
HISTORY 319
HISTORY/LCA/ Buddhism and Society in Southeast
RELIG ST 438 Asian History
Fourth Semester Hmong Third Semester Indonesian

Fourth Semester Indonesian
Third Semester Javanese
Fourth Semester Javanese
Third Semester Khmer
Fourth Semester Khmer
Third Semester Lao
Fourth Semester Lao
Third Semester Thai
Fourth Semester Thai
Third Semester Vietnamese
Fourth Semester Vietnamese
Fifth Semester Burmese
Sixth Semester Burmese
Fifth Semester Filipino
Sixth Semester Filipino
Fifth Semester Hmong
Sixth Semester Hmong
Fifth Semester Indonesian
Sixth Semester Indonesian
Fifth Semester Khmer
Sixth Semester Khmer
Fifth Semester Lao
Sixth Semester Lao
Fifth Semester Thai
Sixth Semester Thai
Fifth Semester Vietnamese
Sixth Semester Vietnamese

Globalization, Poverty and
Development
Popular Culture and Film in Twentieth-Century China in Southeast Asia Introduction to Music Cultures of the World
Musical Cultures of the World

Introduction to Southeast Asia:
Vietnam to the Philippines

Human Geography of Southeast Asia

The Making of the Islamic World: The Middle East, 500-1500

Southeast Asian Refugees of the
"Cold" War

The Vietnam Wars

| HISTORY/ | History of Southeast Asia to 1800 |
| :--- | :--- |
| LCA 457 |  |
| HISTORY/ | History of Southeast Asia Since <br> LCA 458 |
| INTL BUS 200 | International Business |
| LCA 401 | Modern Indonesian Literature |
| LCA 441 | Language and Society in Southeast <br> Asia |
| LCA 671 | Structure of Thai |
| MUSIC/ | Introduction to Music Cultures of |
| FOLKLORE 103 | the World |
| MUSIC 361 | Non-Western Music Performance- <br> Study Groups |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 402 |  |
| RELIG ST/ | Islam: Religion and Culture |
| AFRICAN/ |  |
| LCA 370 |  |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA on all certificate-approved courses

8 credits in the certificate, in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Historical and Cultural Grounding) understanding the historical political and cultural forces and conditions that have given rise to the unity and diversity in the region today.
2. (Multi-disciplinarity) analyzing contemporary political, economic, and cultural realities in the region from at least two disciplinary perspectives, ideally including humanities, social sciences and sometimes natural science approaches.
3. (Depth of Knowledge) mastering at the undergraduate generalist level a particular facet of life in the region by taking courses on a particular subregion or country or by studying a regional language or by taking at least two courses on the region in one discipline.

## ADVISING AND CAREERS

All students interested in this certificate are encouraged to take HISTORY/GEOG/LCA/POLI SCI/SOC 244 Introduction to Southeast Asia: Vietnam to the Philippines.

Southeast Asian language courses can be taken during the academic year (Filipino, Hmong, Indonesian, Thai, and Vietnamese) and all of these plus three others (Burmese, Khmer, and Lao) can be taken at UWMadison's summer program, the Southeast Asian Studies Summer Institute (http://seassi.wisc.edu).

Students interested in the certificate in Southeast Asian Studies, should contact the program adviser Michael Cullinane, mmcullin@wisc.edu, 608-263-1755.

## WISCONSIN EXPERIENCE

As a regional center within the Institute for Regional and International Studies, we support and enhance international and global awareness in our student communities and inspire informed thinking about the complexities of our world. We encourage our students to connect to international networks and our regional communities through our program's lecture series, film screenings, and varied outreach events and activities. We encourage our students to study abroad, do international internships, learn foreign languages, and expect them to gain an interdisciplinary grounding in global and regional affairs. We provide resources and expertise on our world area to students, and prospective students, and more broadly to K-12 teachers and students, postsecondary educators and graduate students, businesses, the media, the military, the community at large, and anyone else who wants it.

## RESOURCES AND SCHOLARSHIPS

Information about resources, scholarships and funding through the Center for Southeast Asian Studies is available from our website (http:// seasia.wisc.edu) on the "For Students" and the "Resources" tabs. We also encourage our students to explore funding options available through the Institute for Regional and International Studies (IRIS) Awards Office (https://iris.wisc.edu/funding).

## INTEGRATED LIBERAL STUDIES

Integrated Liberal Studies (https://ils.wisc.edu) (ILS) is an interdisciplinary program offering courses devoted to Western history, philosophy, politics, art, literature, and culture. As an alternative to scattered electives, ILS offers a set of related courses specially tailored to meet the breadth requirements of the College of Letters \& Science. ILS draws exemplary, dynamic faculty from departments across campus to create courses that challenge students with a rigorous program of interdisciplinary study emphasizing critical thinking and judgment rather than passive absorption of information. Although these courses may be taken as single electives, the purpose of the program is to counter the fragmentation of undergraduate education by providing a common ground of learning.

Because ILS courses are interdisciplinary, students are encouraged to make connections between the various subject areas. They study the relations between literature and the arts; science, technology, and philosophy; and political, economic, and social thought. The content of the curriculum has been developed in the belief that historical perspective is required for a full understanding of contemporary issues. Courses numbered 201-208 progress from historical to contemporary topics, in each of the three breadth areas. Together, these courses provide a comprehensive introduction to the achievements of Western culture. Those numbered 251-372 cover interdisciplinary special topics in the natural sciences, social sciences, and humanities, from "Art and Political Activism" to "Vietnam: Music, Media, and Mayhem." ILS also includes a course (ILS 200 Critical Thinking and Expression) in Critical Thinking and Expression to sharpen communication and research skills necessary for college work. This course satisfies the university's Communications B requirement. ILS 400 Capstone Integration Seminar, a senior capstone
seminar addressing an interdisciplinary topic, is required in order to complete the ILS certificate.

## BRADLEY LEARNING COMMUNITY

The ILS program is affiliated with the Bradley Learning Community (http://www.housing.wisc.edu/bradley), a residence hall. ILS faculty participate in activities and offer courses taught in the residence hall.

## DEGREES/MAJORS/CERTIFICATES

- Integrated Liberal Studies, Certificate (p. 964)


## PEOPLE

## AFFILIATED FACULTY

Richard Avramenko, Chair (Political Science)
William Aylward (Classics)
Doug Bradley (Integrated Liberal Studies)
Aaron Brower (Social Work)
Florence Hsia (History of Science)
David Kleinman (Rural Sociology)
Jason Lopez (Communication Arts)
Laura McClure (Classics)
Cathy Middlecamp (Nelson Institute for Environmental Studies)
Steve Nadler (Philosophy)
Adam Nelson (Educational Policy Studies)
Lynn Nyhart (History of Science)
Shawn Peters (The Center for Educational Opportunity-CeO)
Nandini Pandey (Classics)
Howard Schweber (Political Science)
Basil Tikoff (Geoscience)
Mike Vanden Heuvel (Theatre and Drama)
Craig Werner (Afro-American Studies)
John Zumbrunnen (Political Science)

## INTEGRATED LIBERAL STUDIES, CERTIFICATE

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## BRADLEY LEARNING COMMUNITY

The ILS program is affiliated with the Bradley Learning Community (http://www.housing.wisc.edu/bradley), a residence hall. ILS faculty participate in activities and offer courses taught in the residence hall.

## HOW TO GET IN

ILS is open to all UW undergraduate students in any college. There are no requirements or prerequisites to declare the certificate.

Declaring an ILS certificate may be accomplished any time during the year and does not need to be added to UW-Madison admission forms. To declare an ILS certificate students can stop by the Meiklejohn House (228 North Charter Street) and talk to the advisor or administrator to fill out their declaration form. For more information, please see the program website (http://ils.wisc.edu) or send an email to ils@ls.wisc.edu.

## REQUIREMENTS

## 18 CREDITS FROM:

| Code | Title | Credits |
| :--- | :--- | ---: |
| At least 3 credits from a 230+ numbered course: |  |  |
| ILS/RELIG ST 234 | Genres of Western Religious Writing |  |


| ILS 681 | Undergraduate Honors Thesis |  |
| :---: | :---: | :---: |
| ILS 682 | Undergraduate Honors Thesis |  |
| ILS 691 | Undergraduate Thesis |  |
| ILS 692 | Undergraduate Thesis |  |
| Capstone |  |  |
| ILS 400 | Capstone Integration Seminar | 3 |
| Additional credits: |  | 12 |
| Any ILS course from above or: ${ }^{1}$ |  |  |
| ILS/ENVIR ST 126 Principles of Environmental Science |  |  |
| ILS 138 | CRC First-Year Seminar. Foundations of a Liberal Arts Education |  |
| ILS/INTERAG 150 | Ways of Knowing |  |
| ILS 153 | Ways of Knowing in the Sciences |  |
| ILS 157 | Bradley Roundtable Seminar |  |
| ILS 170 | Creativity and the Civic-Minded Culture |  |
| ILS 198 | Directed Study |  |
| ILS 199 | Directed Study |  |
| ILS 200 | Critical Thinking and Expression |  |
| ILS 201 | Western Culture: Science, Technology, Philosophy I |  |
| ILS 202 | Western Culture: Science, Technology, Philosophy II |  |
| ILS 203 | Western Culture: Literature and the Arts I |  |
| ILS 204 | Western Culture: Literature and the Arts II |  |
| ILS 205 | Western Culture: Political, Economic, and Social Thought I |  |
| ILS 206 | Western Culture: Political, Economic, and Social Thought II |  |
| ILS 208 | History of Western Culture II |  |
| ILS 209 | Introduction to Global Cultures |  |
| Total Credits 18 |  |  |

1 Up to 6 credits from Freshman Interest Group (FIG) courses may apply to the certificate. Consult the undergraduate advisor for more information about applying these courses to the program.

## RESIDENCE \& QUALITY OF WORK

2.000 GPA on ILS courses and courses counting toward the certificate

9 credits in the certificate, in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Ability to integrate different types of knowledge and disciplinary approaches.
2. Knowledge of the past and its relevance to the present.
3. Ability to handle complex ideas.
4. Intellectual curiosity.

## ADVISING AND CAREERS

## ADVISOR CONTACT

Richard Avramenko, ILS Chair<br>ils@ls.wisc.edu<br>608-262-2190

## CAREER INFORMATON

The Integrated Liberal Studies Program encourages certificate students to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks in the College of Letters \& Science to help you leverage the academic skills learned in your major and liberal arts degree, explore and try out different career paths, participate in internships, prepare for the job search and/or graduate school applications, and network with professionals in the field (alumni and employers).

Letters \& Science graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## AFFILIATED FACULTY

Richard Avramenko, ILS Chair (Political Science)
William Aylward (Classics)
Doug Bradley (ILS)
Florence Hsia (History of Science)
Jason Lopez (Communication Arts)
Laura McClure (Classics)
Cathy Middlecamp (Nelson Institute for Environmental Studies)
Steve Nadler (Philosophy)
Adam Nelson (Educational Policy Studies)
Lynn Nyhart (History of Science)
Zakir Paul (Political Science)
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Nandini Pandey (Classics)
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Basil Tikoff (Geoscience)
Mike Vanden Heuvel (Theatre and Drama)
Craig Werner (Afro-American Studies)
John Zumbrunnen (Political Science)

## WISCONSIN EXPERIENCE

## "A SMALL LIBERAL ARTS COLLEGE WITHIN A GREAT UNIVERSITY"

ILS is not only a certificate, but a community on campus. The program strives to create a place where students can take multiple classes with the same group of peers and develop lasting relationships. It's like a FIG (firstyear interest group) throughout the entire undergraduate experience.

> "The University of Wisconsin needs programs like ILS to give students the indispensable liberal arts experience and I am happy that it was part of my experience here on campus." Brett Tietz ( 2015 ILS graduate)
"I love that the history and literature I learn in my ILS courses makes me a better conversationalist." Paul Sutherland (2015 ILS graduate)


#### Abstract

"I love ILS because there is so much to learn. Through ILS I was able to trace the history of science from natural philosophy all the way up to Newtonian physics, and the impact of science on the contemporary art \& literature. I really enjoyed being able to study the humanities, and the insights these classes have provided me on the interaction between science and culture. The program was a great way for me to study things that I am interested in, but are unrelated to my major, such as astronomy, geology, philosophy, literature, art history, geopolitics." Brad Glasco (2015 ILS graduate)


"The main goal of ILS is to get its students to recognize how different subjects of knowledge connect with one another. Our student-led class in our ILS capstone attempted to accomplish this goal through the topic of tattoos. By reading articles and books on tattoos, witnessing a classmate receive a tattoo, interviewing veteran tattoo artists in the field, debating case studies, and discussing stigmas and stereotypes of tattoos, we wove together knowledge from history, psychology, sociology, criminology, philosophy, and art. My views about tattoos, and people
who choose to get them, will be forever better informed. I will always remember my classmates and this capstone!" Ryan Fleming (2015 ILS graduate)
"Virtually every ILS class threatens to fundamentally change the way you see the world." Eric Schmidt, political science major
"Some of the best professors on campus teach ILS classes, and they love the program as much as the students! How many other programs offer Aristophanes, Nietzsche and Jon Stewart in the same class?" Jeff Landow, English major

## RESOURCES AND SCHOLARSHIPS

ILS offers multiple scholarship and award opportunities for declared certificate students. These are awarded every Spring at the end of the year banquet.

## MEIKLEJOHN TRAVEL AWARD UP TO \$1500

Named for Alexander Meiklejohn, founder of the University of Wisconsin Experimental College (1927-32), the forerunner to the ILS program, this prize is intended to help support an ILS student in a university-sponsored or an independent program of education-centered travel or study abroad, taking place during the summer or academic year (or in the United States if the destination is remote from the student's home or the campus).

## POOLEY PRIZE

UP TO \$2,000 EACH (BASED ON AVAILABLE FUNDS)
Named for Professor Robert Pooley, the first chair of the Integrated Liberal Studies program (1948), this prize is:

- given annually to one outstanding male ILS student and one outstanding female ILS student
- on the basis of academic achievement (GPA of at least 3.0 for the 3 preceding semesters),
- evidence of good character,
- student leadership in the ILS program, including involvement in extracurricular activities, and
- available for travel purposes relating to their ILS courses.


## RUTH KNATZ AWARD <br> UP TO \$5,000 (BASED ON AVAILABLE FUNDS)

Named for Ruth Knatz Gross Wisnewsky and given by her husband, Edward Wisnewsky, this prize will be given only to a truly outstanding student who:

- is majoring in at least one humanities discipline (including history and history of science, but not social science or science); this means you may be double-majoring in one non-humanities major, but the other must be a humanities major
- gives promise of making a valuable contribution to the humanities
- has done exemplary work in 15 ILS credits (6 credits above 250)
- has achieved junior or senior standing,
- will be travelling with the purpose of strengthening their ILS course and academic purpose, and
- has signed up for the certificate and plans to complete the ILS certificate program.


## INTEGRATIVE BIOLOGY

## RESEARCH AND EDUCATION

With 22 faculty members and 14 affiliated faculty members from campus, research and education in the Department of Integrative Biology spans all levels of biological organization (from the molecular level to whole ecosystems and regions), considers a diverse range of taxa (microbes, plants, animals) and systems (terrestrial, aquatic), and addresses a wide array of basic and applied research questions. The Department of Integrative Biology is committed to providing the best training and education in the field of biology for UW-Madison undergraduate and graduate students.

## MAJORS

As one of the largest departments in the College of Letters \& Science, the Department of Integrative Biology is home to the biology (L\&S), molecular biology, neurobiology, and zoology undergraduate majors. Nearly 2,500 students enroll in our introductory biology courses (BIOLOGY/ ZOOLOGY 101 Animal Biology and ZOOLOGY/BIOLOGY 102 Animal Biology Laboratory; BOTANY/BIOLOGY/ZOOLOGY 151 Introductory Biology/ZOOLOGY 153 Introductory Biology 153 and ZOOLOGY/BIOLOGY/ BOTANY 152 Introductory Biology), and another 1,000 students enroll in a variety of courses in the field of biology.

## DEGREES/MAJORS/CERTIFICATES

- Biology, B.A. (L\&S) (p. 967)
- Biology, B.S. (L\&S) (p. 986)
- Molecular Biology, B.A. (p. 1004)
- Molecular Biology, B.S. (p. 1009)
- Neurobiology, B.A. (p. 1014)
- Neurobiology, B.S. (p. 1020)
- Zoology, B.A. (p. 1026)
- Zoology, B.S. (p. 1032)


## PEOPLE

Professors Hardin (chair, jdhardin@wisc.edu), Bement, Blair, Gammie, Halloran, Ives, Lee, Newmark, Porter, Riters, Stanley, Stretton, Turner, and Vander Zanden

Associate Professors Amann, Damschen, Grinblat, and Orrock
Assistant Professors Dugan, Sharma, and Wolman
Adjunct Professor Peckarsky

## BIOLOGY, B.A. (L\&S)

The biology major is designed for students with broad interests in the biological sciences. It is intended primarily to:

1. prepare undergraduates for graduate studies in diverse areas of biology;
2. prepare certain preprofessional students (e.g., medicine, veterinary medicine, dentistry) for advanced study in the health professions;
3. provide a broad exposure to biology for students who want a general science education as biologists; and
4. serve as initial preparation for students who later choose a more specialized major.

The major is offered by the College of Letters \& Science and the College of Agricultural and Life Sciences.

## HOW TO GET IN

Students interested in declaring the biology major should set up an appointment to speak with biology academic advisor. Information can be found at advising (http://biologymajor.wisc.edu/advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :--- | :--- |
| Language | - Complete the third unit of a foreign language and the |
|  | second unit of an additional foreign language |

Note: A unit is one year of high school work or one semester/term of college work.

| L\&S Breadth | Humanities, 12 credits: 6 of the 12 credits must be in |
| :--- | :--- |
|  | literature |
|  | - Social Sciences, 12 credits |
|  | Natural Sciences, 12 credits: must include one $3+$ |
|  | credit course in the biological sciences; must include |
|  | one $3+$ credit course in the physical sciences |


| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major |  |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

Students may complete the Biology major requirements or select a Named Option (below).

## CORE REQUIREMENTS

| Mathematics and Statistics |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select one of the following: |  | 5-10 |
| MATH 171 \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| Select one of the following: ${ }^{1}$ |  | 3-4 |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| STAT 301 | Introduction to Statistical Method |  |
| STAT 371 | Introductory Applied Statistics fo the Life Sciences |  |
| 1 Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences. |  |  |
| Chemistry |  |  |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| 1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement. |  |  |

## Physics

Code Title Credits
1st semester Physics; select one of the following: 4-5
PHYSICS 103 General Physics

PHYSICS 201 General Physics


| MICROBIO 470 | Microbial Genetics \& Molecular Machines | 3 |
| :---: | :---: | :---: |
| MICROBIO/ <br> SOIL SCI 523 | Soil Microbiology and Biochemistry | 3 |
| MICROBIO/M M \& I/ <br> PATH-BIO 528 | Immunology | 3 |
| MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 |
| MICROBIO/ ONCOLOGY/ <br> PLPATH 640 | General Virology-Multiplication of Viruses | 3 |
| M M \& I 341 | Immunology | 3 |
| NEURODPT/ NTP/PHYSIOL/ ZOOLOGY 616 | Lab Course in Neurobiology and Behavior ${ }^{1}$ | 4 |
| NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| NTP/PHYSIOL 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| NTP 655 | Modeling Neurodevelopmental Disease | 3 |
| NTP 675 | Special Topics (Stem Cell in Neurobiology) | 1-3 |
| NTP 675 | Special Topics (Reproductive Neuroendocrinology) | 1-3 |
| NTP 675 | Special Topics (Molecular Mechanisms of Brain Damage) | 1-3 |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology ${ }^{1}$ | 2 |
| NEURODPT 533 | Molecular Physiology | 2 |
| PSYCH 601 | Current Topics in Psychology (Epigenetics \& the Brain) ${ }^{2}$ | 3 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 523 \end{aligned}$ | Neurobiology | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab ${ }^{1}$ | 2 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |

1 Courses also approved for lab credit

## B. Organismal Biology

Code Title

| AN SCI/DY SCI 373 | Animal Physiology | 3 |
| :--- | :--- | ---: |
| AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |
| AN SCI/F\&W ECOL/ | Ornithology | 3 |
| ZOOLOGY 520 |  |  |
| AN SCI/F\&W ECOL/ | Birds of Southern Wisconsin ${ }^{1}$ | 3 |
| ZOOLOGY 521 |  | 5 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 3 |
| ANAT\&PHY 337 | Human Anatomy | 2 |
| ANAT\&PHY 338 | ${\text { Human Anatomy Laboratory }{ }^{1}}{ }^{1}$ |  |


| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 |
| :---: | :---: | :---: |
| ANTHRO/ <br> NTP/PSYCH/ <br> ZOOLOGY 619 | Biology of Mind | 3 |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language | 3 |
| DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 |
| ENTOM/ <br> ZOOLOGY 302 | Introduction to Entomology ${ }^{1}$ | 4 |
| ENTOM 321 | Physiology of Insects | 3 |
| ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| F\&W ECOL 401 | Physiological Animal Ecology | 3 |
| GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |
| GENETICS/ <br> MD GENET 565 | Human Genetics | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 |
| KINES 721 | Neural Basis for Movement | 3 |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory ${ }^{1}$ | 2 |
| MICROBIO 330 | Host-Parasite Interactions | 3 |
| MICROBIO/ BIOLOGY 525 | Advanced Biological Laboratory Practices: A Research Experience ${ }^{1}$ | 2 |
| MICROBIO 526 | Physiology of Microorganisms | 3 |
| M M \& I 301 | Pathogenic Bacteriology | 2 |
| M M \& I/ENTOM/ PATH-BIO/ ZOOLOGY 350 | Parasitology | 3 |
| M M \& 1410 | Medical Mycology | 2 |
| NTP/NEURODPT/ <br> PSYCH 611 | Systems Neuroscience | 4 |
| NTP/ZOOLOGY 620 | Neuroethology Seminar | 2 |
| NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 |
| NTP 675 | Special Topics (Basic Sleep Mechanisms \& Sleep Disorders) | 1-3 |
| NTP 675 | Special Topics (Functional Brain Imaging of Cognitive Disorders) | 1-3 |
| NUTR SCI 431 | Nutrition in the Life Span | 3 |
| NUTR SCI 631 | Clinical Nutrition I | 3 |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |


| ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| :---: | :---: | :---: |
| PATH 404 | Pathophysiologic Principles of Human Diseases | 3 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| PSYCH 406 | Psychology of Perception | 3-4 |
| PSYCH 601 | Current Topics in Psychology <br> (Neural Basis of Cognitive Control) ${ }^{2}$ | 3 |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| PSYCH 513 | Hormones, Brain, and Behavior | 4 |
| PSYCH 606 | Hormones and Behavior | 3 |
| ZOOLOGY 303 | Aquatic Invertebrate Biology | 3 |
| ZOOLOGY 400 | Topics in Biology (Mammalogy) | 1-3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates ${ }^{1}$ | 5 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory | 2 |

1 Courses also approved for lab credit

## C. Ecology

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| AGRONOMY/ ENTOM/F\&W ECOL/ M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 633 | Ecotoxicology: Impacts on Individuals | 1 |
| AGRONOMY/ ENTOM/F\&W ECOL/ M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems | 1 |
| BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach | 2 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 |
| BOTANY/ENTOM/ <br> ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| BOTANY/ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { ZOOLOGY } 315 \end{aligned}$ | Limnology-Conservation of Aquatic Resources | 2 |


| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| :---: | :---: | :---: |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources 1 | 2-3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab ${ }^{1}$ | 2 |
| 1 Courses also app | roved for lab credit |  |

## D. Evolution and Systematics

| Code | Title | Credits |
| :--- | :--- | ---: |
| ANTHRO 302 | Hominoid Evolution | 3 |
| ANTHRO 304 | Heredity, Environment and Human <br> Populations | 3 |
| ANTHRO/BOTANY// Evolutionary Biology | 3 |  |


| ZOOLOGY 410 |  |
| :--- | :--- |
| ANTHRO 411 | The Evolution of the Genus, Homo |

ANTHRO 458 Primate Behavioral Ecology 3
ANTHRO 603 Seminar in Evolutionary Theory 3
ANTHRO 658 Ecological Models of Behavior 3
$\begin{array}{lll}\text { BOTANY } 305^{\text {BOTANY }} 400 & \text { Plant Morphology and Evolution }{ }^{1} & 4 \\ \text { BOTAN Systematics }{ }^{1} & 4\end{array}$
$\begin{array}{lll}\text { BOTANY 400 } & \text { Plant Systematics } & 4 \\ \text { BOTANY } 401 & \text { Vascular Flora of Wisconsin }^{1} & 4\end{array}$
BOTANY 422 Plant Geography 3
BOTANY 563 Phylogenetic Analysis of Molecular 3
ENTOM $432 \quad$ Taxonomy and Bionomics of 4
Immature Insects ${ }^{1}$
$\begin{array}{llr}\text { ENTOM/GENETICS/ } & \text { Molecular Ecology } & 3 \\ \text { ZOOLOGY } 624 & \text { Extinction of Species } & 3\end{array}$
F\&W ECOL/
ZOOLOGY 360
$\begin{array}{lll}\text { GENETICS 468 } & \text { General Genetics 2 } & 3 \\ \text { GEOSCI/ } & \text { Paleobiology } & 3\end{array}$
$\begin{array}{lll}\text { ZOOLOGY } 541 & & \\ \text { MICROBIO } 450 & \text { Diversity, Ecology and Evolution of } & 3\end{array}$

| MICROBIO 450 | Diversity, Ecology and Evolution of <br> Microrrganisms | 3 |
| :--- | :--- | :--- |
| PSYCH 449 | Animal Behavior | 3 |
| PSYCH 450 | Primates and Us: Insights into <br> Human Biology and Behavior | 3 |


| $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language | 3 |
| :---: | :---: | :---: |
| ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab ${ }^{1}$ | 2 |
| ZOOLOGY 425 | Behavioral Ecology | 3 |
| 1 Courses also appr | roved for lab credit |  |
| E. Applied Biology, | Agriculture and Natural Resources |  |
| Code | Title | Credits |
| A AE/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY 302 | Forage Management and Utilization | 3 |
| AGRONOMY/ <br> HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy | 2 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| AGRONOMY/ <br> HORT 501 | Principles of Plant Breeding | 3 |
| AMER IND/ANTHRO/ BOTANY 474 | Ethnobotany | 3-4 |
| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 |
| AN SCI 503 | Avian Physiology ${ }^{1}$ | 3 |
| AN SCI 512 | Management for Avian Health ${ }^{1}$ | 3 |
| BIOCORE 587 | Biological Interactions | 3 |
| BIOLOGY/ GENETICS 522 | Evolution Seminar SeriesUndergraduate | 1 |
| BOTANY 403 | Field Collections and Identification | 1-4 |
| DY SCI/INTERAG 471 | Food Production Systems and Sustainability | 3 |
| ENTOM 351 | Principles of Economic Entomology | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 371 \end{aligned}$ | Medical Entomology ${ }^{1}$ | 3 |
| ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 |
| ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology ${ }^{1}$ | 4 |
| F\&W ECOL/ HORT/LAND ARC/ PLPATH 309 | Diseases of Trees and Shrubs | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| F\&W ECOL/ <br> ZOOLOGY 335 | Human/Animal Relationships: Biological and Philosophical Issues | 3 |


| F\&W ECOL 410 | Principles of Silviculture | 3 |
| :---: | :---: | :---: |
| F\&W ECOL 415 | Tree Physiology | 3 |
| F\&W ECOL/ <br> SURG SCI 548 | Diseases of Wildlife | 3 |
| F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 |
| FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory ${ }^{1}$ | 2 |
| FOOD SCI/ MICROBIO 325 | Food Microbiology | 3 |
| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 |
| GENETICS/ <br> HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants ${ }^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| MEDICINE/ <br> M\&ENVTOX/ <br> ONCOLOGY/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| NTP/MED PHYS 651 | Methods for Neuroimaging Research ${ }^{1,3}$ | 3 |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| PL PATH/ <br> SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar | 1 |

1 Courses also approved for lab credit

## BIOLOGY NAMED OPTIONS

Instead of completing the requirements above, students may choose to select one of the options below.

- Biology: Evolutionary Biology (p. 91)
- Biology: Neurobiology (p. 96)
- Biology: Plant Biology (p. 101)


## HONORS IN THE MAJOR

Once students have declared the biology major, they may apply to pursue Honors in the Major. To apply, students must pick up an Honors form from either the L\&S Honors Office at 1401 Observatory Drive or the Biology Major Office at 1550 Linden Drive. A Senior Honors Thesis is
required. Before enrolling in a Senior Honors Thesis course, the student must produce a two- to three-page, double-spaced thesis proposal that briefly introduces the biological problem and then describes the line of experimentation that is proposed for the thesis work. The student and faculty mentor must sign the proposal before it is submitted to the Biology Major Office.

## HONORS IN THE MAJOR IN BIOLOGY: REQUIREMENTS ${ }^{1}$

To earn a B.A. or B.S. with Honors in the Major in Biology students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA in the major/subject
- Complete 13 credits of Foundation, and/or intermediate/advanced courses for Honors.
- Complete an approved two-semester Senior Honors Thesis for a total of 6 credits.

1 Plant biology option must choose from intermediate/advanced courses listed under the plant biology option and should consult with their advisor about the Senior Thesis options.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
| UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |  |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| grade point average specified by the school, college, or |  |
| academic program to remain in good academic standing. |  |
| Students whose academic performance drops below |  |
| these minimum thresholds will be placed on academic |  |
| probation. |  |

## LEARNING OUTCOMES

1. Know and understand core concepts that unify the breadth of biological sciences including: evolution; structure and function; information flow, exchange, and storage; pathways for transformations of energy and matter; and systems.
2. Demonstrate practical skills of a professional biologist including: problem\#solving by engaging the process of science; written and verbal proficiency; laboratory skills; quantitative analysis skills; and teamwork skills.
3. Graduates will be able to engage and make broader connections to other scientific disciplines and society.

## ADVISING AND CAREERS

## ADVISING

Your advisor is here to guide you through the biology major. We can address your questions and concerns, provide advice, help you create a four-year degree plan that meets your major and professional goals, and connect you to resources. It is important to remember that advising is about the process, and some questions do not have a quick and easy answer. Your advisor will challenge you to self-reflect, to critically think about your goals and strategies, and to develop decision-making skills. For more information about what to expect during your advising appointment, visit UW Undergraduate Advising (http://advising.wisc.edu/ content/expectations-about-advising).

In the biology major, students are assigned to an adviser according to last name. Please visit us here (http://biologymajor.wisc.edu/advising) to schedule an advising appointment.

## CAREERS

The biology major encourages our students to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## ADVISING LEADERSHIP AND STAFF

Harris, Kelley, Program Manager
Asen, Brian
Courtenay, Todd
Haas-Gallo, Erica
Smith, Mary

## BIOLOGY MAJOR ADMINISTRATION

Fernandez, Donna, L\&S Co-Chair
Wassarman, Karen, CALS Co-Chair
Pringle, Anne Evolutionary Biology Option Representative
Auger, Catherine, Neurobiology Option Representative
Goldman, Irwin and Patricia McManus, Plant Biology Option
Representative
Blair, Seth
Gilroy, Simon
Boekhoff-Falk, Grace
Harris, Michelle
Senes, Alessandro
Kurtz, Robin, ex-officio
Thoma, Sharon, ex-officio
Harris, Kelley, ex-officio

## WISCONSIN EXPERIENCE

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in biology, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- Beta Beta Beta Biological Honor Society (https://win.wisc.edu/ organization/tribeta) is an honor and professional organization for undergraduate students in the biological sciences. Its activities are designed to stimulate interest, scholarly attainment, and investigation in the biological sciences, and to promote the dissemination of information and new interpretations among students in life sciences. The society offers its members the unique opportunity to publish their undergraduate work in the pages of its journal, BIOS.
- Biology majors have the opportunity to go on experiential study abroad programs, where students can immerse themselves in research or global health field experiences. Students can review the Biology Major Advising Page (https://www.studyabroad.wisc.edu/ map_biology.asp) on the International Academic Programs website for information on these and other programs, as well as requirements that can typically be fulfilled abroad and things to consider when incorporating study abroad into an academic plan.
- Students are encouraged to get involved in research in any life science department. Research can be performed for either course credit or pay, depending on the opportunity. Research opportunities can be identified by inquiring directly with faculty members, reading the Biology Major Newsletter, or announcement on the Student Job Center (https://jobcenter.wisc.edu).


## BIOLOGY: EVOLUTIONARY BIOLOGY

## REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

## CORE REQUIREMENTS

| Mathematics and Statistics |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| Select one of the following: ${ }^{1}$ |  | 3-4 |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |

1 Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences.

## Chemistry

| Code | Title | Credits |
| :---: | :---: | :---: |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement.

Physics


| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology |
| :---: | :---: |
| Option B: |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |
| BIOCORE 383 | Cellular Biology |
| BIOCORE 384 | Cellular Biology Laboratory |
| BIOCORE 485 | Organismal Biology |
| Option C: |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |
| BOTANY/ <br> BIOLOGY 130 | General Botany |
| Foundational Course ${ }^{2}$ |  |
| Select one of the fol | wing: 3 |
| BIOCORE 381 <br> \& BIOCORE 383 | Evolution, Ecology, and Genetics and Cellular Biology ${ }^{3}$ |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology |
| GENETICS 466 | Principles of Genetics |
| GENETICS 468 | General Genetics 2 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |
| BIOCHEM 501 | Introduction to Biochemistry |
| BIOCHEM 508 | General Biochemistry II |
| For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy). |  |
| Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement. |  |
| 3 Students may u BIOCORE 383 C and satisfy foun | BIOCORE 381 Evolution, Ecology, and Genetics and lular Biology to contribute to introductory biology ation. |

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.

Students must take ANTHRO/BOTANY/ZOOLOGY 410 Evolutionary Biology. In addition, select one course from categories A or B below. Select one course from category C. Select one course from category D. Additional courses can be taken from A-E to satisfy the lab and/or 31credit requirement.

| A. Cellular and Subcellular Biology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology | 3 |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques ${ }^{1}$ | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | 4 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| BIOCHEM 507 | General Biochemistry I | 3 |
| BIOCHEM 508 | General Biochemistry II | 3-4 |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition | 3 |
| BIOCHEM 551 | Biochemical Methods ${ }^{1}$ | 4 |
| BIOCHEM/ <br> M M \& I 575 | Biology of Viruses | 2 |
| BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 |
| BIOCHEM/ <br> GENETICS/ <br> MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| BIOCHEM/ <br> GENETICS/ <br> MD GENET 620 | Eukaryotic Molecular Biology | 3 |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry | 3 |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals | 2 |
| BIOCHEM/PHMCOL- <br> M/ZOOLOGY 630 | Cellular Signal Transduction Mechanisms | 3 |
| BMOLCHEM 314 | Introduction to Human Biochemistry | 3 |
| BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{1}$ | 3 |
| BMOLCHEM/ MICROBIO 668 | Microbiology at Atomic Resolution | 3 |
| BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: <br> Molecular and Ecological Aspects | 3 |
| BOTANY/GENETICS/ HORT 561 | Introductory Cytogenetics | 2-3 |
| GENETICS 466 | Principles of Genetics | 3 |
| GENETICS 467 | General Genetics 1 | 3 |
| GENETICS 520 | Neurogenetics | 2 |
| GENETICS/ <br> MD GENET/ <br> ZOOLOGY 562 | Human Cytogenetics | 2 |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics | 3 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines | 3 |
| MICROBIO/ SOIL SCI 523 | Soil Microbiology and Biochemistry | 3 |
| MICROBIO/M M \& I/ PATH-BIO 528 | Immunology | 3 |


| MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 |
| :---: | :---: | :---: |
| MICROBIO/ <br> ONCOLOGY/ <br> PLPATH 640 | General Virology-Multiplication of Viruses | 3 |
| M M \& I 341 | Immunology | 3 |
| NEURODPT/ NTP/PHYSIOL/ ZOOLOGY 616 | Lab Course in Neurobiology and Behavior ${ }^{1}$ | 4 |
| NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| NTP/PHYSIOL 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| NTP 655 | Modeling Neurodevelopmental Disease | 3 |
| NTP 675 | Special Topics (Stem Cell in Neurobiology) | 1-3 |
| NTP 675 | Special Topics (Reproductive Neuroendocrinology) | 1-3 |
| NTP 675 | Special Topics (Molecular Mechanisms of Brain Damage) | 1-3 |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology ${ }^{1}$ | 2 |
| NEURODPT 533 | Molecular Physiology | 2 |
| PSYCH 601 | Current Topics in Psychology (Epigenetics \& the Brain) | 3 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| ZOOLOGY/ <br> PSYCH 523 | Neurobiology | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab ${ }^{1}$ | 2 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |

1 Courses also approved for lab credit

| B. Organismal Biology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AN SCI/DY SCI 373 | Animal Physiology | 3 |
| AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |
| AN SCI/F\&W ECOL/ ZOOLOGY 520 | Ornithology | 3 |
| AN SCI/F\&W ECOL/ ZOOLOGY 521 | Birds of Southern Wisconsin ${ }^{1}$ | 3 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 |
| ANAT\&PHY 337 | Human Anatomy | 3 |
| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 |
| ANTHRO/ <br> NTP/PSYCH/ <br> ZOOLOGY 619 | Biology of Mind | 3 |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |


| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| BOTANY/ <br> PLPATH 332 | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language | 3 |
| DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology ${ }^{1}$ | 4 |
| ENTOM 321 | Physiology of Insects | 3 |
| ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| F\&W ECOL 401 | Physiological Animal Ecology | 3 |
| GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |
| GENETICS/ <br> MD GENET 565 | Human Genetics | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 |
| ANAT\&PHY 338 | Human Anatomy Laboratory | 2 |
| KINES 721 | Neural Basis for Movement | 3 |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory ${ }^{1}$ | 2 |
| MICROBIO 330 | Host-Parasite Interactions | 3 |
| MICROBIO/ <br> BIOLOGY 525 | Advanced Biological Laboratory Practices: A Research Experience ${ }^{1}$ | 2 |
| MICROBIO 526 | Physiology of Microorganisms | 3 |
| M M \& I 301 | Pathogenic Bacteriology | 2 |
| M M \& I/ENTOM/ PATH-BIO/ ZOOLOGY 350 | Parasitology | 3 |
| M M \& 1410 | Medical Mycology | 2 |
| NTP/NEURODPT/ PSYCH 611 | Systems Neuroscience | 4 |
| NTP/ZOOLOGY 620 | Neuroethology Seminar | 2 |
| NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 |
| NTP 675 | Special Topics (Basic Sleep Mechanisms \& Sleep Disorders) | 1-3 |
| NTP 675 | Special Topics (Functional Brain Imaging of Cognitive Disorders) | 1-3 |
| NUTR SCI 431 | Nutrition in the Life Span | 3 |
| NUTR SCI 631 | Clinical Nutrition I | 3 |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |
| ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| PATH 404 | Pathophysiologic Principles of Human Diseases | 3 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| PSYCH 406 | Psychology of Perception | 3-4 |


| PSYCH 601 | Current Topics in Psychology <br> (Neural Basis of Cognitive Control) | 3 |
| :--- | :--- | ---: |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| PSYCH 513 | Hormones, Brain, and Behavior | 4 |
| PSYCH 606 | Hormones and Behavior | 3 |
| ZOOLOGY 303 | Aquatic Invertebrate Biology | 3 |
| ZOOLOGY 400 | Topics in Biology (Mammalogy) | $1-3$ |
| ZOOLOGY 430 | Comparative Anatomy of <br> Vertebrates 1 | 5 |
| ZOOLOGY 603 | Endocrinology | $3-4$ |
| ZOOLOGY 611 | Comparative and Evolutionary <br> Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory <br> 1 | 2 |


| Courses also app | roved for lab credit |  |
| :---: | :---: | :---: |
| C. Ecology |  | ts |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| AGRONOMY/ ENTOM/F\&W ECOL/ M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 633 | Ecotoxicology: Impacts on Individuals | 1 |
| AGRONOMY/ ENTOM/F\&W ECOL/ M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems | 1 |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { ZOOLOGY } 450 \end{aligned}$ | Midwestern Ecological Issues: A Case Study Approach | 2 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 |
| BOTANY/ENTOM/ <br> ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| BOTANY/ENVIR ST/ F\&W ECOL/ ZOOLOGY 651 | Conservation Biology | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| ENVIR ST/ ZOOLOGY 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |


| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 |
| :---: | :---: | :---: |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources 1 | 2-3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab ${ }^{1}$ | 2 |
| Courses also approved for lab credit |  |  |
| D. Evolution and Systematics |  |  |
| Code | Title | Credits |
| ANTHRO 302 | Hominoid Evolution | 3 |
| ANTHRO 304 | Heredity, Environment and Human Populations | 3 |
| ANTHRO/BOTANY/ <br> ZOOLOGY 410 | Evolutionary Biology | 3 |
| ANTHRO 411 | The Evolution of the Genus, Homo | 3 |
| ANTHRO 458 | Primate Behavioral Ecology | 3 |
| ANTHRO 603 | Seminar in Evolutionary Theory | 3 |
| ANTHRO 658 | Ecological Models of Behavior | 3 |
| BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 |
| BOTANY 422 | Plant Geography | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| ENTOM 432 | Taxonomy and Bionomics of Immature Insects ${ }^{1}$ | 4 |
| ENTOM/GENETICS/ <br> ZOOLOGY 624 | Molecular Ecology | 3 |
| ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 360 | Extinction of Species | 3 |
| GENETICS 468 | General Genetics 2 | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 541 \end{aligned}$ | Paleobiology | 3 |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| PSYCH 449 | Animal Behavior | 3 |
| PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior | 3 |
| $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language | 3 |
| ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab ${ }^{1}$ | 2 |
| ZOOLOGY 425 | Behavioral Ecology | 3 |
| 1 Courses also app | roved for lab credit |  |


| E. Applied Biology, | griculture and Natural Resources |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| A A E/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY 302 | Forage Management and Utilization | 3 |
| AGRONOMY/ <br> HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy | 2 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| AGRONOMY/ <br> HORT 501 | Principles of Plant Breeding | 3 |
| AMER IND/ANTHRO/ BOTANY 474 | Ethnobotany | 3-4 |
| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 |
| AN SCI 503 | Avian Physiology ${ }^{1}$ | 3 |
| AN SCI 512 | Management for Avian Health ${ }^{1}$ | 3 |
| BIOCORE 587 | Biological Interactions | 3 |
| BIOLOGY/ GENETICS 522 | Evolution Seminar SeriesUndergraduate | 1 |
| BOTANY 403 | Field Collections and Identification | 1-4 |
| DY SCI/INTER- <br> AG 471 | Food Production Systems and Sustainability | 3 |
| ENTOM 351 | Principles of Economic Entomology | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 371 \end{aligned}$ | Medical Entomology ${ }^{1}$ | 3 |
| ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 |
| ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology ${ }^{1}$ | 4 |
| F\&W ECOL/ HORT/LAND ARC/ PLPATH 309 | Diseases of Trees and Shrubs | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| $\begin{aligned} & \text { F\&W ECOL/ } \\ & \text { ZOOLOGY } 335 \end{aligned}$ | Human/Animal Relationships: Biological and Philosophical Issues | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 415 | Tree Physiology | 3 |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 |
| F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 |
| FOOD SCI/ MICROBIO 324 | Food Microbiology Laboratory ${ }^{1}$ | 2 |
| FOOD SCI/ | Food Microbiology | 3 |


| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 |
| :---: | :---: | :---: |
| GENETICS/ HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants $\mathrm{I}^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| MEDICINE/ <br> M\&ENVTOX/ <br> ONCOLOGY/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| M M \& 1554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| NTP/MED PHYS 651 | Methods for Neuroimaging Research ${ }^{1,3}$ | 3 |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar | 1 |
| 1 Courses also appr | roved for lab credit |  |
| SEMINAR |  |  |
| Code <br> Undergradute Evolution | Title <br> n Seminar ( 1 cr minimum) | Credits |
| BIOLOGY/ <br> GENETICS 522 | Evolution Seminar SeriesUndergraduate | 1 |
| ADDITIONAL LAB ORFIELD RESEARCH |  |  |
| Select one of the following options: |  |  |
| 2. Complete a directed study in a biological science discipline. ${ }^{1}$ <br> 3. Complete a thesis in biological science. ${ }^{1}$ |  |  |
| 1 Must complete Introductory Biology prior to enrolling in either a directed study or thesis. Select an appropriate course in consultation with advisor. |  |  |
| RESIDENCE AND QUALITY OF WORK |  |  |
| 2.000 GPA in all major courses |  |  |
| 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$ |  |  |

15 credits in the major, taken on the UW-Madison campus
1 Courses with intermediate or advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Once students have declared the biology major, they may apply to pursue Honors in the Major. To apply, students must pick up an Honors form from either the L\&S Honors Office at 1401 Observatory Drive or the Biology Major Office at 1550 Linden Drive. A Senior Honors Thesis is required. Before enrolling in a Senior Honors Thesis course, the student must produce a two- to three-page, double-spaced thesis proposal that briefly introduces the biological problem and then describes the line of experimentation that is proposed for the thesis work. The student and faculty mentor must sign the proposal before it is submitted to the Biology Major Office.

## HONORS IN THE MAJOR IN BIOLOGY: REQUIREMENTS ${ }^{1}$

To earn a B.A. or B.S. with Honors in the Major in Biology students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA in the major/subject
- Complete 13 credits of Foundation, and/or intermediate/advanced courses for Honors.
- Complete an approved two-semester Senior Honors Thesis for a total of 6 credits.

1 Plant biology option must choose from intermediate/advanced courses listed under the plant biology option and should consult with their advisor about the Senior Thesis options.

## BIOLOGY: NEUROBIOLOGY

Admissions to the Biology: Neurobiology B.A. have been suspended as of fall 2016; and will be discontinued fall 2019. If you have any questions, please contact the department (info@biologymajor.wisc.edu).

## REQUIREMENTS

The College of Letters \& Science now offers a neurobiology major. Students already declared for the biology major with a Neurobiology option are allowed to continue in the program; they must complete the program no later than August 2019.

Students who have declared the biology major with a Neurobiology option may cancel the major and declare the new neurobiology major, provided it does not extend their time to degree. Students should consult with an advisor in the new neurobiology major to determine which program is best for them.

Students may not double-major in any biology major option and the neurobiology major.

## CORE REQUIREMENTS

| Mathematics and Statistics |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| Select one of the following: ${ }^{1}$ |  | 3-4 |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |

1
Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences.

## Chemistry

| Code | Title | Credits |
| :--- | :--- | ---: |
| General Chemistry | $5-9$ |  |
| Select one of the following: ${ }^{1}$ |  |  |
| CHEM 103 |  | General Chemistry I |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  | 3 |
| CHEM 343 | Introductory Organic Chemistry | 2 |
| CHEM 344 | Introductory Organic Chemistry <br> Laboratory |  |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement.

## Physics



| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology |
| :---: | :---: |
| Option B: |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |
| BIOCORE 383 | Cellular Biology |
| BIOCORE 384 | Cellular Biology Laboratory |
| BIOCORE 485 | Organismal Biology |
| Option C: |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { BIOLOGY } 130 \end{aligned}$ | General Botany |
| Foundational Course ${ }^{2}$ |  |
| Select one of the fol | wing: 3 |
| BIOCORE 381 <br> \& BIOCORE 383 | Evolution, Ecology, and Genetics and Cellular Biology ${ }^{3}$ |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology |
| GENETICS 466 | Principles of Genetics |
| GENETICS 468 | General Genetics 2 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |
| BIOCHEM 501 | Introduction to Biochemistry |
| BIOCHEM 508 | General Biochemistry II |
| For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy). |  |
| Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement. |  |
| 3 Students may u BIOCORE 383 C and satisfy foun | BIOCORE 381 Evolution, Ecology, and Genetics and lular Biology to contribute to introductory biology ation. |

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.
Students must complete ZOOLOGY/PSYCH 523 Neurobiology and PSYCH 454 Behavioral Neuroscience.
In addition, select one course from category A. Select one course from category B. Select one course from categories $C$ or $D$ below. Additional courses can be taken from A-F to satisfy the lab and/or 31-credit requirement.

## A. Cellular and Molecular Neurobiology Code <br> Title GENETICS $520 \quad$ Neurogenetics

Credits
(Neuroeconomics)

| NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| :---: | :---: | :---: |
| NTP/NEURODPT/ PHYSIOL/ ZOOLOGY 616 | Lab Course in Neurobiology and Behavior ${ }^{1}$ | 4 |
| NTP/PHYSIOL 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| NTP 655 | Modeling Neurodevelopmental Disease | 3 |
| NTP 675 | Special Topics (Molecular Mechanisms of Brain Damage) | 1-3 |
| NTP 675 | Special Topics (Reproductive Neuroencrinology) | 1-3 |
| PSYCH 601 | Current Topics in Psychology (Epigenetics \& the Brain) | 3 |
| PSYCH 601 | Current Topics in Psychology (Neuropharmacology) | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology ${ }^{1}$ | 3 |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab ${ }^{1}$ | 2 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |

1 Courses also approved for lab credit

## B. Systems Neurobiology

| Code | Title | Credits |
| :--- | :--- | ---: |
| CS\&D 210 | Neural Basis of Communication | 3 |
| CS\&D 503 | Neural Mechanisms of Speech, | 3 |
|  | Hearing and Language | 3 |
| ED PSYCH 326 | Mind, Brain and Education | 3 |
| KINES 531 | Neural Control of Movement | 4 |

PSYCH 611
NTP/ZOOLOGY 620 Neuroethology Seminar 2
NTP/ Neuronal Mechanisms for 3

NEURODPT 630 Sensation and Memory in Cerebral Cortex

| NTP/MED PHYS 651 | Methods for Neuroimaging <br> Research ${ }^{1}$ |
| ---: | :--- |

NTP 675 Special Topics (Functional Brain 1-3
Imaging of Cognitive Disorders)
Special Topics (Basic Sleep 1-3

Mechanisms \& Sleep Disorders)
PSYCH 406 Psychology of Perception 3-4
PSYCH 414 Cognitive Psychology 3
PSYCH 504 Affective Neuroscience 4
PSYCH 601 Current Topics in Psychology 3
(Cognition \& Emotion: Cognitive Affective Neuroscience)
PSYCH $601 \quad 3$
(Neural Basis of Cognitive Control)
PSYCH $601 \quad$ Current Topics in Psychology
(Cognition \& Emotion: Cognitive
Affective Neuroscience)

| C. Ecology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 633 | Ecotoxicology: Impacts on Individuals | 1 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems | 1 |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { ZOOLOGY } 450 \end{aligned}$ | Midwestern Ecological Issues: A Case Study Approach | 2 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| BOTANY/F\&W ECOL/ ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 |
| BOTANY/ENTOM/ <br> ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| BOTANY/ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |
| ENVIR ST/ ZOOLOGY 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL/ <br> LAND ARC/ <br> ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources 1 | 2-3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab ${ }^{1}$ | 2 |


| D. Evolution and Systematics |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ANTHRO 302 | Hominoid Evolution | 3 |
| ANTHRO 304 | Heredity, Environment and Human Populations | 3 |
| ANTHRO/BOTANY/ ZOOLOGY 410 | Evolutionary Biology | 3 |
| ANTHRO 411 | The Evolution of the Genus, Homo | 3 |
| ANTHRO 458 | Primate Behavioral Ecology | 3 |
| ANTHRO 603 | Seminar in Evolutionary Theory | 3 |
| ANTHRO 658 | Ecological Models of Behavior | 3 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 |
| BOTANY 422 | Plant Geography | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| ENTOM/GENETICS/ <br> ZOOLOGY 624 | Molecular Ecology | 3 |
| ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 360 | Extinction of Species | 3 |
| GENETICS 468 | General Genetics 2 | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 541 \end{aligned}$ | Paleobiology | 3 |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| PSYCH 449 | Animal Behavior | 3 |
| PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior | 3 |
| $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language | 3 |
| ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab ${ }^{1}$ | 2 |
| ZOOLOGY 425 | Behavioral Ecology | 3 |
| 1 Courses also approved for lab credit |  |  |
| E. Applied Biology, Agriculture and Natural Resources |  |  |
| A A E/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY 302 | Forage Management and Utilization | 3 |
| AGRONOMY/ HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy | 2 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| AGRONOMY/ HORT 501 | Principles of Plant Breeding | 3 |
| AMER IND/ANTHRO/ BOTANY 474 | Ethnobotany | 3-4 |
| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |


| AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 | M M \& 1554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 | MICROBIO/ <br> SOIL SCI 425 | Environmental Microbiology | 3 |
| AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 | NUTR SCI 332 | Human Nutritional Needs | 3 |
| AN SCI 503 | Avian Physiology ${ }^{1}$ | 3 | PL PATH/ | Soil Biology | 3 |
| AN SCI 512 | Management for Avian Health ${ }^{1}$ | 3 | SOIL SCI 323 |  |  |
| BIOCORE 587 | Biological Interactions | 3 | PL PATH 517 | Plant Disease Resistance | 2-3 |
| BIology/ | Evolution Seminar Series- | 1 | SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| GENETICS 522 | Undergraduate |  | 1 Courses also approved for lab credit |  |  |
| BOTANY 403 | Field Collections and Identification | 1-4 |  |  |  |
| DY SCI/INTER- | Food Production Systems and Sustainability | 3 | F. Other Lab Courses |  |  |
| AG 471 |  |  | Code | Title | Credits |
| ENTOM 351 | Principles of Economic Entomology | 3 | AGRONOMY/ | Plant Biotechnology: Principles and | 4 |
| ENTOM/ | Medical Entomology ${ }^{1}$ | 3 | BOTANY/HORT 339 | Techniques ${ }^{1}$ |  |
| ZOOLOGY 371 |  |  | AGRONOMY/ | Plant Cell Culture and Genetic | 4 |
| ENTOM/ | Insects in Forest Ecosystem | 2 | BOTANY/HORT 340 | Engineering ${ }^{1}$ |  |
| F\&W ECOL 500 | Function and Management |  | ANATOMY 329 | Human Anatomy-Kinesiology ${ }^{1}$ | 2 |
| ENVIR ST/ | Introduction to Environmental | 3 | AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| POP HLTH 471 |  |  | AN SCI/F\&W ECOL/ | Birds of Southern Wisconsin ${ }^{1}$ | 3 |
| ENVIR ST/ | Air Pollution and Human Health | 3 | ZOOLOGY 521 |  |  |
| POP HLTH 502 |  |  | AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology ${ }^{1}$ | 4 | ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 |
| F\&W ECOL/ | Diseases of Trees and Shrubs | 3 | ANAT\&PHY 338 | Human Anatomy Laboratory | 2 |
| HORT/LAND ARC/ <br> PLPATH 309 |  |  | ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 | BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| F\&W ECOL/ | Human/Animal Relationships: | 3 | BIOCHEM 551 | Biochemical Methods ${ }^{1}$ | 4 |
| ZOOLOGY 335 | Biological and Philosophical Issues |  | BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{1}$ | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 | BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| F\&W ECOL 415 | Tree Physiology | 3 | BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| F\&W ECOL/ | Diseases of Wildlife | 3 | BOTANY 330 | Algae ${ }^{1}$ | 3 |
| SURG SCI 548 |  |  | BOTANY/ | Fungi ${ }^{1}$ | 4 |
| F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 | PL PATH 332 |  |  |
| FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory ${ }^{1}$ | 2 | BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| FOOD SCI/ | Food Microbiology | 3 | BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| MICROBIO 325 |  |  | BOTANY/GENETICS/ | Introductory Cytogenetics ${ }^{1}$ | 2-3 |
| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 | HORT 561 |  |  |
| GENETICS/ | Molecular Approaches for Potential | 3 | DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 |
| HORT 550 | Crop Improvement |  | ENTOM/ | Introduction to Entomology ${ }^{1}$ | 4 |
| HORT/ | Landscape Plants I ${ }^{1}$ | 3 | ZOOLOGY 302 |  |  |
| LAND ARC 263 |  |  | ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| HORT 370 | World Vegetable Crops | 3 | KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 |
| HORT 372 | Colloquium in Organic Agriculture | 1 | GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |
| HORT 376 | Tropical Horticultural Systems | 1 | GEOSCI/ | Invertebrate Paleontology | 3 |
| HORT 378 | Tropical Horticultural Systems | 2 | ZOOLOGY 542 |  |  |
|  | International Field Study |  | MICROBIO 304 | Biology of Microorganisms | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |  | Laboratory ${ }^{1}$ |  |
| MEDICINE/ M\&ENVTOX/ | Toxicology I | 3 | MICROBIO/ BIOLOGY 525 | Advanced Biological Laboratory Practices: A Research Experience ${ }^{1}$ | 2 |
| ONCOLOGY/PATH/ PHM SCI/PHMCOL- |  |  | MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 |
| M/POP HLTH 625 |  |  | PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology ${ }^{1}$ | 2 |


| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| :--- | :--- | :--- |
| ZOOLOGY 430 | Comparative Anatomy of <br>  <br>  <br> VOrtebrates 1 | 5 |
| CoOLOGY 612 | Comparative Physiology Laboratory <br> 1 | 2 |

1 Courses also approved for lab credit

## SEMINAR

| Code Title | Credits |
| :--- | :--- |
| Undergradute Neurobiology Seminar |  |

Undergradute Neurobiology Seminar
ZOOLOGY $500 \quad$ Undergraduate Neurobiology
Seminar

## ADDITIONAL LAB OR FIELD RESEARCH

Select one of the following options:

1. Take an additional lab or field instruction from categories $A-E$ in the Intermediate/Advanced course lists.
2. Complete a directed study in a biological science discipline. ${ }^{1}$
3. Complete a thesis in biological science. ${ }^{1}$

1 Must complete Introductory Biology prior to enrolling in either a directed study or thesis. Select an appropriate course in consultation with advisor.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in the major, taken on the UW-Madison campus
1 Courses with intermediate or advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Once students have declared the biology major, they may apply to pursue Honors in the Major. To apply, students must pick up an Honors form from either the L\&S Honors Office at 1401 Observatory Drive or the Biology Major Office at 1550 Linden Drive. A Senior Honors Thesis is required. Before enrolling in a Senior Honors Thesis course, the student must produce a two- to three-page, double-spaced thesis proposal that briefly introduces the biological problem and then describes the line of experimentation that is proposed for the thesis work. The student and faculty mentor must sign the proposal before it is submitted to the Biology Major Office.

## HONORS IN THE MAJOR IN BIOLOGY: REQUIREMENTS ${ }^{1}$

To earn a B.A. or B.S. with Honors in the Major in Biology students must satisfy both the requirements for the major and the following additional requirements:

## - Earn a 3.300 overall university GPA

- Earn a 3.300 GPA in the major/subject
- Complete 13 credits of Foundation, and/or intermediate/advanced courses for Honors.
- Complete an approved two-semester Senior Honors Thesis for a total of 6 credits.

1 Plant biology option must choose from intermediate/advanced courses listed under the plant biology option and should consult with their advisor about the Senior Thesis options.

## BIOLOGY: PLANT BIOLOGY

## REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

## CORE REQUIREMENTS

## Mathematics and Statistics

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | $5-10$ |  |
| MATH 171 | Calculus with Algebra and |  |
| \& MATH 217 | Trigonometry I <br> and Calculus with Algebra and <br> Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 $^{1}$ | 3-4 |


| MATH 222 | Calculus and Analytic Geometry 2 |
| :--- | :--- |
| STAT 301 | Introduction to Statistical Methods |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |

1 Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences.

## Chemistry

| Code | Title | Credits |
| :---: | :---: | :---: |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

1 The completion of CHEM 115 Chemical Principles I and CHEM 116
Chemical Principles II also satisfies the General Chemistry
Requirement.

## Physics

| Code | Title | Credits |
| :---: | :---: | :---: |
| 1st semester Physics; select one of the following: |  |  |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| 2nd semester Physics, select one of the following: |  |  |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| Introductory Biology |  |  |
| Code | Title | Credits |
| Select one of the following options: ${ }^{1}$ |  |  |
| Option A: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology |  |
| Option B: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |
| Option C: |  |  |
| ZOOLOGY/ <br> BIOLOGY 101 | Animal Biology |  |
| ZOOLOGY/ BIOLOGY 102 | Animal Biology Laboratory |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany |  |
| Foundational Course ${ }^{2}$ |  |  |
| Select one of the following: |  |  |
| BIOCORE 381 <br> \& BIOCORE 383 | Evolution, Ecology, and Genetics and Cellular Biology ${ }^{3}$ |  |
| AGRONOMY/ <br> HORT 338 | Plant Breeding and Biotechnology |  |
| GENETICS 466 | Principles of Genetics |  |
| GENETICS 468 | General Genetics 2 |  |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |  |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BIOCHEM 508 | General Biochemistry II |  |
| For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy). |  |  |
| Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take |  |  |

MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement.
3 Students may use BIOCORE 381 Evolution, Ecology, and Genetics and BIOCORE 383 Cellular Biology to contribute to introductory biology and satisfy foundation.

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.
Select one course from categories A or B below. Select one course from categories C or D below. Select one course from category E or from an unused category above.

## A. Cellular and Subcellular Biology

| Code | Title | Credits |
| :--- | :--- | ---: |
| AGRONOMY/ | Plant Breeding and Biotechnology | 3 |
| HORT 338 |  |  |
| AGRONOMY/ | Plant Biotechnology: Principles and | 4 |
| BOTANY/HORT 339 | Techniques I |  |

1 Courses also approved for lab credit

## B. Organismal Biology

| Code | Title | Credits |
| :---: | :---: | :---: |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology ${ }^{1}$ | 4 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |

1 Courses also approved for lab credit
C. Ecology

Code Title Credits
AGRONOMY/ Grassland Ecology 3
botany/
SOIL SCI 370

| BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach | 2 |
| :---: | :---: | :---: |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 |
| BOTANY/F\&W ECOL/ ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 |
| $\begin{aligned} & \text { BOTANY/ENTOM/ } \\ & \text { ZOOLOGY } 473 \end{aligned}$ | Plant-Insect Interactions | 3 |
| BOTANY/ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| 1 Courses also approved for lab credit |  |  |
| D. Evolution and Systematics |  |  |
| Code | Title | Credits |
| ANTHRO/BOTANY/ ZOOLOGY 410 | Evolutionary Biology | 3 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 |
| BOTANY 422 | Plant Geography | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| GENETICS 468 | General Genetics 2 | 3 |

1 Courses also approved for lab credit

## $\begin{array}{ll}\text { E. Applied Biology, Agriculture and Natural Resources } \\ \text { Code } & \text { Title }\end{array}$

| A A E/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| :---: | :---: | :---: |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY 302 | Forage Management and Utilization | 3 |
| AGRONOMY/ HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy | 2 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| AGRONOMY/ HORT 501 | Principles of Plant Breeding | 3 |
| AMER IND/ANTHRO/ BOTANY 474 | Ethnobotany | 3-4 |
| BIOLOGY/ GENETICS 522 | Evolution Seminar SeriesUndergraduate | 1 |
| BOTANY 403 | Field Collections and Identification | 1-4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| DY SCI/INTER- $\text { AG } 471$ | Food Production Systems and Sustainability | 3 |


| F\&W ECOL/ HORT/LAND ARC/ PL PATH 309 | Diseases of Trees and Shrubs | 3 |
| :---: | :---: | :---: |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 415 | Tree Physiology | 3 |
| GENETICS/ <br> HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants I ${ }^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| MED PHYS/NTP 651 | Methods for Neuroimaging Research | 3 |
| PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar | 1 |
| BIOCORE 587 | Biological Interactions | 3 |
| 1 Courses also approved for lab credit |  |  |
| SEMINAR |  |  |
| Code | Title | Credits |
| Undergradute Plant Science Seminar (1 cr minimum) |  |  |
| PL PATH 375 | Special Topics (Frontiers in Plant Biology) | 1-4 |

## ADDITIONAL LAB OR FIELD RESEARCH

Select one of the following options:

1. Take an additional lab or field instruction from categories $A-E$ in the Intermediate/Advanced course lists.
2. Complete a directed study in a biological science discipline. ${ }^{1}$
3. Complete a thesis in biological science. ${ }^{1}$

1 Must complete Introductory Biology prior to enrolling in either a directed study or thesis. Select an appropriate course in consultation with advisor.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in the major, taken on the UW-Madison campus
1 Courses with intermediate or advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Once students have declared the biology major, they may apply to pursue Honors in the Major. To apply, students must pick up an Honors form from either the L\&S Honors Office at 1401 Observatory Drive or the Biology Major Office at 1550 Linden Drive. A Senior Honors Thesis is required. Before enrolling in a Senior Honors Thesis course, the student must produce a two- to three-page, double-spaced thesis proposal that briefly introduces the biological problem and then describes the line of experimentation that is proposed for the thesis work. The student and faculty mentor must sign the proposal before it is submitted to the Biology Major Office.

## HONORS IN THE MAJOR IN BIOLOGY: REQUIREMENTS ${ }^{1}$

To earn a B.A. or B.S. with Honors in the Major in Biology students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA in the major/subject
- Complete 13 credits of Foundation, and/or intermediate/advanced courses for Honors.
- Complete an approved two-semester Senior Honors Thesis for a total of 6 credits.

1 Plant biology option must choose from intermediate/advanced courses listed under the plant biology option and should consult with their advisor about the Senior Thesis options.

## BIOLOGY, B.S. (L\&S)

The biology major is designed for students with broad interests in the biological sciences. It is intended primarily to:

1. prepare undergraduates for graduate studies in diverse areas of biology;
2. prepare certain preprofessional students (e.g., medicine, veterinary medicine, dentistry) for advanced study in the health professions;
3. provide a broad exposure to biology for students who want a general science education as biologists; and
4. serve as initial preparation for students who later choose a more specialized major.

The major is offered by the College of Letters \& Science and the College of Agricultural and Life Sciences.

## HOW TO GET IN

Students interested in declaring the biology major should set up an appointment to speak with biology academic advisor. Information can be found at advising (http://biologymajor.wisc.edu/advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT |
| Limit one each: COMP SCI, STAT |  |


| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| :---: | :---: |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UW- <br> Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

Students may complete the Biology major requirements or select a Named Option (below).

## CORE REQUIREMENTS

Mathematics and Statistics

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Select one of the following: | $5-10$ |

Select one of the following:

| MATH 171 | Calculus with Algebra and <br> \& MATH 217 <br> Trigonometry I <br> and Calculus with Algebra and <br> Trigonometry II |
| :--- | :--- |
| MATH 221 | Calculus and Analytic Geometry 1 |
| Select one of the following: ${ }^{1}$ |  |

MATH $222 \quad$ Calculus and Analytic Geometry 2 STAT 301 Introduction to Statistical Methods STAT 371 Introductory Applied Statistics for the Life Sciences

1 Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences.

| Chemistry |  |  |
| :---: | :---: | :---: |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| 1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement. |  |  |
| Physics |  |  |
| Code | Title | Credits |
| 1st semester Physics; select one of the following: |  | 4-5 |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| 2nd semester Physics, select one of the following: |  | 4-5 |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| Introductory Biology |  |  |
| Code | Title | Credits |
| Select one of the following options: ${ }^{1}$ |  | 10-16 |
| Option A: |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 | Introductory Biology |  |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology |  |
| Option B: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |
| Option C: |  |  |
| ZOOLOGY/ <br> BIOLOGY 101 | Animal Biology |  |
| ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology Laboratory |  |
| BOTANY/ $\text { BIOLOGY } 130$ | General Botany |  |
| Foundational Course ${ }^{2}$ |  |  |
| Select one of the following: |  | 3 |
| BIOCORE 381 <br> \& BIOCORE 383 | Evolution, Ecology, and Genetics and Cellular Biology ${ }^{3}$ |  |


| AGRONOMY/ <br> HORT 338 | Plant Breeding and Biotechnology |
| :--- | :--- |
| GENETICS 466 | Principles of Genetics |
| GENETICS 468 | General Genetics 2 |
| MICROBIO 470 | Microbial Genetics \& Molecular <br> Machines |
| BIOCHEM 501 | Introduction to Biochemistry |
| BIOCHEM 508 | General Biochemistry II |

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.
Select one course from categories A or B below.
Select one course from categories C or D below.
Select one course from category E or from an unused category above.

## A. Cellular and Subcellular Biology

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology | 3 |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques ${ }^{1}$ | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | 4 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| BIOCHEM 507 | General Biochemistry I | 3 |
| BIOCHEM 508 | General Biochemistry II | 3-4 |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition | 3 |
| BIOCHEM 551 | Biochemical Methods ${ }^{1}$ | 4 |
| BIOCHEM/ <br> M M \& । 575 | Biology of Viruses | 2 |
| BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 |
| BIOCHEM/ GENETICS/ MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| BIOCHEM/ GENETICS/ MD GENET 620 | Eukaryotic Molecular Biology | 3 |


| BIOCHEM/ BOTANY 621 | Plant Biochemistry | 3 |
| :---: | :---: | :---: |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals | 2 |
| BIOCHEM/PHMCOL- <br> M/ZOOLOGY 630 | Cellular Signal Transduction Mechanisms | 3 |
| BMOLCHEM 314 | Introduction to Human Biochemistry | 3 |
| BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{1}$ | 3 |
| BMOLCHEM/ MICROBIO 668 | Microbiology at Atomic Resolution | 3 |
| BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: Molecular and Ecological Aspects | 3 |
| BOTANY/GENETICS/ HORT 561 | Introductory Cytogenetics | 2-3 |
| GENETICS 466 | Principles of Genetics | 3 |
| GENETICS 467 | General Genetics 1 | 3 |
| GENETICS 520 | Neurogenetics | 2 |
| GENETICS/ <br> MD GENET/ ZOOLOGY 562 | Human Cytogenetics | 2 |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics | 3 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines | 3 |
| MICROBIO/ SOIL SCI 523 | Soil Microbiology and Biochemistry | 3 |
| MICROBIO/M M \& I/ PATH-BIO 528 | Immunology | 3 |
| MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 |
| MICROBIO/ <br> ONCOLOGY/ <br> PL PATH 640 | General Virology-Multiplication of Viruses | 3 |
| M M \& I 341 | Immunology | 3 |
| NEURODPT/ <br> NTP/PHYSIOL/ <br> ZOOLOGY 616 | Lab Course in Neurobiology and Behavior ${ }^{1}$ | 4 |
| NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| NTP/PHYSIOL 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| NTP 655 | Modeling Neurodevelopmental Disease | 3 |
| NTP 675 | Special Topics (Stem Cell in Neurobiology) | 1-3 |
| NTP 675 | Special Topics (Reproductive Neuroendocrinology) | 1-3 |
| NTP 675 | Special Topics (Molecular Mechanisms of Brain Damage) | 1-3 |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology ${ }^{1}$ | 2 |
| NEURODPT 533 | Molecular Physiology | 2 |
| PSYCH 601 | Current Topics in Psychology (Epigenetics \& the Brain) ${ }^{2}$ | 3 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |


| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 523 \end{aligned}$ | Neurobiology | 3 |
| :---: | :---: | :---: |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab ${ }^{1}$ | 2 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |
| 1 Courses also approved for lab credit |  |  |
| B. Organismal Biology |  |  |
| Code | Title | Credits |
| AN SCI/DY SCI 373 | Animal Physiology | 3 |
| AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |
| AN SCI/F\&W ECOL/ ZOOLOGY 520 | Ornithology | 3 |
| AN SCI/F\&W ECOL/ ZOOLOGY 521 | Birds of Southern Wisconsin ${ }^{1}$ | 3 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 |
| ANAT\&PHY 337 | Human Anatomy | 3 |
| ANAT\&PHY 338 | Human Anatomy Laboratory ${ }^{1}$ | 2 |
| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 |
| ANTHRO/ <br> NTP/PSYCH/ <br> ZOOLOGY 619 | Biology of Mind | 3 |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { PL PATH } 332 \end{aligned}$ | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language | 3 |
| DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology ${ }^{1}$ | 4 |
| ENTOM 321 | Physiology of Insects | 3 |
| ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| F\&W ECOL 401 | Physiological Animal Ecology | 3 |
| GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |
| GENETICS/ MD GENET 565 | Human Genetics | 3 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 |
| KINES 721 | Neural Basis for Movement | 3 |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory ${ }^{1}$ | 2 |
| MICROBIO 330 | Host-Parasite Interactions | 3 |


| MICROBIO/ BIOLOGY 525 | Advanced Biological Laboratory Practices: A Research Experience ${ }^{1}$ | 2 |
| :---: | :---: | :---: |
| MICROBIO 526 | Physiology of Microorganisms | 3 |
| M M \& I 301 | Pathogenic Bacteriology | 2 |
| M M \& I/ENTOM/ PATH-BIO/ ZOOLOGY 350 | Parasitology | 3 |
| M M \& 1410 | Medical Mycology | 2 |
| NTP/NEURODPT/ PSYCH 611 | Systems Neuroscience | 4 |
| NTP/ZOOLOGY 620 | Neuroethology Seminar | 2 |
| NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 |
| NTP 675 | Special Topics (Basic Sleep Mechanisms \& Sleep Disorders) | 1-3 |
| NTP 675 | Special Topics (Functional Brain Imaging of Cognitive Disorders) | 1-3 |
| NUTR SCI 431 | Nutrition in the Life Span | 3 |
| NUTR SCI 631 | Clinical Nutrition I | 3 |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |
| ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| PATH 404 | Pathophysiologic Principles of Human Diseases | 3 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| PSYCH 406 | Psychology of Perception | 3-4 |
| PSYCH 601 | Current Topics in Psychology (Neural Basis of Cognitive Control) ${ }^{2}$ | 3 |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| PSYCH 513 | Hormones, Brain, and Behavior | 4 |
| PSYCH 606 | Hormones and Behavior | 3 |
| ZOOLOGY 303 | Aquatic Invertebrate Biology | 3 |
| ZOOLOGY 400 | Topics in Biology (Mammalogy) | 1-3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates ${ }^{1}$ | 5 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory 1 | 2 |
| 1 Courses also app | roved for lab credit |  |
| C. Ecology |  |  |
| Code | Title | Credits |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |


| AGRONOMY/ | Ecotoxicology: Impacts on | 1 | ANTHRO 658 | Ecological Models of Behavior | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENTOM/F\&W ECOL/ | Individuals |  | BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| M\&ENVTOX 633 |  |  | BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 |
|  | Ecotoxicology: Impacts on | 1 | BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 |
| ENTOM/F\&W ECOL/ M\&ENVTOX 634 | Populations, Communities and Ecosystems |  | BOTANY 422 | Plant Geography | 3 |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { ZOOLOGY } 450 \end{aligned}$ | Midwestern Ecological Issues: A Case Study Approach | 2 | BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 | ENTOM 432 | Taxonomy and Bionomics of Immature Insects ${ }^{1}$ | 4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 | ENTOM/GENETICS/ <br> ZOOLOGY 624 | Molecular Ecology | 3 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 | ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 360 | Extinction of Species | 3 |
| BOTANY/ENTOM/ ZOOLOGY 473 | Plant-Insect Interactions | 3 | GENETICS 468 | General Genetics 2 | 3 |
| BOTANY/ENVIR ST/ F\&W ECOL/ | Conservation Biology | 3 | $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 541 \end{aligned}$ | Paleobiology | 3 |
| ZOOLOGY 651 |  |  | MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| ENTOM 450 | Basic and Applied Insect Ecology | 3 |  |  |  |
| ENTOM 451 | Basic and Applied Insect Ecology | 1 | PSYCH 449 PSYCH 450 | Animal Behavior | 3 |
|  | Laboratory | 2 | PSYCH 450 | Human Biology and Behavior | 3 |
| $\text { ZOOLOGY } 315$ | Resources | 2 | PSYCH/ | Animal Communication and the | 3 |
| ENVIR ST/ | Wetlands Ecology | 3 | ZOOLOGY 550 | Origins of Language |  |
| LAND ARC 361 |  |  | ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 | ZOOLOGY 301 | Invertebrate Biology and Evolution | 2 |
| F\&W ECOL 550 | Forest Ecology | 3 |  |  |  |
| F\&W ECOL/ | Principles of Landscape Ecology | 2 | ZOOLOGY 425 | Behavioral Ecology | 3 |
| LAND ARC/ ZOOLOGY 565 |  |  | 1 Courses also app | roved for lab credit |  |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 | E. Applied Biology, Code | Agriculture and Natural Resources Title | Credits |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 | A A E/AGRONOMY/ INTER-AG/ | World Hunger and Malnutrition | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 | NUTR SCI 350 |  |  |
| ZOOLOGY 316 | Laboratory for Limnology- | 2-3 | AGRONOMY 300 | Cropping Systems | 3 |
|  | Conservation of Aquatic Resources |  | AGRONOMY 302 | Forage Management and Utilization | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 | AGRONOMY/ <br> HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy | 2 |
| ZOOLOGY/ | Ecology of Fishes | 3 | AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| ENVIR ST 510 |  |  | AGRONOMY/ | Principles of Plant Breeding | 3 |
| ZOOLOGY/ | Ecology of Fishes Lab ${ }^{1}$ | 2 | HORT 501 |  |  |
| ENVIR ST 511 |  |  | AMER IND/ANTHRO/ EthnobotanyBOTANY 474 |  | 3-4 |
| Courses also approved for lab credit |  |  |  |  |  |
|  |  |  | AN SCI/DY SCI/ | Comparative Animal Nutrition | 3 |
| D. Evolution and Systematics |  |  | NUTR SCI 311 |  |  |
| Code | Title | Credits | AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| ANTHRO 302 | Hominoid Evolution | 3 | AN SCI/DY SCI 320 | Animal Health and Disease | 3 |
| ANTHRO 304 | Heredity, Environment and Human | 3 |  | Management |  |
|  | Populations |  | AN SCI/DY SCI 361 | Introduction to Animal and | 2 |
| ANTHRO/BOTANY/ | Evolutionary Biology | 3 |  | Veterinary Genetics |  |
| ZOOLOGY 410 |  |  | AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 |
| ANTHRO 411 | The Evolution of the Genus, Homo | 3 | AN SCI 503 | Avian Physiology ${ }^{1}$ | 3 |
| ANTHRO 458 | Primate Behavioral Ecology | 3 | AN SCI 512 | Management for Avian Health ${ }^{1}$ | 3 |
| ANTHRO 603 | Seminar in Evolutionary Theory | 3 | BIOCORE 587 | Biological Interactions | 3 |


| BIOLOGY/ <br> GENETICS 522 | Evolution Seminar SeriesUndergraduate | 1 |
| :---: | :---: | :---: |
| BOTANY 403 | Field Collections and Identification | 1-4 |
| DY SCI/INTERAG 471 | Food Production Systems and Sustainability | 3 |
| ENTOM 351 | Principles of Economic Entomology | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 371 \end{aligned}$ | Medical Entomology ${ }^{1}$ | 3 |
| ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 |
| ENVIR ST/ POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology ${ }^{1}$ | 4 |
| F\&W ECOL/ <br> HORT/LAND ARC/ <br> PL PATH 309 | Diseases of Trees and Shrubs | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: <br> Biological and Philosophical Issues | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 415 | Tree Physiology | 3 |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 |
| F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 |
| FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory ${ }^{1}$ | 2 |
| $\begin{aligned} & \text { FOOD SCI/ } \\ & \text { MICROBIO } 325 \end{aligned}$ | Food Microbiology | 3 |
| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 |
| GENETICS/ HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants I ${ }^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| MEDICINE/ <br> M\&ENVTOX/ ONCOLOGY/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| NTP/MED PHYS 651 | Methods for Neuroimaging Research ${ }^{1,3}$ | 3 |
| NUTR SCI 332 | Human Nutritional Needs | 3 |


| PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| :---: | :---: | :---: |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar | 1 |
| 1 Courses also approved for lab credit |  |  |
| BIOLOGY NAMED OPTIONS |  |  |
| Instead of completing the requirements above, students may choose to select one of the options below. |  |  |
| - Biology: Evolutionary Biology (p. 91) |  |  |
| - Biology: Neurobiology (p. 96) |  |  |
| - Biology: Plant Biology (p. 101) |  |  |

## HONORS IN THE MAJOR

Once students have declared the biology major, they may apply to pursue Honors in the Major. To apply, students must pick up an Honors form from either the L\&S Honors Office at 1401 Observatory Drive or the Biology Major Office at 1550 Linden Drive. A Senior Honors Thesis is required. Before enrolling in a Senior Honors Thesis course, the student must produce a two- to three-page, double-spaced thesis proposal that briefly introduces the biological problem and then describes the line of experimentation that is proposed for the thesis work. The student and faculty mentor must sign the proposal before it is submitted to the Biology Major Office.

## HONORS IN THE MAJOR IN BIOLOGY: REQUIREMENTS ${ }^{1}$

To earn a B.A. or B.S. with Honors in the Major in Biology students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA in the major/subject
- Complete 13 credits of Foundation, and/or intermediate/advanced courses for Honors.
- Complete an approved two-semester Senior Honors Thesis for a total of 6 credits.

1 Plant biology option must choose from intermediate/advanced courses listed under the plant biology option and should consult with their advisor about the Senior Thesis options.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Know and understand core concepts that unify the breadth of biological sciences including: evolution; structure and function; information flow, exchange, and storage; pathways for transformations of energy and matter; and systems.
2. Demonstrate practical skills of a professional biologist including: problem\#solving by engaging the process of science; written and verbal proficiency; laboratory skills; quantitative analysis skills; and teamwork skills.
3. Graduates will be able to engage and make broader connections to other scientific disciplines and society.

## ADVISING AND CAREERS

## ADVISING

Your advisor is here to guide you through the biology major. We can address your questions and concerns, provide advice, help you create a four-year degree plan that meets your major and professional goals, and connect you to resources. It is important to remember that advising is about the process, and some questions do not have a quick and easy answer. Your advisor will challenge you to self-reflect, to critically think about your goals and strategies, and to develop decision-making skills. For more information about what to expect during your advising appointment, visit UW Undergraduate Advising (http://advising.wisc.edu/ content/expectations-about-advising).

In the biology major, students are assigned to an adviser according to last name. Please visit us here (http://biologymajor.wisc.edu/advising) to schedule an advising appointment.

## CAREERS

The biology major encourages our students to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well
as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

## ADVISING LEADERSHIP AND STAFF

Harris, Kelley, Program Manager
Asen, Brian
Courtenay, Todd
Haas-Gallo, Erica
Smith, Mary

## BIOLOGY MAJOR ADMINISTRATION

Fernandez, Donna, L\&S Co-Chair
Wassarman, Karen, CALS Co-Chair
Pringle, Anne Evolutionary Biology Option Representative
Auger, Catherine, Neurobiology Option Representative
Goldman, Irwin and Patricia McManus, Plant Biology Option
Representative
Blair, Seth
Gilroy, Simon
Boekhoff-Falk, Grace
Harris, Michelle
Senes, Alessandro
Kurtz, Robin, ex-officio
Thoma, Sharon, ex-officio
Harris, Kelley, ex-officio

## WISCONSIN EXPERIENCE

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in biology, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- Beta Beta Beta Biological Honor Society (https://win.wisc.edu/ organization/tribeta) is an honor and professional organization for undergraduate students in the biological sciences. Its activities are designed to stimulate interest, scholarly attainment, and investigation in the biological sciences, and to promote the dissemination of information and new interpretations among students in life sciences. The society offers its members the unique opportunity to publish their undergraduate work in the pages of its journal, BIOS.
- Biology majors have the opportunity to go on experiential study abroad programs, where students can immerse themselves in research or global health field experiences. Students can review the Biology Major Advising Page (https://www.studyabroad.wisc.edu/ map_biology.asp) on the International Academic Programs website for information on these and other programs, as well as requirements
that can typically be fulfilled abroad and things to consider when incorporating study abroad into an academic plan.
- Students are encouraged to get involved in research in any life science department. Research can be performed for either course credit or pay, depending on the opportunity. Research opportunities can be identified by inquiring directly with faculty members, reading the Biology Major Newsletter, or announcement on the Student Job Center (https://jobcenter.wisc.edu).


## BIOLOGY: EVOLUTIONARY BIOLOGY

## REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

## CORE REQUIREMENTS

Mathematics and Statistics
Code
Title
Select one of the following:
Credits

| MATH 171 <br> \& MATH 217 | Calculus with Algebra and <br> Trigonometry I <br> and Calculus with Algebra and <br> Trigonometry II |
| :--- | :--- |
| MATH 221 | Calculus and Analytic Geometry 1 |
| Select one of the following: ${ }^{1}$ |  | | MATH 222 | Calculus and Analytic Geometry 2 |
| :--- | :--- |
| STAT 301 | Introduction to Statistical Methods |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |

1 Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences.

## Chemistry

Code Title Credits

## General Chemistry

Select one of the following: ${ }^{1} \quad$ 5-9

| CHEM 103 | General Chemistry I |  |
| :--- | :--- | :--- |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  | 3 |
| CHEM 343 | Introductory Organic Chemistry | 2 |
| CHEM 344 | Introductory Organic Chemistry <br>  <br> LHEM 345 | Intermediate Organic Chemistry |

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## Physics

| Code | Title | Credits |
| :--- | :--- | ---: |
| 1st semester Physics; select one of the following: General Physics | $4-5$ |  |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics | $4-5$ |
| PHYSICS 207 | General Physics |  |
| 2nd semester Physics, select one of the following: |  |  |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 |  |  |

## Introductory Biology

Code Title Credits
Select one of the following options: ${ }^{1}$ 10-16
Option A:
BIOLOGY/ Introductory Biology
BOTANY/
ZOOLOGY 151
BIOLOGY/ Introductory Biology
BOTANY/
ZOOLOGY 152
Option B:

| BIOCORE 381 | Evolution, Ecology, and Genetics |
| :--- | :--- |
| BIOCORE 382 | Evolution, Ecology, and Genetics <br> Laboratory |
| BIOCORE 383 | Cellular Biology |
| BIOCORE 384 | Cellular Biology Laboratory |
| BIOCORE 485 | Organismal Biology |
| Option C: |  |
| ZOOLOGY/ <br> BIOLOGY 101 |  |
| ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology Biology Laboratory |
| BOTANY/ <br> BIOLOGY 130 | General Botany |

Foundational Course ${ }^{2}$
Select one of the following: 3
BIOCORE 381 Evolution, Ecology, and Genetics \& BIOCORE 383 and Cellular Biology ${ }^{3}$
AGRONOMY/ Plant Breeding and Biotechnology
HORT 338
GENETICS 466 Principles of Genetics
GENETICS 468 General Genetics 2
MICROBIO 470 Microbial Genetics \& Molecular Machines
BIOCHEM 501 Introduction to Biochemistry
BIOCHEM 508 General Biochemistry II
1 For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy).
2 Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take

MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement.
3

Students may use BIOCORE 381 Evolution, Ecology, and Genetics and BIOCORE 383 Cellular Biology to contribute to introductory biology and satisfy foundation.

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.

Students must take ANTHRO/BOTANY/ZOOLOGY 410 Evolutionary Biology. In addition, select one course from categories A or B below. Select one course from category C. Select one course from category D. Additional courses can be taken from A-E to satisfy the lab and/or 31credit requirement.

| A. Cellular and Subcellular Biology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AGRONOMY/ <br> HORT 338 | Plant Breeding and Biotechnology | 3 |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques ${ }^{1}$ | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | 4 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| BIOCHEM 507 | General Biochemistry I | 3 |
| BIOCHEM 508 | General Biochemistry II | 3-4 |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition | 3 |
| BIOCHEM 551 | Biochemical Methods ${ }^{1}$ | 4 |
| BIOCHEM/ <br> M M \& I 575 | Biology of Viruses | 2 |
| BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 |
| BIOCHEM/ GENETICS/ MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| BIOCHEM/ GENETICS/ MD GENET 620 | Eukaryotic Molecular Biology | 3 |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry | 3 |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals | 2 |
| BIOCHEM/PHMCOL- <br> M/ZOOLOGY 630 | Cellular Signal Transduction Mechanisms | 3 |
| BMOLCHEM 314 | Introduction to Human Biochemistry | 3 |
| BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{1}$ | 3 |
| BMOLCHEM/ MICROBIO 668 | Microbiology at Atomic Resolution | 3 |
| BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: Molecular and Ecological Aspects | 3 |
| BOTANY/GENETICS/ <br> HORT 561 | Introductory Cytogenetics | 2-3 |


| GENETICS 466 | Principles of Genetics | 3 |
| :---: | :---: | :---: |
| GENETICS 467 | General Genetics 1 | 3 |
| GENETICS 520 | Neurogenetics | 2 |
| GENETICS/ <br> MD GENET/ <br> ZOOLOGY 562 | Human Cytogenetics | 2 |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics | 3 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines | 3 |
| MICROBIO/ SOIL SCI 523 | Soil Microbiology and Biochemistry | 3 |
| MICROBIO/M M \& I/ PATH-BIO 528 | Immunology | 3 |
| MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 |
| MICROBIO/ <br> ONCOLOGY/ <br> PL PATH 640 | General Virology-Multiplication of Viruses | 3 |
| M M \& I 341 | Immunology | 3 |
| NEURODPT/ NTP/PHYSIOL/ ZOOLOGY 616 | Lab Course in Neurobiology and Behavior ${ }^{1}$ | 4 |
| NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| NTP/PHYSIOL 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| NTP 655 | Modeling Neurodevelopmental Disease | 3 |
| NTP 675 | Special Topics (Stem Cell in Neurobiology) | 1-3 |
| NTP 675 | Special Topics (Reproductive Neuroendocrinology) | 1-3 |
| NTP 675 | Special Topics (Molecular Mechanisms of Brain Damage) | 1-3 |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology ${ }^{1}$ | 2 |
| NEURODPT 533 | Molecular Physiology | 2 |
| PSYCH 601 | Current Topics in Psychology (Epigenetics \& the Brain) | 3 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 523 \end{aligned}$ | Neurobiology | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab ${ }^{1}$ | 2 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |
| 1 Courses also approved for lab credit |  |  |
| B. Organismal Biology |  |  |
| Code | Title | Credits |
| AN SCI/DY SCI 373 | Animal Physiology | 3 |
| AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |


| AN SCI/F\&W ECOL/ <br> ZOOLOGY 520 | Ornithology | 3 | NTP 675 | Special Topics (Functional Brain Imaging of Cognitive Disorders) | 1-3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AN SCI/F\&W ECOL/ | Birds of Southern Wisconsin ${ }^{1}$ | 3 | NUTR SCI 431 | Nutrition in the Life Span | 3 |
| ZOOLOGY 521 |  |  | NUTR SCI 631 | Clinical Nutrition I | 3 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 | NUTR SCI/ | Herbals, Homeopathy, and Dietary | 2-3 |
| ANAT\&PHY 337 | Human Anatomy | 3 | PHM PRAC 672 | Supplements |  |
| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 | ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| ANTHRO/ NTP/PSYCH/ | Biology of Mind | 3 | PATH 404 | Pathophysiologic Principles of Human Diseases | 3 |
| ZOOLOGY 619 |  |  | PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 | PSYCH 406 | Psychology of Perception | 3-4 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 | PSYCH 601 | Current Topics in Psychology | 3 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |  | (Neural Basis of Cognitive Control) |  |
| BOTANY/ | Fungi ${ }^{1}$ | 4 | PSYCH 414 | Cognitive Psychology | 3 |
| PLPATH 332 |  |  | PSYCH 454 | Behavioral Neuroscience | 3 |
| BOTANY/ | Dendrology ${ }^{1}$ | 2 | PSYCH 513 | Hormones, Brain, and Behavior | 4 |
| F\&W ECOL 402 |  |  | PSYCH 606 | Hormones and Behavior | 3 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 | ZOOLOGY 303 | Aquatic Invertebrate Biology | 3 |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language | 3 | ZOOLOGY 400 | Topics in Biology (Mammalogy) | 1-3 |
| DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 | ZOOLOGY 430 | Comparative Anatomy of Vertebrates ${ }^{1}$ | 5 |
| ENTOM/ <br> ZOOLOGY 302 | Introduction to Entomology ${ }^{1}$ | 4 | ZOOLOGY 603 | Endocrinology | 3-4 |
| ENTOM 321 | Physiology of Insects | 3 | ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 | ZOOLOGY 612 | Comparative Physiology Laboratory | 2 |
| F\&W ECOL 401 | Physiological Animal Ecology | 3 |  |  |  |
| GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |  |  |  |
| GENETICS/ <br> MD GENET 565 | Human Genetics | 3 | 1 Courses also approved for lab credit |  |  |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology | 3 | C. Ecology <br> Code |  | Credits |
| KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 | AGRONOMY/ BOTANY/ | Grassland Ecology | 3 |
| ANAT\&PHY 338 | Human Anatomy Laboratory | 2 | SOIL SCI 370 |  |  |
| KINES 721 | Neural Basis for Movement | 3 | AGRONOMY/ | Ecotoxicology: The Chemical | 1 |
| MICROBIO 303 | Biology of Microorganisms | 3 | ENTOM/F\&W ECOL/ | Players |  |
| MICROBIO 304 | Biology of Microorganisms Laboratory ${ }^{1}$ | 2 | M\&ENVTOX 632 |  |  |
|  |  |  | AGRONOMY/ | Ecotoxicology: Impacts on | 1 |
| MICROBIO 330 | Host-Parasite Interactions | 3 | ENTOM/F\&W ECOL/ | Individuals |  |
| MICROBIO/ | Advanced Biological Laboratory | 2 | M\&ENVTOX 633 |  |  |
| BIOLOGY 525 | Practices: A Research Experience ${ }^{1}$ |  | AGRONOMY/ | Ecotoxicology: Impacts on | 1 |
| MICROBIO 526 | Physiology of Microorganisms | 3 | ENTOM/F\&W ECOL/ | Populations, Communities and |  |
| M M \& I 301 | Pathogenic Bacteriology | 2 | M\&ENVTOX 634 | Ecosystems |  |
| M M \& I/ENTOM/ PATH-BIO/ | Parasitology | 3 | BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach | 2 |
|  |  |  | BOTANY/ | The Vegetation of Wisconsin ${ }^{1}$ | 4 |
| M M \& 1410 | Medical Mycology | 2 | F\&W ECOL 455 |  |  |
| NTP/NEURODPT/ <br> PSYCH 611 | Systems Neuroscience | 4 | BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| NTP/ZOOLOGY 620 | Neuroethology Seminar | 2 | BOTANY/F\&W ECOL/ ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 |
| NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 | BOTANY/ENTOM/ ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| NTP 675 | Special Topics (Basic Sleep Mechanisms \& Sleep Disorders) | 1-3 | BOTANY/ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |


| ENTOM 450 | Basic and Applied Insect Ecology | 3 | MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENTOM 451 | Basic and Applied Insect Ecology Laboratory | 1 |  |  |  |
|  |  |  | PSYCH 449 | Animal Behavior | 3 |
| ENVIR ST/ ZOOLOGY 315 | Limnology-Conservation of Aquatic Resources | 2 | PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior | 3 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 | $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language | 3 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 | ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 | ZOOLOGY 301 | Invertebrate Biology and Evolution | 2 |
| F\&W ECOL/ | Principles of Landscape Ecology | 2 |  | Lab ${ }^{1}$ |  |
| LAND ARC/ |  |  | ZOOLOGY 425 | Behavioral Ecology | 3 |
| ZOOLOGY 565 |  |  |  |  |  |
| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 | Courses also app | roved for lab credit |  |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 | E. Applied Biology, Code | Agriculture and Natural Resources Title | Credits |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 | A A E/AGRONOMY/ INTER-AG/ | World Hunger and Malnutrition | 3 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 | NUTR SCI 350 |  |  |
|  |  |  | AGRONOMY 300 | Cropping Systems | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 | AGRONOMY 302 | Forage Management and Utilization | 3 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 | AGRONOMY/ <br> HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy | 2 |
| ZOOLOGY/ | Ecology of Fishes Lab ${ }^{1}$ | 2 | AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| ENVIR ST 511 | Ecology of Fishes Lab |  | AGRONOMY/ HORT 501 | Principles of Plant Breeding | 3 |
| Courses also app | roved for lab credit |  | AMER IND/ANTHRO/ BOTANY 474 | Ethnobotany | 3-4 |
| D. Evolution and Sy | stematics |  | AN SCI/DY SCI/ | Comparative Animal Nutrition | 3 |
| Code | Title | Credits | NUTR SCI 311 |  |  |
| ANTHRO 302 | Hominoid Evolution | 3 | AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| ANTHRO 304 | Heredity, Environment and Human Populations | 3 | AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 |
| ANTHRO/BOTANY/ <br> ZOOLOGY 410 | Evolutionary Biology | 3 | AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| ANTHRO 411 | The Evolution of the Genus, Homo | 3 | AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 |
| ANTHRO 458 | Primate Behavioral Ecology | 3 | AN SCI 503 | Avian Physiology ${ }^{1}$ | 3 |
| ANTHRO 603 | Seminar in Evolutionary Theory | 3 | AN SCI 512 | Management for Avian Health ${ }^{1}$ | 3 |
| ANTHRO 658 | Ecological Models of Behavior | 3 | BIOCORE 587 | Biological Interactions | 3 |
| BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 | BIOLOGY/ | Evolution Seminar Series- | 1 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 | GENETICS 522 | Undergraduate |  |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 | BOTANY 403 | Field Collections and Identification | 1-4 |
| BOTANY 422 | Plant Geography | 3 | DY SCI/INTER- | Food Production Systems and | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 | AG 471 | Sustainability |  |
|  |  |  | ENTOM 351 | Principles of Economic Entomology | 3 |
| ENTOM 432 | Taxonomy and Bionomics of Immature Insects ${ }^{1}$ | 4 | $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 371 \end{aligned}$ | Medical Entomology ${ }^{1}$ | 3 |
| ENTOM/GENETICS/ <br> ZOOLOGY 624 | Molecular Ecology | 3 | ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 |
| ENVIR ST/ <br> F\&W ECOL/ | Extinction of Species | 3 | ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 |
| ZOOLOGY 360 |  |  | ENVIR ST/ | Air Pollution and Human Health | 3 |
| GENETICS 468 | General Genetics 2 | 3 | POP HLTH 502 |  |  |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 541 \end{aligned}$ | Paleobiology | 3 | F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology ${ }^{1}$ | 4 |


| F\&W ECOL/ <br> HORT/LAND ARC/ <br> PLPATH 309 | Diseases of Trees and Shrubs | 3 |
| :---: | :---: | :---: |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: <br> Biological and Philosophical Issues | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 415 | Tree Physiology | 3 |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 |
| F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 |
| FOOD SCI/ MICROBIO 324 | Food Microbiology Laboratory ${ }^{1}$ | 2 |
| FOOD SCI/ MICROBIO 325 | Food Microbiology | 3 |
| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 |
| GENETICS/ HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants I ${ }^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| MEDICINE/ <br> M\&ENVTOX/ <br> ONCOLOGY/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| NTP/MED PHYS 651 | Methods for Neuroimaging Research ${ }^{1,3}$ | 3 |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar | 1 |

1 Courses also approved for lab credit

## SEMINAR

| Code | Title | Credits |
| :--- | :--- | ---: |
| Undergradute Evolution Seminar (1 cr minimum) |  |  |
| BIOLOGY/ | Evolution Seminar Series- | 1 |
| GENETICS 522 | Undergraduate |  |

## ADDITIONAL LAB OR FIELD RESEARCH <br> Select one of the following options: <br> 1. Take an additional lab or field instruction from categories $A-E$ in the Intermediate/Advanced course lists (p. ). <br> 2. Complete a directed study in a biological science discipline. ${ }^{1}$ <br> 3. Complete a thesis in biological science. ${ }^{1}$ <br> 1 Must complete Introductory Biology prior to enrolling in either a directed study or thesis. Select an appropriate course in consultation with advisor.

## RESIDENCE AND QUALITY OF WORK <br> 2.000 GPA in all major courses <br> 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$ 15 credits in the major, taken on the UW-Madison campus <br> 1 Courses with intermediate or advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Once students have declared the biology major, they may apply to pursue Honors in the Major. To apply, students must pick up an Honors form from either the L\&S Honors Office at 1401 Observatory Drive or the Biology Major Office at 1550 Linden Drive. A Senior Honors Thesis is required. Before enrolling in a Senior Honors Thesis course, the student must produce a two- to three-page, double-spaced thesis proposal that briefly introduces the biological problem and then describes the line of experimentation that is proposed for the thesis work. The student and faculty mentor must sign the proposal before it is submitted to the Biology Major Office.

## HONORS IN THE MAJOR IN BIOLOGY: REQUIREMENTS ${ }^{1}$

To earn a B.A. or B.S. with Honors in the Major in Biology students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA in the major/subject
- Complete 13 credits of Foundation, and/or intermediate/advanced courses for Honors.
- Complete an approved two-semester Senior Honors Thesis for a total of 6 credits.

1 Plant biology option must choose from intermediate/advanced courses listed under the plant biology option and should consult with their advisor about the Senior Thesis options.

## BIOLOGY: NEUROBIOLOGY

Admissions to the Biology: Neurobiology B.S. have been suspended as of fall 2016; and will be discontinued fall 2019. If you have any questions, please contact the department (info@biologymajor.wisc.edu).

## REQUIREMENTS

The College of Letters \& Science now offers a neurobiology major. Students already declared for the biology major with a Neurobiology option are allowed to continue in the program; they must complete the program no later than August 2019.

Students who have declared the biology major with a Neurobiology option may cancel the major and declare the new neurobiology major, provided it does not extend their time to degree. Students should consult with an advisor in the new neurobiology major to determine which program is best for them.

Students may not double-major in any biology major option and the neurobiology major.

## CORE REQUIREMENTS



| Chemistry <br> Code <br> General Chemistry | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: ${ }^{1}$ | $5-9$ |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I <br> and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry |  |
| CHEM 344 | Introductory Organic Chemistry <br> Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement.

## Physics

Code Title Credits

1st semester Physics; select one of the following:


Option B:

| BIOCORE 381 | Evolution, Ecology, and Genetics |
| :--- | :--- |
| BIOCORE 382 | Evolution, Ecology, and Genetics <br> Laboratory |
| BIOCORE 383 | Cellular Biology |
| BIOCORE 384 | Cellular Biology Laboratory |
| BIOCORE 485 Organismal Biology <br> Option C:  <br> ZOOLOGY/ Animal Biology <br> BIOLOGY 101  <br> ZOOLOGY/ Animal Biology Laboratory <br> BIOLOGY 102  <br> BOTANY/ General Botany <br> BIOLOGY 130  |  |

Foundational Course ${ }^{2}$
Select one of the following: 3
BIOCORE 381 Evolution, Ecology, and Genetics \& BIOCORE 383 and Cellular Biology ${ }^{3}$
AGRONOMY/ Plant Breeding and Biotechnology
HORT 338
GENETICS 466 Principles of Genetics
GENETICS 468 General Genetics 2
MICROBIO 470 Microbial Genetics \& Molecular Machines
BIOCHEM 501 Introduction to Biochemistry
BIOCHEM 508 General Biochemistry II
1 For AP Biology policy, as it applies to introductory biology in the biology major, see this link (http://biologymajor.wisc.edu/advising/ advisor-resources/ap-ib-biology-policy).
2 Does not count toward intermediate/advanced courses. Students completing the Evolutionary Biology option must complete either GENETICS 466 Principles of Genetics or GENETICS 468 General Genetics 2 to fulfill the Foundational requirement. Students completing the Plant Biology option are not allowed to take MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the Foundational requirement.

3 Students may use BIOCORE 381 Evolution, Ecology, and Genetics and BIOCORE 383 Cellular Biology to contribute to introductory biology and satisfy foundation.

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote.
Students must complete ZOOLOGY/PSYCH 523 Neurobiology and PSYCH 454 Behavioral Neuroscience.
In addition, select one course from category A. Select one course from category B. Select one course from categories C or D below. Additional courses can be taken from A-F to satisfy the lab and/or 31-credit requirement.

| A. Cellular and Molecular Neurobiology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| GENETICS 520 | Neurogenetics | 2 |
| NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| NTP/NEURODPT/ PHYSIOL/ ZOOLOGY 616 | Lab Course in Neurobiology and Behavior ${ }^{1}$ | 4 |
| NTP/PHYSIOL 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| NTP 655 | Modeling Neurodevelopmental Disease | 3 |
| NTP 675 | Special Topics (Molecular Mechanisms of Brain Damage) | 1-3 |
| NTP 675 | Special Topics (Reproductive Neuroencrinology) | 1-3 |
| PSYCH 601 | Current Topics in Psychology (Epigenetics \& the Brain) | 3 |
| PSYCH 601 | Current Topics in Psychology (Neuropharmacology) | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology ${ }^{1}$ | 3 |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab ${ }^{1}$ | 2 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |

1 Courses also approved for lab credit

| B. Systems Neurobiology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| CS\&D 210 | Neural Basis of Communication | 3 |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language | 3 |
| ED PSYCH 326 | Mind, Brain and Education | 3 |
| KINES 531 | Neural Control of Movement | 3 |
| NTP/NEURODPT/ PSYCH 611 | Systems Neuroscience | 4 |
| NTP/ZOOLOGY 620 | Neuroethology Seminar | 2 |
| NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 |
| NTP/MED PHYS 651 | Methods for Neuroimaging Research ${ }^{1}$ | 3 |


| NTP 675 | Special Topics (Functional Brain <br> Imaging of Cognitive Disorders) | $1-3$ |
| :--- | :--- | ---: |
| NTP 675 | Special Topics (Basic Sleep <br> Mechanisms \& Sleep Disorders) | $1-3$ |
| PSYCH 406 | Psychology of Perception | $3-4$ |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH 504 | Affective Neuroscience | 4 |
| PSYCH 601 | Current Topics in Psychology <br> (Cognition \& Emotion: Cognitive <br> Affective Neuroscience) | 3 |
| PSYCH 601 | Current Topics in Psychology <br> (Neural Basis of Cognitive Control) | 3 |
| PSYCH 601 | Current Topics in Psychology <br> (Neuroeconomics) | 3 |
|  |  |  |

1 Courses also approved for lab credit
C. Ecology

Code Title Credits
AGRONOMY/ Grassland Ecology 3
BOTANY/
SOIL SCI 370
AGRONOMY/ Ecotoxicology: The Chemical 1
ENTOM/F\&W ECOL/ Players
M\&ENVTOX 632
AGRONOMY/ Ecotoxicology: Impacts on 1
ENTOM/F\&W ECOL/ Individuals
M\&ENVTOX 633
AGRONOMY/ Ecotoxicology: Impacts on 1
$\begin{array}{ll}\text { ENTOM/F\&W ECOL/ } & \text { Populations, Communities and } \\ \text { M\&ENVTOX } 634 & \text { Ecosystems }\end{array}$

| M\&ENVTOX 634 | Ecosystems |
| :--- | :--- |
| BOTANY/ | Midwestern Ecological Issues: A |

ZOOLOGY 450 Case Study Approach
BOTANY/ The Vegetation of Wisconsin ${ }^{1} 4$
F\&W ECOL 455
BOTANY/ Ecological Techniques for Field 1-2
$\begin{array}{ll}\text { ZOOLOGY } 459 & \text { Monitoring } \\ \text { BOTANY/F\&W ECOL/ General Ecology }{ }^{1} & 4\end{array}$
ZOOLOGY 460
BOTANY/ENTOM/ Plant-Insect Interactions 3
ZOOLOGY 473
BOTANY/ENVIR ST/ Conservation Biology 3
F\&W ECOL/
ZOOLOGY 651
ENTOM $450 \quad$ Basic and Applied Insect Ecology 3
ENTOM 451 Basic and Applied Insect Ecology 1

|  | Laboratory |
| :--- | :--- |
| ENVIR ST/ Limnology-Conservation of Aquatic |  |

$\begin{array}{ll}\text { ZOOLOGY } 315 & \text { Resources } \\ \text { ENVIR ST/ } & \text { Wetlands Ecology }\end{array}$
LAND ARC 361
F\&W ECOL 379 Principles of Wildlife Management 3
F\&W ECOL $550 \quad$ Forest Ecology 3
F\&W ECOL/ Principles of Landscape Ecology 2
LAND ARC/
ZOOLOGY 565

| F\&W ECOL/ ZOOLOGY 660 | Climate Change Ecology | 3 | E. Applied Biology, Code | Agriculture and Natural Resources Title | Credits |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 | AAE/AGRONOMY/ INTER-AG/ | World Hunger and Malnutrition | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 | NUTR SCI 350 |  |  |
| ZOOLOGY 316 | Laboratory for Limnology- | 2-3 | AGRONOMY 300 | Cropping Systems | 3 |
|  | Conservation of Aquatic Resources |  | AGRONOMY 302 | Forage Management and Utilization | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 | AGRONOMY/ <br> HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy | 2 |
| ZOOLOGY/ | Ecology of Fishes | 3 | AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| ENVIR ST 510 |  |  | AGRONOMY/ | Principles of Plant Breeding | 3 |
| ZOOLOGY/ | Ecology of Fishes Lab ${ }^{1}$ | 2 | HORT 501 |  |  |
| ENVIR ST 511 |  |  | AMER IND/ANTHRO/ | Ethnobotany | 3-4 |
| Cou |  |  | BOTANY 474 |  |  |
| Courses also app | roved for lab credit |  | AN SCI/DY SCI/ | Comparative Animal Nutrition | 3 |
| D. Evolution and Sy | stematics |  | NUTR SCI 311 |  |  |
| Code | Title | Credits | AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| ANTHRO 302 | Hominoid Evolution | 3 | AN SCI/DY SCI 320 | Animal Health and Disease | 3 |
| ANTHRO 304 | Heredity, Environment and Human | 3 |  | Management |  |
|  | Populations |  | AN SCI/DY SCI 361 | Introduction to Animal and | 2 |
| ANTHRO/BOTANY/ | Evolutionary Biology | 3 |  | Veterinary Genetics |  |
| ZOOLOGY 410 |  |  | AN SCI/DY SCl 363 | Principles of Animal Breeding | 2 |
| ANTHRO 411 | The Evolution of the Genus, Homo | 3 | AN SCI 503 | Avian Physiology ${ }^{1}$ | 3 |
| ANTHRO 458 | Primate Behavioral Ecology | 3 | AN SCI 512 | Management for Avian Health ${ }^{1}$ | 3 |
| ANTHRO 603 | Seminar in Evolutionary Theory | 3 | BIOCORE 587 | Biological Interactions | 3 |
| ANTHRO 658 | Ecological Models of Behavior | 3 | BIOLOGY/ | Evolution Seminar Series- | 1 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 | GENETICS 522 | Undergraduate |  |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 | BOTANY 403 | Field Collections and Identification | 1-4 |
| BOTANY 422 | Plant Geography | 3 | DY SCI/INTERAG 471 | Food Production Systems and Sustainability | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 | ENTOM 351 | Principles of Economic Entomology | 3 |
| ENTOM/GENETICS/ ZOOLOGY 624 | Molecular Ecology | 3 | ENTOM/ ZOOLOGY 371 | Medical Entomology ${ }^{1}$ | 3 |
| ENVIR ST/ <br> F\&W ECOL/ | Extinction of Species | 3 | ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 |
| ZOOLOGY 360 |  |  | ENVIR ST/ | Introduction to Environmental | 3 |
| GENETICS 468 | General Genetics 2 | 3 | POP HLTH 471 | Health |  |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 541 \end{aligned}$ | Paleobiology | 3 | ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 | F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology ${ }^{1}$ | 4 |
| PSYCH 449 | Animal Behavior | 3 | F\&W ECOL/ | Diseases of Trees and Shrubs | 3 |
| PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior | 3 | PLPATH 309 |  |  |
|  | Animal Communication and the | 3 | F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| ZOOLOGY 550 | Origins of Language |  | F\&W ECOL/ | Human/Animal Relationships: | 3 |
| ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |  | Piological and Philosophical Issues | 3 |
| ZOOLOGY 301 | Invertebrate Biology and Evolution | 2 | F\&W ECOL 415 | Principles of Silviculture | 3 |
| ZOOLOGY 425 | Behavioral Ecology | 3 | F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 |
| Courses also approved for lab credit |  |  | F\&W ECOL 561 | Wildlife Management Techniques ${ }^{1}$ | 3 |
|  |  |  | FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory ${ }^{1}$ | 2 |
|  |  |  | FOOD SCI/ MICROBIO 325 | Food Microbiology | 3 |


| FOOD SCI 532 | Integrated Food Manufacturing ${ }^{1}$ | 4 |
| :---: | :---: | :---: |
| GENETICS/ <br> HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants I ${ }^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| MEDICINE/ <br> M\&ENVTOX/ <br> ONCOLOGY/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| MICROBIO/ <br> SOIL SCI 425 | Environmental Microbiology | 3 |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| PL PATH/ <br> SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| SOIL SCI 321 | Soils and Environmental Chemistry | 3 |

1 Courses also approved for lab credit

## F. Other Lab Courses

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ <br> BOTANY/HORT 339 | Plant Biotechnology: Principles and Techniques ${ }^{1}$ | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | 4 |
| ANATOMY 329 | Human Anatomy-Kinesiology ${ }^{1}$ | 2 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| AN SCI/F\&W ECOL/ ZOOLOGY 521 | Birds of Southern Wisconsin ${ }^{1}$ | 3 |
| AN SCI/DY SCI 434 | Reproductive Physiology ${ }^{1}$ | 3 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 |
| ANAT\&PHY 338 | Human Anatomy Laboratory | 2 |
| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ | 5 |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BIOCHEM 551 | Biochemical Methods ${ }^{1}$ | 4 |
| BMOLCHEM 504 | Human Biochemistry Laboratory ${ }^{1}$ | 3 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| BOTANY/GENETICS/ <br> HORT 561 | Introductory Cytogenetics ${ }^{1}$ | 2-3 |


| DY SCI 305 | Lactation Physiology ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology ${ }^{1}$ | 4 |
| ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| KINES 314 | Physiology of Exercise ${ }^{1}$ | 4 |
| GENETICS 545 | Genetics Laboratory ${ }^{1}$ | 2 |
| $\begin{aligned} & \text { GEOSCI/ } \\ & \text { ZOOLOGY } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory ${ }^{1}$ | 2 |
| MICROBIO/ BIOLOGY 525 | Advanced Biological Laboratory Practices: A Research Experience ${ }^{1}$ | 2 |
| MICROBIO 551 | Capstone Research Project in Microbiology ${ }^{1}$ | 2 |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology ${ }^{1}$ | 2 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates ${ }^{1}$ | 5 |
| ZOOLOGY 612 | Comparative Physiology Laboratory 1 | 2 |
| 1 Courses als | roved for lab credit |  |


| Code | Title | Credits |
| :--- | :--- | ---: |
| Undergradute Neurobiology Seminar |  |  |
| ZOOLOGY 500 | Undergraduate Neurobiology <br> Seminar | 1 |

## ADDITIONAL LAB OR FIELD RESEARCH

Select one of the following options:

1. Take an additional lab or field instruction from categories $A-E$ in the Intermediate/Advanced course lists.
2. Complete a directed study in a biological science discipline. ${ }^{1}$
3. Complete a thesis in biological science. ${ }^{1}$

1 Must complete Introductory Biology prior to enrolling in either a directed study or thesis. Select an appropriate course in consultation with advisor.

## RESIDENCE AND QUALITY OF WORK <br> 2.000 GPA in all major courses <br> 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$ <br> 15 credits in the major, taken on the UW-Madison campus <br> 1 Courses with intermediate or advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Once students have declared the biology major, they may apply to pursue Honors in the Major. To apply, students must pick up an Honors form from either the L\&S Honors Office at 1401 Observatory Drive or the Biology Major Office at 1550 Linden Drive. A Senior Honors Thesis is required. Before enrolling in a Senior Honors Thesis course, the student
must produce a two- to three-page, double-spaced thesis proposal that briefly introduces the biological problem and then describes the line of experimentation that is proposed for the thesis work. The student and faculty mentor must sign the proposal before it is submitted to the Biology Major Office.

## HONORS IN THE MAJOR IN BIOLOGY: REQUIREMENTS ${ }^{1}$

To earn a B.A. or B.S. with Honors in the Major in Biology students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA in the major/subject
- Complete 13 credits of Foundation, and/or intermediate/advanced courses for Honors.
- Complete an approved two-semester Senior Honors Thesis for a total of 6 credits.

1 Plant biology option must choose from intermediate/advanced courses listed under the plant biology option and should consult with their advisor about the Senior Thesis options.

## BIOLOGY: PLANT BIOLOGY

## REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere. Students must complete a minimum of 31 credits from Introductory Biology, Foundation, Intermediate/Advanced, Seminar (options only) and additional lab/research courses.

## CORE REQUIREMENTS

## Mathematics and Statistics

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| Select one of the following: ${ }^{1}$ |  | 3-4 |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |

1
Students completing the Evolutionary Biology option are required to complete either STAT 301 Introduction to Statistical Methods or STAT 371 Introductory Applied Statistics for the Life Sciences.

## Chemistry

Code
Title
Credits
General Chemistry
Select one of the following: ${ }^{1}$
$\left.\begin{array}{llr}\text { CHEM 103 } & \text { General Chemistry I } & \\ \text { \& CHEM 104 } & \text { and General Chemistry II }\end{array}\right]$

1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement.

## Physics

| Code | Title | Credits |
| :--- | :--- | ---: |
| 1st semester Physics; select one of the following: $4-5$ <br> PHYSICS 103 General Physics |  |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics | $4-5$ |
| 2nd semester Physics, select one of the following: |  |  |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |

## Introductory Biology

Code Title Credits
Select one of the following options: ${ }^{1}$ 10-16
Option A:

| BIOLOGY/ | Introductory Biology |
| :--- | :--- |
| BOTANY/ |  |
| ZOOLOGY 151 |  |
| BIOLOGY/ | Introductory Biology |
| BOTANY/ |  |
| ZOOLOGY 152 |  |

Option B:

| BIOCORE 381 | Evolution, Ecology, and Genetics |
| :--- | :--- |
| BIOCORE 382 | Evolution, Ecology, and Genetics <br> Laboratory |
| BIOCORE 383 | Cellular Biology |
| BIOCORE 384 | Cellular Biology Laboratory |
| BIOCORE 485 | Organismal Biology |
| Option C: |  |
| ZOOLOGY/ | Animal Biology |
| BIOLOGY 101 |  |
| ZOOLOGY/ | Animal Biology Laboratory |
| BIOLOGY 102 |  |
| BOTANY/ | General Botany |
| BIOLOGY 130 |  |

Foundational Course ${ }^{2}$
Select one of the following: 3

| BIOCORE 381 | Evolution, Ecology, and Genetics |
| :--- | :--- |
| \& BIOCORE 383 | and Cellular Biology ${ }^{3}$ |
| AGRONOMY/ Plant Breeding and Biotechnology <br> HORT 338  <br> GENETICS 466 Principles of Genetics <br> GENETICS 468 General Genetics 2 |  |

MICROBIO $470 \quad$| Microbial Genetics \& Molecular |
| :--- |
| Machines |

| BIOCHEM $501 \quad$ Introduction to Biochemistry |
| :--- | :--- |


| BIOCHEM $508 \quad$ General Biochemistry II |
| :--- |

For AP Biology policy, as it applies to introductory biology in the
biology major, see this link (http://biologymajor.wisc.edu/advising/
advisor-resources/ap-ib-biology-policy).
Does not count toward intermediate/advanced courses. Students
completing the Evolutionary Biology option must complete either
GENETICS 466 Principles of Genetics or GENETICS 468 General
Genetics 2 to fulfill the Foundational requirement. Students
completing the Plant Biology option are not allowed to take
MICROBIO 470 Microbial Genetics \& Molecular Machines to fulfill the
Foundational requirement.
Students may use BIOCORE 381 Evolution, Ecology, and Genetics and
BIOCORE 383 Cellular Biology to contribute to introductory biology
and satisfy foundation.

## INTERMEDIATE/ADVANCED COURSES

Minimum of 13 credits required and must include one approved lab course. Approved lab courses are indicated by footnote. Select one course from categories A or B below. Select one course from categories $C$ or $D$ below. Select one course from category $E$ or from an unused category above.

## A. Cellular and Subcellular Biology

| Code | Title | Credits |
| :---: | :---: | :---: |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology | 3 |
| AGRONOMY/ <br> BOTANY/HORT 339 | Plant Biotechnology: Principles and Techniques ${ }^{1}$ | 4 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering ${ }^{1}$ | 4 |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| BIOCHEM 507 | General Biochemistry I | 3 |
| BIOCHEM 508 | General Biochemistry II | 3-4 |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry | 3 |
| BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: <br> Molecular and Ecological Aspects | 3 |
| BOTANY/GENETICS/ HORT 561 | Introductory Cytogenetics | 2-3 |
| GENETICS 466 | Principles of Genetics | 3 |
| GENETICS 467 | General Genetics 1 | 3 |

1 Courses also approved for lab credit

## B. Organismal Biology

| Code | Title | Credits |
| :---: | :---: | :---: |
| BIOCORE 486 | Organismal Biology Laboratory ${ }^{1}$ | 2 |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| BOTANY 330 | Algae ${ }^{1}$ | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |


| BOTANY 500 | Plant Physiology ${ }^{1}$ | 3-4 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 302 \end{aligned}$ | Introduction to Entomology ${ }^{1}$ | 4 |
| PL PATH 558 | Biology of Plant Pathogens ${ }^{1}$ | 3 |
| 1 Courses also approved for lab credit |  |  |
| C. Ecology |  |  |
| Code | Title | Credits |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach | 2 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 |
| BOTANY/F\&W ECOL/ ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 |
| BOTANY/ENTOM/ <br> ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| BOTANY/ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 |
| MICROBIO/AN SCI/ BOTANY 335 | The Microbiome of Plants, Animals, and Humans | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| 1 Courses also approved for lab credit |  |  |
| D. Evolution and Systematics |  |  |
| Code | Title | Credits |
| ANTHRO/BOTANY/ ZOOLOGY 410 | Evolutionary Biology | 3 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 |
| BOTANY 422 | Plant Geography | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| GENETICS 468 | General Genetics 2 | 3 |
| 1 Courses also approved for lab credit |  |  |
| E. Applied Biology, Agriculture and Natural Resources |  |  |
| Code | Title | Credits |
| A A E/AGRONOMY/ <br> INTER-AG/ <br> NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY 302 | Forage Management and Utilization | 3 |
| AGRONOMY/ HORT 360 | Genetically Modified Crops: Science, Regulation \& Controversy | 2 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |

1 Courses also approved for lab credit
C. Ecology

BOTANY/

F\&W ECOL 455
BOTANY/F\&W ECOL/ General Ecology ${ }^{1} 4$
ZOOLOGY 460
BOTANY/ENTOM/ Plant-Insect Interactions 3
ZOOLOGY 473
BOTANY/ENVIR ST/ Conservation Biology 3
F\&W ECOL/
ZOOLOGY 651

ZOOLOGY 565

1 Courses also approved for lab credit

1 Courses also approved for lab credit

## E. Applied Biology, Agriculture and Natural Resources

| AGRONOMY/ <br> HORT 501 | Principles of Plant Breeding | 3 |
| :---: | :---: | :---: |
| AMER IND/ANTHRO/ BOTANY 474 | Ethnobotany | 3-4 |
| BIOLOGY/ GENETICS 522 | Evolution Seminar SeriesUndergraduate | 1 |
| BOTANY 403 | Field Collections and Identification | 1-4 |
| BOTANY/ <br> ZOOLOGY 459 | Ecological Techniques for Field Monitoring | 1-2 |
| DY SCI/INTERAG 471 | Food Production Systems and Sustainability | 3 |
| F\&W ECOL/ <br> HORT/LAND ARC/ <br> PL PATH 309 | Diseases of Trees and Shrubs | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| F\&W ECOL 415 | Tree Physiology | 3 |
| GENETICS/ <br> HORT 550 | Molecular Approaches for Potential Crop Improvement | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants I ${ }^{1}$ | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| HORT 372 | Colloquium in Organic Agriculture | 1 |
| HORT 376 | Tropical Horticultural Systems | 1 |
| HORT 378 | Tropical Horticultural Systems International Field Study | 2 |
| HORT/PATH-BIO 500 | Molecular Biology Techniques ${ }^{1}$ | 3 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| MED PHYS/NTP 651 | Methods for Neuroimaging Research | 3 |
| PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar | 1 |
| BIOCORE 587 | Biological Interactions | 3 |

1 Courses also approved for lab credit

## SEMINAR

## Code Title

Credits
Undergradute Plant Science Seminar (1 cr minimum)
PL PATH 375 Special Topics (Frontiers in Plant Biology)

## ADDITIONAL LAB OR FIELD RESEARCH

Select one of the following options:

1. Take an additional lab or field instruction from categories $A-E$ in the Intermediate/Advanced course lists.
2. Complete a directed study in a biological science discipline. ${ }^{1}$
3. Complete a thesis in biological science. ${ }^{1}$

1 Must complete Introductory Biology prior to enrolling in either a directed study or thesis. Select an appropriate course in consultation with advisor

# RESIDENCE AND QUALITY OF WORK 

2.000 GPA in all major courses

2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in the major, taken on the UW-Madison campus
1 Courses with intermediate or advanced level are considered upper level in this major.

## HONORS IN THE MAJOR

Once students have declared the biology major, they may apply to pursue Honors in the Major. To apply, students must pick up an Honors form from either the L\&S Honors Office at 1401 Observatory Drive or the Biology Major Office at 1550 Linden Drive. A Senior Honors Thesis is required. Before enrolling in a Senior Honors Thesis course, the student must produce a two- to three-page, double-spaced thesis proposal that briefly introduces the biological problem and then describes the line of experimentation that is proposed for the thesis work. The student and faculty mentor must sign the proposal before it is submitted to the Biology Major Office.

## HONORS IN THE MAJOR IN BIOLOGY: REQUIREMENTS ${ }^{1}$

To earn a B.A. or B.S. with Honors in the Major in Biology students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA in the major/subject
- Complete 13 credits of Foundation, and/or intermediate/advanced courses for Honors.
- Complete an approved two-semester Senior Honors Thesis for a total of 6 credits.

Plant biology option must choose from intermediate/advanced courses listed under the plant biology option and should consult with their advisor about the Senior Thesis options.

## MOLECULAR BIOLOGY, B.A.

Admissions to the Molecular Biology B.A. have been suspended as of fall 2019. If you have any questions, please contact the department (molecularbiomajor@ls.wisc.edu).

## ABOUT THE MAJOR

Molecular biology is the basic science that seeks an understanding of biological processes in terms of the properties and functions of the molecules that make up living cells. The scope of questions addressed in molecular biology ranges from evolution to development to the regulation of gene expression. A career in molecular biology requires a strong background in biology as well as a solid foundation in chemistry, mathematics, and physics.

The molecular biology major has been designed primarily for three groups of students:

1. those who plan to enter a research career in molecular biology or related areas such as biochemistry, genetics, oncology, microbiology, cell biology or developmental biology;
2. pre-professional students who plan to enter either a research or clinical career in medicine, or allied health fields;
3. students who plan to teach biology at the college or secondaryschool levels.

Students with other interests are also welcome, of course. Career opportunities for students with an undergraduate degree in molecular biology are amazingly diverse. Graduates of the program have gone into patent law, science journalism, forensics, philosophy, nutrition, genetic counseling, veterinary medicine, anthropology, archeology, marine biology, theology, and much more (https:// molecularbiologymajor.wiscweb.wisc.edu/wp-content/uploads/ sites/290/2017/07/What_can_I_do_with_a_MolBio_Major_.pdf).

Major requirements have been set to assure a high degree of proficiency in the various areas specified while still allowing as much flexibility as possible for students to individualize their programs. For the undergraduate interested in life sciences, this major uniquely provides access to the extraordinary scope and strength of biology courses and laboratories on the UW-Madison campus. Each student in the major is assigned a faculty advisor, and it is hoped that students will take advantage of both the staff and faculty advising service available to make a judicious choice of courses, as well as to gain scholarly experience outside the classroom that will further their academic and career goals.

Students who wish to obtain further information about the program or to declare a molecular biology major should contact the student services coordinator. (https://molecularbio.ls.wisc.edu/advising) Faculty advisors are assigned through the program office and are located in many related departments throughout campus. Molecular biology faculty advisors are especially competent to provide counsel regarding the major and career opportunities in molecular biology.

## UNDERGRADUATE RESEARCH

Undergraduate molecular biology students at UW-Madison are fortunate to have the opportunity to work with some of the world's leading researchers. Many opportunities for laboratory research experience are available on campus for undergraduate students and this type of experiences is strongly encouraged. Such an experience provides students the opportunity to apply what they're learning and compliment their knowledge with practical skills. Research experience is highly valued by employers, graduate programs, and professional schools. See the major website (https://molecularbio.Is.wisc.edu/undergraduate-research) for more information on how to get involved in undergraduate research.

## HOW TO GET IN

Admissions to the Molecular Biology B.A. have been suspended as of fall 2019. If you have any questions, please contact the department (molecularbiomajor@ls.wisc.edu).

To declare the molecular biology major, students must contact or make an appointment (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/ aBNbotSX.html;jsessionid=53F9D957BE6099BCF895E0A8487F3B94.primary with the molecular biology student services coordinator.

If students are not currently in the College of Letters \& Science (L\&S), you must transfer into $L \& S$ before declaring. However, students are welcome to meet with the molecular biology student services coordinator to discuss the major before transferring.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences |
| :---: | :---: |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ <br> Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

MATHEMATICS, CHEMISTRY \& PHYSICS
Code Title Credits

| Calculus 1 |  |
| :--- | :--- |
| MATH 221 Calculus and Analytic Geometry 1 <br> or MATH 211 Calculus |  |

Calculus 2 or Statistics-one course: 3-5

| MATH 222 | Calculus and Analytic Geometry 2 |
| :--- | :--- |
| MATH 213 | Calculus and Introduction to <br> Differential Equations |
| MATH 234 | Calculus--Functions of Several <br> Variables |
| MATH 276 | Topics in Calculus II |
| STAT 301 | Introduction to Statistical Methods |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |

General Chemistry-complete one option: 5-9
CHEM 103 General Chemistry I
\& CHEM 104 and General Chemistry II

| CHEM 109 | Advanced General Chemistry |
| :--- | :--- |
| CHEM 115 | Chemical Principles I |
| \& CHEM 116 | and Chemical Principles II (by <br> consent of instructor only) |

Analytical Chemistry

| CHEM 327 | Fundamentals of Analytical Science | 4 |
| :--- | :--- | :--- |
| or CHEM 329 | Fundamentals of Analytical Science |  |
| Organic Chemistry |  | 3 |
| CHEM 343 | Introductory Organic Chemistry | 2 |
| CHEM 344 | Introductory Organic Chemistry <br> Laboratory | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

Physics-complete one option:

| PHYSICS 201 | General Physics |
| :--- | :--- |
| \& PHYSICS 202 | and General Physics |
| PHYSICS 207 | General Physics |
| \& PHYSICS 208 | and General Physics |

Total Credits
25-31

## GENERAL BIOLOGY

| Code | Title | Credits |
| :---: | :---: | :---: |
| Complete one option: |  | 10-16 |
| Option A: |  |  |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 151 <br> \& BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology and Introductory Biology |  |
| GENETICS 466 | Principles of Genetics |  |
| Option B (BIOCORE): ${ }^{1}$ |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 485 | Organismal Biology |  |

1 BIOCORE is an Honors program. Students may find more information here (p. 488).

| BIOCHEMISTRY AND MOLECULAR BIOLOGY |  |  |
| :--- | ---: | ---: |
| Code | Title | Credits |
| Biochemistry |  | $3-7$ |


| Select one of the following: | 3 |  |
| :--- | :--- | ---: |
| BIOCHEM 501 | Introduction to Biochemistry | $6-7$ |
| BIOCHEM 507 | General Biochemistry I |  |
| \& BIOCHEM 508 | and General Biochemistry II |  |

Molecular Biology - 3 credits from: 3

| AGRONOMY/ | Plant Biotechnology: Principles and |
| :--- | :--- |
| HORT 339 | Techniques I |
| AGRONOMY/ | Plant Cell Culture and Genetic |
| HORT 340 | Engineering |


| BIOCHEM/ GENETICS/ MICROBIO 612 | Prokaryotic Molecular Biology |  |
| :---: | :---: | :---: |
| BIOCHEM/ <br> GENETICS 620 | Eukaryotic Molecular Biology |  |
| GENETICS 545 | Genetics Laboratory |  |
| HORT/PATH- <br> BIO 500 | Molecular Biology Techniques |  |
| HORT/ GENETICS 550 | Molecular Approaches for Potential Crop Improvement |  |
| Advanced Courses - 6 credits from 2 areas: |  | 6 |
| Development |  |  |
| BOTANY 500 | Plant Physiology ${ }^{3}$ |  |
| ZOOLOGY 470 | Introduction to Animal Development 3 |  |
| ZOOLOGY 555 | Laboratory in Developmental Biology |  |
| ZOOLOGY 625 | Development of the Nervous System |  |
| Microbiology |  |  |
| BOTANY/PL PATH $505$ | Plant-Microbe Interactions: <br> Molecular and Ecological Aspects ${ }^{3}$ |  |
| MICROBIO 303 | Biology of Microorganisms |  |
| MICROBIO 304 | Biology of Microorganisms Laboratory |  |
| MICROBIO 330 | Host-Parasite Interactions |  |
| MICROBIO/ <br> SOIL SCI 425 | Environmental Microbiology |  |
| MICROBIO/PL <br> PATH 622 | Plant-Bacterial Interactions ${ }^{3}$ |  |
| MICROBIO/ ONCOLOGY/PL PATH 640 | General Virology-Multiplication of Viruses ${ }^{3}$ |  |
| M M \& I/ BIOCHEM 575 | Biology of Viruses |  |
| Genetics |  |  |
| AGRONOMY/ <br> HORT 338 | Plant Breeding and Biotechnology |  |
| GENETICS/ BOTANY/HORT 561 | Introductory Cytogenetics ${ }^{3}$ |  |
| GENETICS/MD GENET 565 | Human Genetics ${ }^{3}$ |  |
| GENETICS 566 | Advanced Genetics |  |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |  |
| MICROBIO/ GENETICS 607 | Advanced Microbial Genetics ${ }^{3}$ |  |
| Cell Biology (Endocrinology, Neurobiology, Immunology) |  |  |
| BIOCHEM/ <br> PHMCOL-M/ <br> ZOOLOGY 630 | Cellular Signal Transduction Mechanisms ${ }^{3}$ |  |
| BIOCORE 587 | Biological Interactions |  |
| MICROBIO/ <br> M M \& I/PATHBIO 528 | Immunology |  |


| M M \& I 341 | Immunology |  |
| :---: | :---: | :---: |
| ONCOLOGY 401 | Introduction to Experimental Oncology |  |
| ONCOLOGY/ MICROBIO/ PLPATH 640 | General Virology-Multiplication of Viruses ${ }^{3}$ |  |
| ZOOLOGY/ PSYCH 523 | Neurobiology ${ }^{3}$ |  |
| ZOOLOGY 570 | Cell Biology ${ }^{3}$ |  |
| Biochemistry and Physical Chemistry |  |  |
| BIOCHEM 508 | General Biochemistry II |  |
| BIOCHEM/NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition |  |
| BIOCHEM 550 | Topics in Medical Biochemistry ${ }^{3}$ |  |
| BIOCHEM 551 | Biochemical Methods ${ }^{3}$ |  |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry ${ }^{3}$ |  |
| CHEM 561 | Physical Chemistry ${ }^{3}$ |  |
| CHEM 565 | Biophysical Chemistry ${ }^{3}$ |  |
| NEURODPT 533 | Molecular Physiology |  |
| Quantitative and Computational Sciences |  |  |
| $\begin{aligned} & \text { B M I/COMP SCI } \\ & 576 \end{aligned}$ | Introduction to Bioinformatics ${ }^{3}$ |  |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data |  |
| COMP SCI/I SY E/ MATH 425 | Introduction to Combinatorial Optimization ${ }^{3}$ |  |
| F\&W ECOL/HORT/ STAT 571 | Statistical Methods for Bioscience $1^{3}$ |  |
| F\&W ECOL/HORT/ STAT 572 | Statistical Methods for Bioscience II ${ }^{3}$ |  |
| STAT 333 | Applied Regression Analysis |  |
| STAT/B M I 541 | Introduction to Biostatistics ${ }^{3}$ |  |
| Total Credits |  | 21-26 |

## LABORATORY/INDEPENDENT RESEARCH

2 credits from:
Code Title Credits

## Lab/Research courses:

HORT/PATH-BIO Molecular Biology Techniques
500

GENETICS 545 Genetics Laboratory
BMOLCHEM 504 Human Biochemistry Laboratory
MICROBIO 304 Biology of Microorganisms Laboratory
BIOCHEM 551 Biochemical Methods
ZOOLOGY 555 Laboratory in Developmental
Biology

| Thesis/Directed St |  |
| :---: | :---: |
| MOL BIOL 681 <br> \& MOL BIOL 682 | Senior Honors Thesis and Senior Honors Thesis |
| MOL BIOL 691 <br> \& MOL BIOL 692 | Senior Thesis and Senior Thesis |

## MOL BIOL 699 Directed Studies in Molecular Biology

2 For assistance finding a directed lab or research experience and for information about scholarships, see the advisor for this program and/or consult the Undergraduate Research page (https:// molecularbio.Is.wisc.edu/undergraduate-research).

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all MOL BIOL and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in MOL BIOL, taken on the UW-Madison campus
${ }^{1}$ Courses accepted in the major that are intermediate or advanced are considered upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Molecular Biology Major in consultation with the Molecular Biology undergraduate advisor.

## HONORS IN THE MOLECULAR BIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Molecular Biology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all courses accepted in the major
- Complete the Advanced Course requirement, two courses in two different areas, utilizing the courses indicated with the ${ }^{3}$ above, taken for Honors credit and with grades of $B$ or better earned in each individual course
- Complete one of the following, with a grade of B or better. MICROBIO/ BIOCHEM/GENETICS 612 Prokaryotic Molecular Biology, BIOCHEM/ GENETICS/MD GENET 620 Eukaryotic Molecular Biology, HORT/GENETICS 550 Molecular Approaches for Potential Crop Improvement
- Complete a two-semester Senior Honors Thesis in MOL BIOL 681 Senior Honors Thesis and MOL BIOL 682 Senior Honors Thesis, for a total of 6 credits
- Complete MOL BIOL 686 Senior Honors Seminar in Molecular Biology


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Summarize the energetic and thermodynamic basis of life.
2. Define and explain the molecular basis of life and relationships between the structure and function of biological macromolecules.
3. Describe the nature of the cell and its role as the basic unit of life.
4. Understand the nature of the genetic material and its roles in inheritance, evolution, and cellular function.
5. Demonstrate comprehension of basic molecular biology laboratory techniques.
6. Utilize the scientific method to solve biological problems characteristic of today's society.
7. Understand the primary scientific literature and apply concepts from literature to draw conclusions about modern topics in the field.
8. Communicate scientific ideas in written and oral form.

## ADVISING AND CAREERS

Students in the major are assigned to a team of advisors composed of a faculty advisor and a the major's student services coordinator. See the major's advising page (https://molecularbio.ls.wisc.edu/advising) for a list of advisors and for the student services coordinator information. The faculty advisor provides guidance specific to the molecular biology discipline through discussions about undergraduate experiences (i.e., research, coursework, internships) that will help prepare students for graduate work or a career after graduation. The student services coordinator provides guidance specific to the discipline, and also helps students with major declarations, course selection, registration, DARS, L\&S degree and major requirements, and tracking progress toward graduation, as well as connecting students with important resources on campus.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Committee of Advisors: Ahmad (Dermatology), Amann (Integrative Biology), Fabry (Pathology and Laboratory Medicine), Filutowicz (Bacteriology), Martin (Biochemistry), McMahon (Civil Engineering and Environmental Engineering), Schuler (Comparative Biosciences)

## RESOURCES AND SCHOLARSHIPS

## HILLDALE UNDERGRADUATE/FACULTY RESEARCH FELLOWSHIP

The Hilldale (https://awards.advising.wisc.edu/all-scholarships/ hilldale-undergraduatefaculty-research-fellowship) Undergraduate/ Faculty Research Fellowships support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Approximately $97-100$ Hilldale awards are available each year. The student researcher receives $\$ 3,000$, and faculty/staff research advisor receives $\$ 1,000$ to help offset research costs (e.g., supplies, faculty or student travel related to the project).

## HOLSTROM ENVIRONMENTAL SCHOLARSHIPS

The Holstrom Environmental Scholarships (https://go.wisc.edu/550x41) support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Research proposals must have an environmental focus, and applicants must have at least a junior standing at time of application.

## SOPHOMORE RESEARCH FELLOWSHIP

Funded by grants from the Brittingham Fund and the Kemper K. Knapp Bequest, the Sophomore Research Fellowships (https:// awards.advising.wisc.edu/all-scholarships/sophomore-researchfellowship) support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Approximately 15 awards are available.

## UNDERGRADUATE RESEARCH SCHOLARS

The Undergraduate Research Scholars (https://urs.Is.wisc.edu) program (URS) is dedicated to enhancing the academic experience of UWMadison students by providing first and second year undergraduates with opportunities to earn credit for participating in the research and creative work with UW-Madison faculty and staff. The program has been designed to include partnerships between students and mentors, seminars on research-relevant issues, and practice in research/artistic presentations. The many benefits of the program are found in the fluid interaction between these activities.

## UNDERGRADUATE SYMPOSIUM

The annual Undergraduate Symposium (https:// ugradsymposium.wisc.edu) showcases undergraduate creativity, achievement, research, service-learning and community-based research from all areas of study at UW-Madison including the humanities, fine arts, biological sciences, physical sciences, and social sciences. This
past year nearly 700 students presented, displayed or performed their work for members of the University, the surrounding community, family and friends.

## UNIVERSITY BOOK STORE AWARD

Supported by a generous grant from the University Book Store, (https:// awards.advising.wisc.edu/all-scholarships/university-book-store-award) this award recognizes undergraduate students who have completed an outstanding independent project, such as a senior thesis, at the University of Wisconsin-Madison. Projects in all academic fields are eligible.

## WISCONSIN IDEA FELLOWSHIPS

Wisconsin Idea Fellowships (https://morgridge.wisc.edu/students/ wisconsin-idea-fellowships) are awarded annually to undergraduate student projects working towards solving a challenge identified along with local or global community partner. Fellowships are awarded to semester-long or year-long projects designed by an undergraduate student (or group of students) in collaboration with a community organization and a UW-Madison faculty or academic staff member.

## MOLECULAR BIOLOGY, B.S.

Admissions to the Molecular Biology B.S. have been suspended as of fall 2019. If you have any questions, please contact the department (molecularbiomajor@ls.wisc.edu).

## ABOUT THE MAJOR

Molecular biology is the basic science that seeks an understanding of biological processes in terms of the properties and functions of the molecules that make up living cells. The scope of questions addressed in molecular biology ranges from evolution to development to the regulation of gene expression. A career in molecular biology requires a strong background in biology as well as a solid foundation in chemistry, mathematics, and physics.

The molecular biology major has been designed primarily for three groups of students:

1. those who plan to enter a research career in molecular biology or related areas such as biochemistry, genetics, oncology, microbiology, cell biology or developmental biology;
2. pre-professional students who plan to enter either a research or clinical career in medicine, or allied health fields;
3. students who plan to teach biology at the college or secondaryschool levels.

Students with other interests are also welcome, of course. Career opportunities for students with an undergraduate degree in molecular biology are amazingly diverse. Graduates of the program have gone into patent law, science journalism, forensics, philosophy, nutrition, genetic counseling, veterinary medicine, anthropology, archeology, marine biology, theology, and much more (https:// molecularbiologymajor.wiscweb.wisc.edu/wp-content/uploads/ sites/290/2017/07/What_can_l_do_with_a_MolBio_Major_.pdf).

Major requirements have been set to assure a high degree of proficiency in the various areas specified while still allowing as much flexibility as possible for students to individualize their programs. For the undergraduate interested in life sciences, this major uniquely provides access to the extraordinary scope and strength of biology courses and
laboratories on the UW-Madison campus. Each student in the major is assigned a faculty advisor, and it is hoped that students will take advantage of both the staff and faculty advising service available to make a judicious choice of courses, as well as to gain scholarly experience outside the classroom that will further their academic and career goals.

Students who wish to obtain further information about the program or to declare a molecular biology major should contact the student services coordinator. (https://molecularbio.Is.wisc.edu/advising) Faculty advisors are assigned through the program office and are located in many related departments throughout campus. Molecular biology faculty advisors are especially competent to provide counsel regarding the major and career opportunities in molecular biology.

## UNDERGRADUATE RESEARCH

Undergraduate molecular biology students at UW-Madison are fortunate to have the opportunity to work with some of the world's leading researchers. Many opportunities for laboratory research experience are available on campus for undergraduate students and this type of experiences is strongly encouraged. Such an experience provides students the opportunity to apply what they're learning and compliment their knowledge with practical skills. Research experience is highly valued by employers, graduate programs, and professional schools. See the major website (https://molecularbio.ls.wisc.edu/undergraduate-research) for more information on how to get involved in undergraduate research.

## HOW TO GET IN

Admissions to the Molecular Biology B.S. have been suspended as of fall 2019. If you have any questions, please contact the department (molecularbiomajor@ls.wisc.edu).

To declare the molecular biology major, students must contact or make an appointment (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/ aBNbotSX.html;jsessionid=53F9D957BE6099BCF895E0A8487F3B94.primary) with the molecular biology student services coordinator.

If students are not currently in the College of Letters \& Science (L\&S), you must transfer into L\&S before declaring. However, students are welcome to meet with the molecular biology student services coordinator to discuss the major before transferring.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT

Limit one each: COMP SCI, STAT
Foreign
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits and Science Coursework

Depth of
60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

MATHEMATICS, CHEMISTRY \& PHYSICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Calculus 1 |  |  |
| MATH 221 or MATH 211 | Calculus and Analytic Geometry 1 Calculus | 5 |
| Calculus 2 or Statistics-one course: |  | 3-5 |
| MATH 222 | Calculus and Analytic Geometry 2 |  |
| MATH 213 | Calculus and Introduction to Differential Equations |  |
| MATH 234 | Calculus--Functions of Several Variables |  |
| MATH 276 | Topics in Calculus II |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| General Chemistry-complete one option: |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II (by consent of instructor only) |  |
| Analytical Chemistry |  |  |
| CHEM 327 <br> or CHEM 329 | Fundamentals of Analytical Science Fundamentals of Analytical Science | 4 |
| Organic Chemistry |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |

Physics-complete one option:

| PHYSICS 201 | General Physics |
| :--- | :--- |
| \& PHYSICS 202 | and General Physics |
| PHYSICS 207 | General Physics |
| \& PHYSICS 208 | and General Physics |

Total Credits
25-31
GENERAL BIOLOGY


Option A:

| BIOLOGY/ | Introductory Biology |
| :---: | :---: |
| BOTANY/ | and Introductory Biology |
| ZOOLOGY 151 |  |
| \& BIOLOGY/ |  |
| BOTANY/ |  |
| ZOOLOGY 152 |  |
| GENETICS 466 | Principles of Genetics |
| Option B (BIOCORE): ${ }^{1}$ |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |
| BIOCORE 383 | Cellular Biology |
| BIOCORE 384 | Cellular Biology Laboratory |
| BIOCORE 485 | Organismal Biology |
| 1 BIOCORE is an Honors program. Students may find more information here (p. 488). |  |
| BIOCHEMISTRY AND MOLECULAR BIOLOGY |  |
| Code | Title Credits |
| Biochemistry | 3-7 |
| Select one of the following: |  |
| BIOCHEM 501 | Introduction to Biochemistry 3 |
| BIOCHEM 507 <br> \& BIOCHEM 508 | General Biochemistry I and General Biochemistry II |
| Molecular Biology - 3 credits from: 3 |  |
| AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques I |
| AGRONOMY/ <br> HORT 340 | Plant Cell Culture and Genetic Engineering |
| BIOCHEM/ GENETICS/ MICROBIO 612 | Prokaryotic Molecular Biology |
| BIOCHEM/ <br> GENETICS 620 | Eukaryotic Molecular Biology |
| GENETICS 545 | Genetics Laboratory |
| HORT/PATH- <br> BIO 500 | Molecular Biology Techniques |
| HORT/ GENETICS 550 | Molecular Approaches for Potential Crop Improvement |
| Advanced Courses - 6 | 6 credits from 2 areas: 6 |
| Development |  |
| BOTANY 500 | Plant Physiology ${ }^{3}$ |
| ZOOLOGY 470 | Introduction to Animal Development 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology |
| ZOOLOGY 625 | Development of the Nervous System |
| Microbiology |  |
| BOTANY/PL PATH 505 | Plant-Microbe Interactions: Molecular and Ecological Aspects ${ }^{3}$ |
| MICROBIO 303 | Biology of Microorganisms |
| MICROBIO 304 | Biology of Microorganisms Laboratory |
| MICROBIO 330 | Interactions |


| MICROBIO/ <br> SOIL SCI 425 | Environmental Microbiology |
| :---: | :---: |
| MICROBIO/PL PATH 622 | Plant-Bacterial Interactions ${ }^{3}$ |
| MICROBIO/ ONCOLOGY/PL PATH 640 | General Virology-Multiplication of Viruses ${ }^{3}$ |
| M M \& I/ BIOCHEM 575 | Biology of Viruses |
| Genetics |  |
| AGRONOMY/ <br> HORT 338 | Plant Breeding and Biotechnology |
| GENETICS/ BOTANY/HORT 561 | Introductory Cytogenetics ${ }^{3}$ |
| GENETICS/MD GENET 565 | Human Genetics ${ }^{3}$ |
| GENETICS 566 | Advanced Genetics |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |
| MICROBIO/ GENETICS 607 | Advanced Microbial Genetics ${ }^{3}$ |
| Cell Biology (Endocrin | ogy, Neurobiology, Immunology) |
| BIOCHEM/ <br> PHMCOL-M/ <br> ZOOLOGY 630 | Cellular Signal Transduction Mechanisms ${ }^{3}$ |
| BIOCORE 587 | Biological Interactions |
| MICROBIO/ M M \& I/PATHBIO 528 | Immunology |
| M M \& I 341 | Immunology |
| ONCOLOGY 401 | Introduction to Experimental Oncology |
| ONCOLOGY/ MICROBIO/ PLPATH 640 | General Virology-Multiplication of Viruses ${ }^{3}$ |
| ZOOLOGY/ <br> PSYCH 523 | Neurobiology ${ }^{3}$ |
| ZOOLOGY 570 | Cell Biology ${ }^{3}$ |
| Biochemistry and Phys | ical Chemistry |
| BIOCHEM 508 | General Biochemistry II |
| BIOCHEM/NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition |
| BIOCHEM 550 | Topics in Medical Biochemistry ${ }^{3}$ |
| BIOCHEM 551 | Biochemical Methods ${ }^{3}$ |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry ${ }^{3}$ |
| CHEM 561 | Physical Chemistry ${ }^{3}$ |
| CHEM 565 | Biophysical Chemistry ${ }^{3}$ |
| NEURODPT 533 | Molecular Physiology |
| Quantitative and Computational Sciences |  |
| B M I/COMP SCI 576 | Introduction to Bioinformatics ${ }^{3}$ |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data |


| COMP SCI/I SY E/ Introduction to Combinatorial |  |
| :--- | :--- |
| MATH 425 | Optimization ${ }^{3}$ |
| F\&W ECOL/HORT/ | Statistical Methods for Bioscience |
| STAT 571 | $\mathrm{I}^{3}$ |
| F\&W ECOL/HORT/ | Statistical Methods for Bioscience |
| STAT 572 | II $^{3}$ |
| STAT 333 | Applied Regression Analysis |
| STAT/B M I 541 | Introduction to Biostatistics ${ }^{3}$ |

## LABORATORY/INDEPENDENT RESEARCH

2 credits from:
Code Title Credits

Lab/Research courses:

| HORT/PATH-BIO | Molecular Biology Techniques |
| :--- | :--- |
| 500 | Genetics Laboratory |
| GENETICS 545 | BMOLCHEM 504 Human Biochemistry Laboratory <br> MICROBIO 304 Biology of Microorganisms <br> Laboratory <br> BIOCHEM 551 Biochemical Methods <br> ZOOLOGY 555 Laboratory in Developmental <br> Biology |

Thesis/Directed Study: ${ }^{2}$
MOL BIOL 681 Senior Honors Thesis
\& MOL BIOL 682 and Senior Honors Thesis
MOL BIOL 691 Senior Thesis
\& MOL BIOL 692 and Senior Thesis
MOL BIOL 699 Directed Studies in Molecular Biology

2 For assistance finding a directed lab or research experience and for information about scholarships, see the advisor for this program and/or consult the Undergraduate Research page (https:// molecularbio.ls.wisc.edu/undergraduate-research).

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all MOL BIOL and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in MOL BIOL, taken on the UW-Madison campus
${ }^{1}$ Courses accepted in the major that are intermediate or advanced are considered upper level in this major.

## HONORS IN THE MAJOR

Students may declare Honors in the Molecular Biology Major in consultation with the Molecular Biology undergraduate advisor.

## HONORS IN THE MOLECULAR BIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Molecular Biology, students must satisfy both the requirements for the major (above) and the following additional requirements:

[^37]- Earn a 3.500 GPA for all courses accepted in the major
- Complete the Advanced Course requirement, two courses in two different areas, utilizing the courses indicated with the ${ }^{3}$ above, taken for Honors credit and with grades of B or better earned in each individual course
- Complete one of the following, with a grade of B or better. MICROBIO/ BIOCHEM/GENETICS 612 Prokaryotic Molecular Biology, BIOCHEM/ GENETICS/MD GENET 620 Eukaryotic Molecular Biology, HORT/GENETICS 550 Molecular Approaches for Potential Crop Improvement
- Complete a two-semester Senior Honors Thesis in MOL BIOL 681 Senior Honors Thesis and MOL BIOL 682 Senior Honors Thesis, for a total of 6 credits
- Complete MOL BIOL 686 Senior Honors Seminar in Molecular Biology


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Summarize the energetic and thermodynamic basis of life.
2. Define and explain the molecular basis of life and relationships between the structure and function of biological macromolecules.
3. Describe the nature of the cell and its role as the basic unit of life.
4. Understand the nature of the genetic material and its roles in inheritance, evolution, and cellular function.
5. Demonstrate comprehension of basic molecular biology laboratory techniques.
6. Utilize the scientific method to solve biological problems characteristic of today's society.
7. Understand the primary scientific literature and apply concepts from literature to draw conclusions about modern topics in the field.
8. Communicate scientific ideas in written and oral form.

## ADVISING AND CAREERS

Students in the major are assigned to a team of advisors composed of a faculty advisor and a the major's student services coordinator. See the major's advising page (https://molecularbio.ls.wisc.edu/advising) for a list of advisors and for the student services coordinator information. The faculty advisor provides guidance specific to the molecular biology discipline through discussions about undergraduate experiences (i.e., research, coursework, internships) that will help prepare students for graduate work or a career after graduation. The student services coordinator provides guidance specific to the discipline, and also helps students with major declarations, course selection, registration, DARS, L\&S degree and major requirements, and tracking progress toward graduation, as well as connecting students with important resources on campus.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).
SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Committee of Advisors: Ahmad (Dermatology), Amann (Integrative Biology), Fabry (Pathology and Laboratory Medicine), Filutowicz (Bacteriology), Martin (Biochemistry), McMahon (Civil Engineering and Environmental Engineering), Schuler (Comparative Biosciences)

## RESOURCES AND SCHOLARSHIPS

## HILLDALE UNDERGRADUATE/FACULTY RESEARCH FELLOWSHIP

The Hilldale (https://awards.advising.wisc.edu/all-scholarships/ hilldale-undergraduatefaculty-research-fellowship) Undergraduate/ Faculty Research Fellowships support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Approximately $97-100$ Hilldale awards are available each year. The student researcher receives $\$ 3,000$, and faculty/staff
research advisor receives \$1,000 to help offset research costs (e.g., supplies, faculty or student travel related to the project).

## HOLSTROM ENVIRONMENTAL SCHOLARSHIPS

The Holstrom Environmental Scholarships (https://go.wisc.edu/55ox41) support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Research proposals must have an environmental focus, and applicants must have at least a junior standing at time of application.

## SOPHOMORE RESEARCH FELLOWSHIP

Funded by grants from the Brittingham Fund and the Kemper K Knapp Bequest, the Sophomore Research Fellowships (https:// awards.advising.wisc.edu/all-scholarships/sophomore-researchfellowship) support undergraduate research done in collaboration with UW-Madison faculty or research/instructional academic staff. Approximately 15 awards are available.

## UNDERGRADUATE RESEARCH SCHOLARS

The Undergraduate Research Scholars (https://urs.ls.wisc.edu) program (URS) is dedicated to enhancing the academic experience of UWMadison students by providing first and second year undergraduates with opportunities to earn credit for participating in the research and creative work with UW-Madison faculty and staff. The program has been designed to include partnerships between students and mentors, seminars on research-relevant issues, and practice in research/artistic presentations. The many benefits of the program are found in the fluid interaction between these activities.

## UNDERGRADUATE SYMPOSIUM

The annual Undergraduate Symposium (https:// ugradsymposium.wisc.edu) showcases undergraduate creativity, achievement, research, service-learning and community-based research from all areas of study at UW-Madison including the humanities, fine arts, biological sciences, physical sciences, and social sciences. This past year nearly 700 students presented, displayed or performed their work for members of the University, the surrounding community, family and friends.

## UNIVERSITY BOOK STORE AWARD

Supported by a generous grant from the University Book Store, (https:// awards.advising.wisc.edu/all-scholarships/university-book-store-award) this award recognizes undergraduate students who have completed an outstanding independent project, such as a senior thesis, at the University of Wisconsin-Madison. Projects in all academic fields are eligible.

## WISCONSIN IDEA FELLOWSHIPS

Wisconsin Idea Fellowships (https://morgridge.wisc.edu/students/ wisconsin-idea-fellowships) are awarded annually to undergraduate student projects working towards solving a challenge identified along with local or global community partner. Fellowships are awarded to semester-long or year-long projects designed by an undergraduate student (or group of students) in collaboration with a community organization and a UW-Madison faculty or academic staff member.
major at UW-Madison will provide a rigorous education in neuroscience principles that will prepare students for health-related careers (physician, physician assistant, veterinarian, dentist, neuroimaging technician, speech-language pathologist, neuropsychologist, drug rehabilitation counselor, physical therapists), academic careers (college and university faculty, research scientists, lab technician, K-12 teachers), and careers in pharmaceutical and biotech industries, venture capital and scientific consulting firms, medical and scientific journals, intellectual property law, neuroscience-related nonprofit organizations and foundations, and government agencies. UW-Madison is one of the leading universities in the world with more than 90 faculty engaged in neuroscience research and undergraduates will have access to this research faculty in formal classroom environments and through undergraduate research opportunities. Please see the Neurobiology Major (http:// www.neuromajor.wisc.edu) website for more information.

## ABOUT THE CURRICULUM

The curriculum is designed to give students a solid foundation in basic biology, chemistry, physics, and mathematics before going on to study neuroscience at the molecular, cellular, systems, and cognitive levels. Students with interests in non-neuroscience majors are welcome and encouraged to enroll in neuroscience courses. For example, students may be attracted to the diversity and flexibility of courses offered within the biology major in the College of Agricultural and Life Sciences and still take several neuroscience courses that satisfy requirements in the biology major. Students can also perform independent research in neuroscience laboratories on campus. Students in other majors, such as biochemistry, psychology, genetics, animal sciences, communication sciences and disorders, engineering, and computer science, can enroll in neuroscience courses that uniquely complement courses within their major. The Neurobiology Major Program Committee is committed to increasing opportunities for all students with interests in neuroscience and helping students accomplish their academic goals at UW-Madison. This new major is tailored to attract students from a diverse array of backgrounds. Please see the Neurobiology Major website (http:// www.neuromajor.wisc.edu) for more information.

## HOW TO GET IN

Undergraduate advising in the major. The student services coordinators Catherine Auger and Virginia Jackson, located in Birge Hall, are the primary advisors for the neurobiology major. Students should declare the major no later than the beginning of the junior year. Students can make appointments for general advising and major declarations through the student services coordinators. Advisors are assigned based on student's last name.

Last names beginning with A through F-see Virginia Jackson, Schedule an Appointment (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/ aBNbotSX.html;jsessionid=53F9D957BE6099BCF895E0A8487F3B94.primary) Last names beginning with G through Z-see Catherine Auger, Schedule an Appointment (https://calendar.wisc.edu/scheduling-assistant/public/ profiles/GvjvmzDO.html)

## NEUROBIOLOGY, B.A.

Neuroscience is the scientific study of the central (brain and spinal cord) and peripheral (nerves in body) nervous system. The neurobiology

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b$ (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR MATH, STATISTICS, CHEMISTRY \& PHYSICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics-one course: |  | 5 |
| MATH 211 | Calculus |  |
| MATH 217 | Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 275 | Topics in Calculus I |  |
| Statistics-one course: |  | 3 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| STAT/B M I 541 | Introduction to Biostatistics |  |
| BOTANY 575 | Special Topics |  |
| General Chemistry-one course: |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |


| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II |  |
| :---: | :---: | :---: |
| Organic Chemistry-one course: |  | 3 |
| CHEM 341 | Elementary Organic Chemistry |  |
| CHEM 343 \& CHEM 345 | Introductory Organic Chemistry and Intermediate Organic Chemistry |  |
| General Physics 1-one course: |  | 4 |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| $\begin{aligned} & \text { E M A } 201 \\ & \& \text { E M A } 202 \end{aligned}$ | Statics and Dynamics ${ }^{1}$ |  |
| General Physics 2 |  | 4 |
| Select one of the following: |  |  |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |
| Total Credits |  |  |
| 1 M E 240 may be taken instead of E M A 202 |  |  |

## 30 CREDITS OF BIOLOGY AND NEUROBIOLOGY

Credits will be applied from General Biology, Neurobiology, Lab, and Electives. Courses apply only once.

## General Biology

Complete one General Biology sequence:

| Code <br> Introductory Biology <br> ZOOLOGY/ <br> BIOLOGY/ | Title | Credits |
| :--- | :--- | ---: |
| BOTANY 151 |  |  |$\quad$| $10-16$ |
| :--- |


| Neurobiology |  | Credits |
| :--- | :--- | ---: |
| Code | Title |  |
| Neurobiology: |  |  |
| ZOOLOGY/ | Neurobiology |  |
| PSYCH 523 |  |  |
| Behavioral Neuroscience: |  |  |
| PSYCH 454 | Behavioral Neuroscience |  |
| Neuroscience Seminar: |  |  |
| ZOOLOGY 500 | Undergraduate Neurobiology <br> Seminar |  |
| Distributed Neuroscience-three courses from: |  |  |
| BIOCHEM 375 | Special Topics (Molecular Control of |  |
| Metabolism and Metabolic Disease) |  |  |


| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ |
| :---: | :---: |
| NEURODPT 533 | Molecular Physiology |
| PSYCH 406 | Psychology of Perception |
| PSYCH 414 | Cognitive Psychology |
| PSYCH 513 | Hormones, Brain, and Behavior |
| PSYCH 601 | Current Topics in Psychology (Epigenetics and the Brain) |
| PSYCH 601 | Current Topics in Psychology (Neuropharmacology) |
| PSYCH 601 | Current Topics in Psychology <br> (Neural Basis of Cognitive Control) |
| PSYCH 601 | Current Topics in Psychology (Neuroeconomics) |
| PSYCH 606 | Hormones and Behavior |
| PSYCH/ <br> NEURODPT/ <br> NTP 611 | Systems Neuroscience |
| ZOOLOGY 555 | Laboratory in Developmental Biology |
| ZOOLOGY 603 | Endocrinology |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology |
| ZOOLOGY/ ANTHRO/NTP/ PSYCH 619 | Biology of Mind |
| ZOOLOGY/ <br> NTP 620 | Neuroethology Seminar |
| ZOOLOGY 625 | Development of the Nervous System |
| ZOOLOGY/ NEURODPT/ PSYCH 674 | Behavioral Neuroendocrinology Seminar |
| Students may apply only one of the following courses toward the major. BIOCHEM 375, BIOCHEM 501, BIOCHEM 508, ANAT\&PHY 335, ANAT\&PHY 435 B M E/CBE 520, ZOOLOGY 470. |  |

## Lab/Research Experience ${ }^{2}$

Choose one option from:

| Code | Title | Credits |
| :--- | :--- | :--- |
| Neuroscience Lab-one course: |  |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| ANAT\&PHY 435 | Fundamentals of Human <br> Physiology |  |
| PSYCH 621 | Mentored Research and Seminar <br> ZOOLOGY 555Laboratory in Developmental <br> Biology |  |
| ZOOLOGY 604 | Computer-based Gene and Disease/ <br> Disorder Research Lab |  |
| ZOOLOGY 612 | Comparative Physiology Laboratory <br> ZOOLOGY/Lab Course in Neurobiology and <br> NEURODPT/NTP/ Behavior <br> PHYSIOL 616 |  |

Directed Study-3 credits from: ${ }^{3}$

| ANATOMY 699 | Independent Study |
| :--- | :--- |
| ANESTHES 699 | Independent Study |
| BIOLOGY 699 | Directed Studies |
| BMOLCHEM 699 | Special Research Problems |
| CHEM 699 | Directed Study |
| COMP BIO 699 | Directed Study |
| CRB 699 | Independent Study |
| CS\&D 699 | Directed Study |
| ED PSYCH 699 | Independent Reading Undergrad |
| FAM MED 699 | Directed Study |
| GENETICS 699 | Special Problems |
| H ONCOL 699 | Independent Study in Human |
| KINES 699 | Cancer Biology |
| MED PHYS 699 | Independent Study |
| MEDICINE 699 | Independent Reading or Research |
| MED SC-V 669 | Small Animal Cardiology Rotation |
| M M \& I 699 | Directed Study |
| MOL BIOL 699 | Directed Studies in Molecular |
| NEURSURG 699 | Neurosurgery: Directed in Study in |

NEUROL 699 Neurology: Directed Study in Neuroscience Research
NEURODPT 699 Independent Work
NUTR SCI 699 Special Problems
OBS\&GYN 699 Directed Study
ONCOLOGY 699 Special Research Problems
OPHTHALM 699 Directed Study
PATH 699 Independent Study
PATH-BIO 699 Directed Study
PEDIAT 699 Independent Study
PHM SCI 699 Advanced Independent Study
PHYSIOL 699 Independent Work
POP HLTH 699 Independent Reading
PSYCH 699 Directed Study
PSYCHIAT 699 Independent Study
RADIOL 699 Directed Study
SURGERY 699 Independent Study
ZOOLOGY 699 Directed Studies in Zoology
Thesis-two semesters:
PSYCH 681 Senior Honors Thesis
\& PSYCH 682 and Senior Honors Thesis
ZOOLOGY 691 Senior Thesis
\& ZOOLOGY 692 and Senior Thesis
2 Note that Lab courses may also be those that apply in the Neurobiology category above.
3 Only Directed Study courses taken after-and not concurrent with or prior to-the completion of an Introductory Biology sequence are accepted in the major.

| Electives <br> Additional credits from the Neurobiology, Lab, or the following list, to attain 30 credits in the major. |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ANAT\&PHY 435 | Fundamentals of Human Physiology |  |
| AN SCI/ DY SCI 362 | Veterinary Genetics |  |
| AN SCI/ <br> DY SCI 434 | Reproductive Physiology |  |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { F\&W ECOL/ } \\ & \text { ZOOLOGY } 520 \end{aligned}$ | Ornithology |  |
| AN SCI/ GENETICS 610 | Quantitative Genetics |  |
| ANATOMY 329 | Human Anatomy-Kinesiology |  |
| BIOCHEM 507 | General Biochemistry I |  |
| BIOCHEM 508 | General Biochemistry II |  |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition |  |
| BIOCHEM 601 | Protein and Enzyme Structure and Function |  |
| BIOCHEM/ <br> GENETICS/ <br> MICROBIO 612 | Prokaryotic Molecular Biology |  |
| BIOCHEM/ <br> GENETICS/ <br> MD GENET 620 | Eukaryotic Molecular Biology |  |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals |  |
| BIOCHEM/ <br> PHMCOL-M/ <br> ZOOLOGY 630 | Cellular Signal Transduction Mechanisms |  |
| BMOLCHEM 314 | Introduction to Human Biochemistry |  |
| BMOLCHEM 503 | Human Biochemistry |  |
| BMOLCHEM 504 | Human Biochemistry Laboratory |  |
| F\&W ECOL 401 | Physiological Animal Ecology |  |
| GENETICS 466 | Principles of Genetics |  |
| GENETICS 545 | Genetics Laboratory |  |
| GENETICS/ <br> MD GENET/ ZOOLOGY 562 | Human Cytogenetics |  |
| GENETICS/ <br> MD GENET 565 | Human Genetics |  |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics |  |
| GENETICS/ <br> BIOCHEM/ <br> MD GENET 620 | Eukaryotic Molecular Biology |  |
| KINES 314 | Physiology of Exercise |  |
| M M \& l 301 | Pathogenic Bacteriology |  |
| M M \& I 302 | Medical Microbiology Laboratory |  |
| M M \& I 341 | Immunology |  |


| M M \& I/ENTOM/ PATH-BIO/ ZOOLOGY 350 | Parasitology |
| :---: | :---: |
| M M \& I/ PATH-BIO/ ZOOLOGY 351 | Parasitology Laboratory |
| M M \& 1410 | Medical Mycology |
| M M \& 1412 | Medical Mycology Laboratory |
| M M \& I/PATHBIO 529 | Immunology Laboratory |
| M M \& I/ BIOCHEM 575 | Biology of Viruses |
| MICROBIO 303 | Biology of Microorganisms |
| MICROBIO 304 | Biology of Microorganisms Laboratory |
| MICROBIO 330 | Host-Parasite Interactions |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |
| MICROBIO/ SOIL SCI 523 | Soil Microbiology and Biochemistry |
| MICROBIO 526 | Physiology of Microorganisms |
| MICROBIO 527 | Advanced Laboratory Techniques in Microbiology |
| MICROBIO/ <br> M M \& I/PATHBIO 528 | Immunology |
| MICROBIO 551 | Capstone Research Project in Microbiology |
| MICROBIO/ ONCOLOGY/ PLPATH 640 | General Virology-Multiplication of Viruses |
| MICROBIO/ BMOLCHEM 668 | Microbiology at Atomic Resolution |
| NTP/NEURODPT/ PSYCH 611 | Systems Neuroscience |
| NTP 660 | Neuroscience \& Public Policy Seminar |
| NEURODPT 533 | Molecular Physiology |
| NUTR SCI 431 | Nutrition in the Life Span |
| NUTR SCI 631 | Clinical Nutrition I |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements |
| ONCOLOGY 401 | Introduction to Experimental Oncology |
| ONCOLOGY/ <br> MICROBIO/ <br> PLPATH 640 | General Virology-Multiplication of Viruses |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology |
| PSYCH 449 | Animal Behavior |
| PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior |
| $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language |


| ZOOLOGY/ <br> ANTHRO/ | Evolutionary Biology |
| :--- | :--- |
| BOTANY 410 |  |$\quad$| ZOOLOGY 425 | Behavioral Ecology |
| :--- | :--- |
| ZOOLOGY 430 | Comparative Anatomy of <br> Vertebrates |
| ZOOLOGY 470 | Introduction to Animal Development |
| ZOOLOGY/ | Paleobiology |
| GEOSCI 541 |  |
| ZOOLOGY/ | Invertebrate Paleontology |
| GEOSCI 542 |  |
| ZOOLOGY 555 | Laboratory in Developmental <br> Biology |
| ZOOLOGY 570 | Cell Biology |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{4}$

15 credits in in the major, taken on the UW-Madison campus
4 Major courses numbered 300-699 are considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Neurobiology Major in consultation with the Neurobiology undergraduate advisor(s).

## HONORS IN THE NEUROBIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Neurobiology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all major courses
- Complete 14 credits, taken for Honors, with individual grades of B or better, while in residence, to include:
- Two courses from PSYCH 454 Behavioral Neuroscience, ZOOLOGY/PSYCH 523 Neurobiology and ZOOLOGY 500 Undergraduate Neurobiology Seminar
- One course from the Required Neuroscience or Distributed Neuroscience course lists (above), taken for honors credit
- A two-semester Senior Honors Thesis, typically 681 and 682, for a total of 6 credits. ${ }^{1}$

The Senior Honors Thesis project must be approved by the Neurobiology Major Program Committee at least one month before beginning 681. The project must focus on a neuroscience-related topic.

1 The thesis can be taken in the following departments: See directed study list in Lab/Research Experience in the Major Requirements section. Other departments will be considered on a case-by-case basis by the Neurobiology Major Program Committee.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  | | Undergraduate students must maintain the minimum |
| :--- |
| grade point average specified by the school, college, or |
| academic program to remain in good academic standing. |

## LEARNING OUTCOMES

1. Demonstrate understanding of basic concepts in biology, chemistry, mathematics, statistics, and physics.
2. Demonstrate understanding of the ionic basis for the neuronal membrane potential and action potential, and as well as the factors that determine neuronal excitability.
3. Demonstrate understanding of the basic mechanisms for synaptic transmission, neurotransmitter release, postsynaptic effects, and modulation of pre- and postsynaptic mechanisms. Predict how specific physiological and pathological conditions alter neuronal function at the cellular and synaptic levels.
4. Differentiate between examples of neuroplasticity at cellular, systems, and organismal levels.
5. Demonstrate understanding of central and peripheral neuroanatomy, basic functions of brain regions, and well-known neural pathways. Predict how localized disruptions of neuronal function alter behavior, motor function, or perception.
6. Demonstrate understanding of basic principles underlying motor function, sensory function (auditory, visual, touch, taste), emotion, autonomic regulation, and higher order cognitive functions (language, memory, attention, decision-making).
7. Demonstrate how experimental tools in neuroscience are used to address experimental questions, such as intra/extracellular recording molecular biology techniques, immunohistochemical staining, fluorescent and electron microscopy, genetic manipulation, brain imaging, behavioral testing.

## ADVISING AND CAREERS

## NEUROBIOLOGY MAJOR ADVISING

The advisors for the neurobiology major are committed to providing students with first-rate guidance through the major and to graduation. Also the neurobiology major advisors are dedicated to helping a student focus their future plans after undergraduate study. If you are interested in declaring the neurobiology major, make an appointment to discuss this.

## CONTACT INFORMATION

Catherine Auger
Birge Hall, Room B156
430 Lincoln Drive
cauger@wisc.edu
Scheduling Assistant (https://calendar.wisc.edu/scheduling-assistant/ public/profiles/GvjvmzDO.html)

Virginia Jackson
Birge Hall, Room 141
430 Lincoln Drive
vjackson4@wisc.edu
Scheduling Assistant (https://calendar.wisc.edu/
scheduling-assistant/public/profiles/
aBNbotSX.html;jsessionid=53F9D957BE6099BCF895E0A8487F3B94.primar

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Hardin (chair, jdhardin@wisc.edu), Bement, Blair, Carpenter, Gammie, Halloran, Ives, Lee, Newmark, Porter, Riters, Stanley, Stretton, Turner and Vander Zanden

Associate Professors Amann, Damschen, Grinblat, McIntyre and Orrock
Assistant Professors Sharma and Wolman

## Adjunct Professor Peckarsky

Neurobiology Major Programming Committee: Professors Ciucci (Communication Sciences and Disorders; Surgery), Gammie (Integrative Biology), Johnson (Comparative Biosciences, chair of major), Lipton
(Neuroscience), Postle (Psychology), Turkstra (Communication Sciences and Disorders)

## NEUROBIOLOGY, B.S.

Neuroscience is the scientific study of the central (brain and spinal cord) and peripheral (nerves in body) nervous system. The neurobiology major at UW-Madison will provide a rigorous education in neuroscience principles that will prepare students for health-related careers (physician, physician assistant, veterinarian, dentist, neuroimaging technician, speech-language pathologist, neuropsychologist, drug rehabilitation counselor, physical therapists), academic careers (college and university faculty, research scientists, lab technician, K-12 teachers), and careers in pharmaceutical and biotech industries, venture capital and scientific consulting firms, medical and scientific journals, intellectual property law, neuroscience-related nonprofit organizations and foundations, and government agencies. UW-Madison is one of the leading universities in the world with more than 90 faculty engaged in neuroscience research and undergraduates will have access to this research faculty in formal classroom environments and through undergraduate Yesearch opportunities. Please see the Neurobiology Major (http:// www.neuromajor.wisc.edu) website for more information.

## ABOUT THE CURRICULUM

The curriculum is designed to give students a solid foundation in basic biology, chemistry, physics, and mathematics before going on to study neuroscience at the molecular, cellular, systems, and cognitive levels. Students with interests in non-neuroscience majors are welcome and encouraged to enroll in neuroscience courses. For example, students may be attracted to the diversity and flexibility of courses offered within the biology major in the College of Agricultural and Life Sciences and still take several neuroscience courses that satisfy requirements in the biology major. Students can also perform independent research in neuroscience laboratories on campus. Students in other majors, such as biochemistry, psychology, genetics, animal sciences, communication sciences and disorders, engineering, and computer science, can enroll in neuroscience courses that uniquely complement courses within their major. The Neurobiology Major Program Committee is committed to increasing opportunities for all students with interests in neuroscience and helping students accomplish their academic goals at UW-Madison. This new major is tailored to attract students from a diverse array of backgrounds. Please see the Neurobiology Major website (http:// www.neuromajor.wisc.edu) for more information.

## HOW TO GET IN

Undergraduate advising in the major. The student services coordinators Catherine Auger and Virginia Jackson, located in Birge Hall, are the primary advisors for the neurobiology major. Students should declare the major no later than the beginning of the junior year. Students can make appointments for general advising and major declarations through the student services coordinators. Advisors are assigned based on student's last name.

Last names beginning with A through F-see Virginia Jackson, Schedule an Appointment (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/ aBNbotSX.html;jsessionid=53F9D957BE6099BCF895E0A8487F3B94.primary) Last names beginning with G through Z-see Catherine Auger, Schedule an Appointment (https://calendar.wisc.edu/scheduling-assistant/public/ profiles/GvjvmzDO.html)

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science
Liberal Arts 108 credits and Science Coursework
Depth of
Intermediate/


## Advanced

work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

MATH, STATISTICS, CHEMISTRY \& PHYSICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics-one course: |  | 5 |
| MATH 211 | Calculus |  |
| MATH 217 | Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| MATH 275 | Topics in Calculus I |  |
| Statistics-one course: |  | 3 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| STAT/B M I 541 | Introduction to Biostatistics |  |
| BOTANY 575 | Special Topics |  |
| General Chemistry-one course: |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |


| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II |  |
| :---: | :---: | :---: |
| Organic Chemistry-one course: |  | 3 |
| CHEM 341 | Elementary Organic Chemistry |  |
| CHEM 343 \& CHEM 345 | Introductory Organic Chemistry and Intermediate Organic Chemistry |  |
| General Physics 1-one course: |  | 4 |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| $\begin{aligned} & \text { E M A } 201 \\ & \& \text { E M A } 202 \end{aligned}$ | Statics and Dynamics ${ }^{1}$ |  |
| General Physics 2 |  | 4 |
| Select one of the following: |  |  |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |
| Total Credits |  |  |
| 1 M E 240 may be taken instead of E M A 202 |  |  |

## 30 CREDITS OF BIOLOGY AND NEUROBIOLOGY

Credits will be applied from General Biology, Neurobiology, Lab, and Electives. Courses apply only once.

## General Biology

Complete one General Biology sequence:

| Code | Title |  |
| :---: | :---: | :---: |
| Introductory Biology |  | 10-16 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY/ } \\ & \text { BOTANY } 151 \end{aligned}$ | Introductory Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY/ } \\ & \text { BOTANY } 152 \end{aligned}$ | Introductory Biology |  |
| BIOCORE ${ }^{3}$ |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |  |
| BIOCORE 383 | Cellular Biology |  |
| BIOCORE 485 | Organismal Biology |  |
| BIOCORE 587 | Biological Interactions |  |
| Plus two from: |  |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 384 | Cellular Biology Laboratory |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| Animal Biology |  |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory |  |
| BOTANY/ <br> BIOLOGY 130 | General Botany |  |


| Neurobiology |  | Credits |
| :--- | :--- | ---: |
| Code | Title |  |
| Neurobiology: |  |  |
| ZOOLOGY/ | Neurobiology |  |
| PSYCH 523 |  |  |
| Behavioral Neuroscience: |  |  |
| PSYCH 454 | Behavioral Neuroscience |  |
| Neuroscience Seminar: |  |  |
| ZOOLOGY 500 | Undergraduate Neurobiology <br> Seminar |  |
| Distributed Neuroscience-three courses from: |  |  |
| BIOCHEM 375 | Special Topics (Molecular Control of |  |
| Metabolism and Metabolic Disease) |  |  |


| ANAT\&PHY 435 | Fundamentals of Human Physiology ${ }^{1}$ |
| :---: | :---: |
| NEURODPT 533 | Molecular Physiology |
| PSYCH 406 | Psychology of Perception |
| PSYCH 414 | Cognitive Psychology |
| PSYCH 513 | Hormones, Brain, and Behavior |
| PSYCH 601 | Current Topics in Psychology (Epigenetics and the Brain) |
| PSYCH 601 | Current Topics in Psychology (Neuropharmacology) |
| PSYCH 601 | Current Topics in Psychology (Neural Basis of Cognitive Control) |
| PSYCH 601 | Current Topics in Psychology (Neuroeconomics) |
| PSYCH 606 | Hormones and Behavior |
| PSYCH/ <br> NEURODPT/ <br> NTP 611 | Systems Neuroscience |
| ZOOLOGY 555 | Laboratory in Developmental Biology |
| ZOOLOGY 603 | Endocrinology |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology |
| ZOOLOGY/ ANTHRO/NTP/ PSYCH 619 | Biology of Mind |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { NTP } 620 \end{aligned}$ | Neuroethology Seminar |
| ZOOLOGY 625 | Development of the Nervous System |
| ZOOLOGY/ NEURODPT/ PSYCH 674 | Behavioral Neuroendocrinology Seminar |
| Students may apply only one of the following courses toward the major. BIOCHEM 375, BIOCHEM 501, BIOCHEM 508, ANAT\&PHY 335, ANAT\&PHY 435 B M E/CBE 520, ZOOLOGY 470. |  |

Lab/Research Experience ${ }^{2}$
Choose one option from:

| Code | Title | Credits |
| :--- | :--- | :--- |
| Neuroscience Lab-one course: |  |  |
| BIOCORE 486 | Organismal Biology Laboratory |  |
| ANAT\&PHY 435 | Fundamentals of Human <br> Physiology |  |
| PSYCH 621 | Mentored Research and Seminar <br> ZOOLOGY 555Laboratory in Developmental <br> Biology |  |
| ZOOLOGY 604 | Computer-based Gene and Disease/ <br> Disorder Research Lab |  |
| ZOOLOGY 612 | Comparative Physiology Laboratory <br> ZOOLOGY/Lab Course in Neurobiology and <br> NEURODPT/NTP/ <br> PHYSIOL 616 | Behavior |

Directed Study-3 credits from: ${ }^{3}$

| ANATOMY 699 | Independent Study |
| :--- | :--- |
| ANESTHES 699 | Independent Study |
| BIOLOGY 699 | Directed Studies |
| BMOLCHEM 699 | Special Research Problems |
| CHEM 699 | Directed Study |
| COMP BIO 699 | Directed Study |
| CRB 699 | Independent Study |
| CS\&D 699 | Directed Study |
| ED PSYCH 699 | Independent Reading Undergrad |
| FAM MED 699 | Directed Study |
| GENETICS 699 | Special Problems |
| H ONCOL 699 | Independent Study in Human |
| KINES 699 | Cancer Biology |
| MED PHYS 699 | Independent Study |
| MEDICINE 699 | Independent Reading or Research Study |
| MED SC-V 669 | Small Animal Cardiology Rotation |
| M M \& I 699 | Directed Study |
| MOL BIOL 699 | Directed Studies in Molecular |
| Biology |  |
| NEURSURG 699 | Neurosurgery: Directed in Study in |

NEUROL 699 Neurology: Directed Study in Neuroscience Research
NEURODPT 699 Independent Work
NUTR SCI 699 Special Problems
OBS\&GYN 699 Directed Study
ONCOLOGY 699 Special Research Problems
OPHTHALM 699 Directed Study
PATH 699 Independent Study
PATH-BIO 699 Directed Study
PEDIAT 699 Independent Study
PHM SCI 699 Advanced Independent Study
PHYSIOL 699 Independent Work
POP HLTH 699 Independent Reading
PSYCH 699 Directed Study
PSYCHIAT 699 Independent Study
RADIOL 699 Directed Study
SURGERY 699 Independent Study
ZOOLOGY 699 Directed Studies in Zoology
Thesis-two semesters:
PSYCH 681 Senior Honors Thesis
\& PSYCH 682 and Senior Honors Thesis
ZOOLOGY 691 Senior Thesis
\& ZOOLOGY 692 and Senior Thesis
2 Note that Lab courses may also be those that apply in the Neurobiology category above.
3 Only Directed Study courses taken after-and not concurrent with or prior to-the completion of an Introductory Biology sequence are accepted in the major.

| Electives <br> Additional credits from the Neurobiology, Lab, or the following list, to attain 30 credits in the major. |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ANAT\&PHY 435 | Fundamentals of Human Physiology |  |
| AN SCI/ DY SCI 362 | Veterinary Genetics |  |
| AN SCI/ DY SCI 434 | Reproductive Physiology |  |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { F\&W ECOL/ } \\ & \text { ZOOLOGY } 520 \end{aligned}$ | Ornithology |  |
| AN SCI/ GENETICS 610 | Quantitative Genetics |  |
| ANATOMY 329 | Human Anatomy-Kinesiology |  |
| BIOCHEM 507 | General Biochemistry I |  |
| BIOCHEM 508 | General Biochemistry II |  |
| BIOCHEM/ NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition |  |
| BIOCHEM 601 | Protein and Enzyme Structure and Function |  |
| BIOCHEM/ <br> GENETICS/ <br> MICROBIO 612 | Prokaryotic Molecular Biology |  |
| BIOCHEM/ <br> GENETICS/ <br> MD GENET 620 | Eukaryotic Molecular Biology |  |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals |  |
| BIOCHEM/ <br> PHMCOL-M/ <br> ZOOLOGY 630 | Cellular Signal Transduction Mechanisms |  |
| BMOLCHEM 314 | Introduction to Human Biochemistry |  |
| BMOLCHEM 503 | Human Biochemistry |  |
| BMOLCHEM 504 | Human Biochemistry Laboratory |  |
| F\&W ECOL 401 | Physiological Animal Ecology |  |
| GENETICS 466 | Principles of Genetics |  |
| GENETICS 545 | Genetics Laboratory |  |
| GENETICS/ <br> MD GENET/ ZOOLOGY 562 | Human Cytogenetics |  |
| GENETICS/ <br> MD GENET 565 | Human Genetics |  |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics |  |
| GENETICS/ <br> BIOCHEM/ <br> MD GENET 620 | Eukaryotic Molecular Biology |  |
| KINES 314 | Physiology of Exercise |  |
| M M \& l 301 | Pathogenic Bacteriology |  |
| M M \& I 302 | Medical Microbiology Laboratory |  |
| M M \& I 341 | Immunology |  |


| M M \& I/ENTOM/ PATH-BIO/ ZOOLOGY 350 | Parasitology |
| :---: | :---: |
| M M \& I/ PATH-BIO/ ZOOLOGY 351 | Parasitology Laboratory |
| M M \& 1410 | Medical Mycology |
| M M \& 1412 | Medical Mycology Laboratory |
| M M \& I/PATHBIO 529 | Immunology Laboratory |
| M M \& I/ BIOCHEM 575 | Biology of Viruses |
| MICROBIO 303 | Biology of Microorganisms |
| MICROBIO 304 | Biology of Microorganisms Laboratory |
| MICROBIO 330 | Host-Parasite Interactions |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines |
| MICROBIO/ SOIL SCI 523 | Soil Microbiology and Biochemistry |
| MICROBIO 526 | Physiology of Microorganisms |
| MICROBIO 527 | Advanced Laboratory Techniques in Microbiology |
| MICROBIO/ <br> M M \& I/PATHBIO 528 | Immunology |
| MICROBIO 551 | Capstone Research Project in Microbiology |
| MICROBIO/ ONCOLOGY/ PLPATH 640 | General Virology-Multiplication of Viruses |
| MICROBIO/ <br> BMOLCHEM 668 | Microbiology at Atomic Resolution |
| NTP/NEURODPT/ PSYCH 611 | Systems Neuroscience |
| NTP 660 | Neuroscience \& Public Policy Seminar |
| NEURODPT 533 | Molecular Physiology |
| NUTR SCI 431 | Nutrition in the Life Span |
| NUTR SCI 631 | Clinical Nutrition I |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements |
| ONCOLOGY 401 | Introduction to Experimental Oncology |
| ONCOLOGY/ MICROBIO/ PLPATH 640 | General Virology-Multiplication of Viruses |
| PHM SCI 558 | Laboratory Techniques in Pharmacology and Toxicology |
| PSYCH 449 | Animal Behavior |
| PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior |
| $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language |


| ZOOLOGY/ <br> ANTHRO/ | Evolutionary Biology |
| :--- | :--- |
| BOTANY 410 |  |$\quad$| ZOOLOGY 425 | Behavioral Ecology |
| :--- | :--- |
| ZOOLOGY 430 | Comparative Anatomy of <br> Vertebrates |
| ZOOLOGY 470 | Introduction to Animal Development |
| ZOOLOGY/ | Paleobiology |
| GEOSCI 541 |  |
| ZOOLOGY/ | Invertebrate Paleontology |
| GEOSCI 542 |  |
| ZOOLOGY 555 | Laboratory in Developmental <br> Biology |
| ZOOLOGY 570 | Cell Biology |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{4}$

15 credits in in the major, taken on the UW-Madison campus
4 Major courses numbered 300-699 are considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Neurobiology Major in consultation with the Neurobiology undergraduate advisor(s).

## HONORS IN THE NEUROBIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Neurobiology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all major courses
- Complete 14 credits, taken for Honors, with individual grades of B or better, while in residence, to include:
- Two courses from PSYCH 454 Behavioral Neuroscience, ZOOLOGY/PSYCH 523 Neurobiology and ZOOLOGY 500 Undergraduate Neurobiology Seminar
- One course from the Required Neuroscience or Distributed Neuroscience course lists (above), taken for honors credit
- A two-semester Senior Honors Thesis, typically 681 and 682, for a total of 6 credits. ${ }^{1}$

The Senior Honors Thesis project must be approved by the Neurobiology Major Program Committee at least one month before beginning 681. The project must focus on a neuroscience-related topic.

1 The thesis can be taken in the following departments: See directed study list in Lab/Research Experience in the Major Requirements section. Other departments will be considered on a case-by-case basis by the Neurobiology Major Program Committee.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  | | Undergraduate students must maintain the minimum |
| :--- |
| grade point average specified by the school, college, or |
| academic program to remain in good academic standing. |

## LEARNING OUTCOMES

1. Demonstrate understanding of basic concepts in biology, chemistry, mathematics, statistics, and physics.
2. Demonstrate understanding of the ionic basis for the neuronal membrane potential and action potential, and as well as the factors that determine neuronal excitability.
3. Demonstrate understanding of the basic mechanisms for synaptic transmission, neurotransmitter release, postsynaptic effects, and modulation of pre- and postsynaptic mechanisms. Predict how specific physiological and pathological conditions alter neuronal function at the cellular and synaptic levels.
4. Differentiate between examples of neuroplasticity at cellular, systems, and organismal levels.
5. Demonstrate understanding of central and peripheral neuroanatomy, basic functions of brain regions, and well-known neural pathways. Predict how localized disruptions of neuronal function alter behavior, motor function, or perception.
6. Demonstrate understanding of basic principles underlying motor function, sensory function (auditory, visual, touch, taste), emotion, autonomic regulation, and higher order cognitive functions (language, memory, attention, decision-making).
7. Demonstrate how experimental tools in neuroscience are used to address experimental questions, such as intra/extracellular recording molecular biology techniques, immunohistochemical staining, fluorescent and electron microscopy, genetic manipulation, brain imaging, behavioral testing.

## ADVISING AND CAREERS

## NEUROBIOLOGY MAJOR ADVISING

The advisors for the neurobiology major are committed to providing students with first-rate guidance through the major and to graduation. Also the neurobiology major advisors are dedicated to helping a student focus their future plans after undergraduate study. If you are interested in declaring the neurobiology major, make an appointment to discuss this.

## CONTACT INFORMATION

Catherine Auger
Birge Hall, Room B156
430 Lincoln Drive
cauger@wisc.edu
Scheduling Assistant (https://calendar.wisc.edu/scheduling-assistant/ public/profiles/GvjvmzDO.html)

Virginia Jackson
Birge Hall, Room 141
430 Lincoln Drive
vjackson4@wisc.edu
Scheduling Assistant (https://calendar.wisc.edu/
scheduling-assistant/public/profiles/
aBNbotSX.html;jsessionid=53F9D957BE6099BCF895E0A8487F3B94.prima

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Hardin (chair, jdhardin@wisc.edu), Bement, Blair, Carpenter, Gammie, Halloran, Ives, Lee, Newmark, Porter, Riters, Stanley, Stretton, Turner and Vander Zanden

Associate Professors Amann, Damschen, Grinblat, McIntyre and Orrock
Assistant Professors Sharma and Wolman

## Adjunct Professor Peckarsky

Neurobiology Major Programming Committee: Professors Ciucci (Communication Sciences and Disorders; Surgery), Gammie (Integrative Biology), Johnson (Comparative Biosciences, chair of major), Lipton (Neuroscience), Postle (Psychology), Turkstra (Communication Sciences and Disorders)

## ZOOLOGY, B.A.

The zoology major is a gateway to the diverse areas of modern biology. The major can be tailored to prepare students for advanced study and careers in many different areas: health professions and public health; law; life sciences research in university, government, and industrial settings; education including museum, nature center, secondary school, and college teaching; biotechnology; and environmental studies.

Specialized preparation is offered in ecology, systematics, limnology, morphology, molecular biology, cellular biology, developmental biology, genetics, neurobiology, physiology, evolution, and behavior. Several possible areas, emphasizing different interests, are outlined in the requirements tab. They include ecology, evolution, and behavior; anatomy, physiology, and organismal biology; and cellular, molecular, and developmental biology. The department encourages undergraduate participation in research and offers summer research scholarships to Butstanding students.

## GOALS OF THE ZOOLOGY MAJOR

The zoology major emphasizes critical thinking and conceptual skills that come from an understanding of how scientific information is obtained and evaluated, and of how this information can be applied to societal issues. The major provides a solid foundation in genetic, cellular, physiological, ecological, and evolutionary principles, and in the related disciplines of chemistry, physics, and mathematics. As a result, the major fosters an understanding of biological complexity including the interrelationships among humans and natural systems.

The unique characteristics of the zoology major include:

- broad-based, yet integrated training in wide-ranging areas of biology;
- solid foundation of basic principles and processes in biology;
- flexibility and advising needed to allow students to tailor the major to their specific goals;
- wide range of opportunities for undergraduate involvement in independent research and senior thesis.


## HOW TO GET IN

## DECLARING THE ZOOLOGY MAJOR

All students who are interested in pursuing the zoology major must schedule an appointment with a department advisor. No major declaration forms are required to declare zoology.

Note: Students in the College of Letters \& Science (L\&S) may be declared by a department advisor immediately. Students who are not currently in L\&S need to either transfer into L\&S or have permission from their school or college to pursue an additional major in zoology. Instructions for transferring into L\&S are available on the L\&S Student Academic Affairs website (https://saa.ls.wisc.edu).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b(Q R B)$ coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science | 108 credits |
| :--- | :--- |
| Coursework |  |$\quad . \quad$| Depth of | 60 intermediate or advanced credits |
| :--- | :--- |
| Intermediate/ |  |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR
MATH, CHEMISTRY \& PHYSICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Math-complete one: |  | 5-6 |
| MATH 112 \& MATH 113 | Algebra and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| Chemistry-complete one: |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Physics-complete one: |  | 8-10 |
| PHYSICS 103 <br> \& PHYSICS 104 | General Physics and General Physics |  |


| PHYSICS 201 <br> \& PHYSICS 202 | General Physics and General Physics | ZOOLOGY/ <br> ENTOM 371 | Medical Entomology |
| :---: | :---: | :---: | :---: |
| PHYSICS 207 \& PHYSICS 208 | General Physics and General Physics | ZOOLOGY 400 | Topics in Biology |
|  |  | ZOOLOGY 405 | Introduction to Museum Studies in the Natural Sciences |
| Total Credits $\quad 18-25$ |  |  |  |
| 30 CREDITS IN BIOLOGY AND ZOOLOGY COURSEWORK Introductory Biology |  | ZOOLOGY/ ANTHRO/ BOTANY 410 | Evolutionary Biology |
| Code | Title Credits | ZOOLOGY 425 | Behavioral Ecology |
| Option 1: Introductory Biology |  | ZOOLOGY 430 | Comparative Anatomy of |
| ZOOLOGY/ <br> BIOLOGY/ <br> BOTANY 151 <br> \& ZOOLOGY/ <br> BIOLOGY/ <br> BOTANY 152 | Introductory Biology and Introductory Biology |  | Vertebrates |
|  |  | ZOOLOGY/ <br> BOTANY 450 | Midwestern Ecological Issues: A Case Study Approach |
|  |  | ZOOLOGY/ <br> BOTANY 459 | Ecological Techniques for Field Monitoring |
|  |  | ZOOLOGY/ BOTANY/ <br> F\&W ECOL 460 | General Ecology |
| Option 2: BIOCORE-complete both: |  |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory |  |  |
| \& BIOCORE 382 |  | GENETICS 466 | Principles of Genetics |
|  |  | ZOOLOGY 470 | Introduction to Animal Development |
| BIOCORE 383 <br> \& BIOCORE 384 | Cellular Biology and Cellular Biology Laboratory | ZOOLOGY/ <br> BOTANY/ | Plant-Insect Interactions |
| Option 3: Animal Biology ${ }^{1}$ |  | BOTANY/ <br> ENTOM 473 |  |
| ZOOLOGY/ <br> BIOLOGY 101 | Animal Biology and Animal Biology Laboratory | ZOOLOGY 500 | Undergraduate Neurobiology Seminar |
| \& ZOOLOGY/ |  | ZOOLOGY 504 | Modeling Animal Landscapes |
| Total Credits | 10-18 | ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes |
| BOTANY/BIOLOGY 130 is recommended, but not required for students pursuing Option 3 (Animal Biology). |  | ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab |
| Zoology Electi | $\text { ves }^{2}$ | ZOOLOGY/ <br> AN SCI/ | Ornithology |
| Code | Title Credits | F\&W ECOL 520 |  |
| ZOOLOGY 299 | Directed Studies in Zoology | ZOOLOGY/ <br> AN SCI/ <br> F\&W ECOL 521 | Birds of Southern Wisconsin |
| ZOOLOGY 300 | Invertebrate Biology and Evolution |  |  |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab |  |  |
|  |  | ZOOLOGY/ <br> PSYCH 523 | Neurobiology |
| ZOOLOGY/ <br> ENTOM 302 | Introduction to Entomology | PSYCH 523 | Tropical Herpetology |
| ZOOLOGY 303 | Aquatic Invertebrate Biology | $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENTOM } 530 \end{aligned}$ | Insect Behavior |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | ENTOM 530 | Ecosystem Analysis |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | ZOOLOGY/ <br> ENTOM 540 | Theoretical Ecology |
| ZOOLOGY/ <br> F\&W ECOL 335 | Human/Animal Relationships: Biological and Philosophical Issues | $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 541 \end{aligned}$ | Paleobiology |
| ZOOLOGY/ <br> ENTOM/M M \& I/ | Parasitology | $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 542 \end{aligned}$ | Invertebrate Paleontology |
| PATH-BIO 350 |  | ZOOLOGY/ | Animal Communication and the |
| ZOOLOGY/ M M \& I/PATHBIO 351 | Parasitology Laboratory | PSYCH 550 | Origins of Language <br> Laboratory in Developmental <br> Biology |
| ZOOLOGY/ <br> ENVIR ST/ <br> F\&W ECOL 360 | Extinction of Species | ZOOLOGY/ GENETICS/ MD GENET 562 | Human Cytogenetics |


| ZOOLOGY/ <br> F\&W ECOL/ LAND ARC 565 | Principles of Landscape Ecology |
| :---: | :---: |
| ZOOLOGY 570 | Cell Biology |
| ZOOLOGY 603 | Endocrinology |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology |
| ZOOLOGY 612 | Comparative Physiology Laboratory |
| ZOOLOGY/ NEURODPT/NTP/ PHYSIOL 616 | Lab Course in Neurobiology and Behavior |
| ZOOLOGY/ ANTHRO/NTP/ PSYCH 619 | Biology of Mind |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { NTP } 620 \end{aligned}$ | Neuroethology Seminar |
| ZOOLOGY/ ENTOM/ GENETICS 624 | Molecular Ecology |
| ZOOLOGY 625 | Development of the Nervous System |
| ZOOLOGY/ BIOCHEM/ PHMCOL-M 630 | Cellular Signal Transduction Mechanisms |
| ZOOLOGY/ BOTANY/ GENETICS 645 | Modeling in Population Genetics and Evolution |
| ZOOLOGY/ <br> BOTANY/ <br> ENVIR ST/ <br> F\&W ECOL 651 | Conservation Biology |
| ZOOLOGY/ <br> F\&W ECOL 660 | Climate Change Ecology |
| ZOOLOGY/ BOTANY/ <br> F\&W ECOL 672 | Historical Ecology |
| ZOOLOGY/ <br> NEURODPT/ <br> PSYCH 674 | Behavioral Neuroendocrinology Seminar |
| ZOOLOGY 677 | Internship in Ecology |
| ZOOLOGY 681 \& ZOOLOGY 682 | Senior Honors Thesis and Senior Honors Thesis |
| ZOOLOGY 691 \& ZOOLOGY 692 | Senior Thesis and Senior Thesis |
| ZOOLOGY 698 | Directed Study |
| ZOOLOGY 699 | Directed Studies in Zoology |
| Total Credits | 12-20 |
| 2 A maximum of 10 <br> ZOOLOGY 698, Z0 <br> ZOOLOGY 692), o <br> ZOOLOGY 682) co | credits of Directed Study (ZOOLOGY 299, OOLOGY 699), Senior Thesis (ZOOLOGY 691, Senior Honors Thesis (ZOOLOGY 681, unt toward the 30 credits required for the major. |


| Approved Upper-level Biological Coursework Not in the |  |
| :--- | :--- |
| Department of Integrative Biology |  |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all ZOOLOGY and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{5}$

15 credits in ZOOLOGY, or courses that count for the major, taken on the UW-Madison campus

ZOOLOGY 299-699, intermediate/advanced BIOCORE, and courses that count toward the major that have an intermediate/advanced designation are considered upper-level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Zoology Major in consultation with a department advisor.

## HONORS IN THE ZOOLOGY MAJOR: REQUIREMENTS

To earn Honors in the Major in Zoology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in all courses that count toward the major
- Complete 12 credits, taken for Honors, with individual grades of B or better. Select 6 credits from the following list:

| Code | Title | Credits |
| :---: | :---: | :---: |
| ZOOLOGY/ANTHRO/ BOTANY 410 | Evolutionary Biology | 3 |
| ZOOLOGY/BOTANY/ <br> F\&W ECOL 460 | General Ecology | 4 |
| GENETICS 466 | Principles of Genetics | 3 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab | 2 |
| $\begin{aligned} & \text { ZOOLOGY/AN SCI/ } \\ & \text { F\&W ECOL } 520 \end{aligned}$ | Ornithology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/AN SCI/ } \\ & \text { F\&W ECOL } 521 \end{aligned}$ | Birds of Southern Wisconsin | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 523 \end{aligned}$ | Neurobiology | 3 |
| ZOOLOGY/ PSYCH 550 | Animal Communication and the Origins of Language | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BOTANY/ENVIR ST/ } \\ & \text { F\&W ECOL } 651 \end{aligned}$ | Conservation Biology | 3 |
| And complete a two-semester Senior Honors Thesis in ZOOLOGY 681 Senior Honors Thesis and ZOOLOGY 682 Senior Honors Thesis, for a total of 6 credits. ${ }^{1}$ |  |  |
| A written thesis a department adv fall and spring of | proposal must be approved by the thes isor. While most theses are completed a student's senior year, other combina | ntor and g the of terms |

are possible. More information about the proposal process, timing, and grading of a thesis can be found on the zoology major website.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Understand the principles of genetics.
2. Understand the principles of cellular biology.
3. Understand the principles of physiology.
4. Understand the principles of ecology.
5. Understand the principles of evolution.
6. Understand current issues in biology.
7. Provide solid connections to related disciplines of chemistry, physics and mathematics.
8. Understand how scientific information is obtained.
9. Understand biological complexity.
10. Understand the interrelationship of humans and natural systems.
11. Develop quantitative reasoning skills (ability to solve problems requiring mathematic/statistical reasoning).
12. Develop critical thinking skills (ability to identify a problem, identify the information needed to solve the problem, and develop methods for solving the problem).
13. Develop skills to effectively communicate scientific information through oral presentations.
14. Develop skills to effectively communicate scientific information through written reports.
15. Develop skills to critically evaluate scientific information.
16. Develop an ability to engage in scientific inquiry.
17. Develop an ability to plan scientific experiments.
18. Access scientific information from various electronic and print sources.
19. Apply scientific knowledge to societal issues.
20. Appreciate the diversity of life.
21. Build a strong foundation for potential graduate study.
22. Develop a sense of competence in the field of study.

## ADVISING AND CAREERS

## ADVISING

Students are encouraged to consult with a department advisor to construct individual programs appropriate to their own needs. Please use scheduling assistant or call either 608-262-2742 or 608-262-3835 to make an appointment with an advisor. Kayla Pelland (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ DIdAlcHP.html;jsessionid=A292232C7EF2B8C801261 B668EAE99A8.primary is available to meet with students on Mondays, Wednesdays, and Fridays in B154 Birge Hall, and India Viola (https://calendar.wisc.edu/schedulingassistant/public/profiles/nPLtQRRK.html) is available on Tuesdays, Wednesdays, and Thursdays in 144 Birge Hall.

## DIRECTED STUDY

For students interested in a short-term undergraduate research experience in a particular area of zoology, the department offers ZOOLOGY 699 Directed Studies in Zoology. ZOOLOGY 699, recommended for juniors and seniors, is graded on an A to F scale. Students cannot take directed studies on a pass/fail basis.

Directed study allows students to gain experience in a wide range of research areas in biology and to learn research techniques that are not easily taught in the classroom. Such experiences allow students to make more informed decisions about their future goals and careers.

Before students can sign up for ZOOLOGY 699, they must set up an appointment with a professor/mentor of their choice, and work with the professor/mentor to:

1. decide the specific number of credits and
2. plan the work required to earn those credits.

Such plans can involve reviewing relevant literature in the area, developing a proposal for independent research, and/or conducting an experiment in the mentor's study area.

Students interested in doing in-depth research as undergraduates in an area of interest can elect to do a Senior Thesis or Senior Honors Thesis (see below). Students should contact a department advisor at the beginning of their junior year to explore possible research areas.

A maximum of 10 credits of directed study (ZOOLOGY 299,
ZOOLOGY 698, ZOOLOGY 699 ), senior thesis (ZOOLOGY 691, ZOOLOGY 692 ), or senior honors thesis (ZOOLOGY 681 , ZOOLOGY 682 ) will count toward the 30 credits required for the major.

## SENIOR THESIS

Students interested in making a longer-term commitment to a research project may consider undertaking a senior thesis. Students should
contact a department advisor during their junior year to explore possible research areas in zoology.

Zoology Senior Thesis Requirements:

- approval of a department advisor;
- completion of ZOOLOGY 691 and ZOOLOGY 692, a two-semester thesis research sequence, during the senior year (6 credits).

It is recommended that candidates for the senior thesis take ZOOLOGY 699 during second semester junior year to prepare for the thesis.

## SENIOR THESIS AND DISTINCTION IN THE MAJOR

Upon recommendation of the department to the dean, Distinction in the Major is granted at graduation to students not earning Honors in the Major who have done superior work in the major. In addition to the requirements for a senior thesis, to graduate with Distinction in the Zoology Major, students must maintain an overall GPA of 3.300 and a GPA of 3.500 in all zoology courses in the major.

## CAREERS

The Department of Integrative Biology encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

## FACULTY

Professors Hardin (chair, jdhardin@wisc.edu), Bement, Blair, Gammie, Halloran, Ives, Lee, Newmark, Porter, Riters, Stanley, Stretton, Turner, and Vander Zanden

Associate Professors Amann, Damschen, Grinblat, and Orrock
Assistant Professors Dugan, Sharma, and Wolman
Adjunct Professor Peckarsky

## ZOOLOGY, B.S.

The zoology major is a gateway to the diverse areas of modern biology. The major can be tailored to prepare students for advanced study and careers in many different areas: health professions and public health; law; life sciences research in university, government, and industrial settings; education including museum, nature center, secondary school, and college teaching; biotechnology; and environmental studies.

Specialized preparation is offered in ecology, systematics, limnology, morphology, molecular biology, cellular biology, developmental biology, genetics, neurobiology, physiology, evolution, and behavior. Several possible areas, emphasizing different interests, are outlined in the requirements tab. They include ecology, evolution, and behavior; anatomy, physiology, and organismal biology; and cellular, molecular, and developmental biology. The department encourages undergraduate participation in research and offers summer research scholarships to outstanding students.

## GOALS OF THE ZOOLOGY MAJOR

The zoology major emphasizes critical thinking and conceptual skills that come from an understanding of how scientific information is obtained and evaluated, and of how this information can be applied to societal issues. The major provides a solid foundation in genetic, cellular, physiological, ecological, and evolutionary principles, and in the related disciplines of chemistry, physics, and mathematics. As a result, the major fosters an understanding of biological complexity including the interrelationships among humans and natural systems.

The unique characteristics of the zoology major include:

- broad-based, yet integrated training in wide-ranging areas of biology;
- solid foundation of basic principles and processes in biology;
- flexibility and advising needed to allow students to tailor the major to their specific goals;
- wide range of opportunities for undergraduate involvement in independent research and senior thesis.

HOW TO GET IN

## DECLARING THE ZOOLOGY MAJOR

All students who are interested in pursuing the zoology major must schedule an appointment with a department advisor. No major declaration forms are required to declare zoology.

Note: Students in the College of Letters \& Science (L\&S) may be declared by a department advisor immediately. Students who are not currently in L\&S need to either transfer into L\&S or have permission from their school or college to pursue an additional major in zoology. Instructions for transferring into L\&S are available on the L\&S Student Academic Affairs website (https://saa.Is.wisc.edu)

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General •Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

## Foreign

Language

L\&S Breadth

Two (2) 3+ credits of intermediate/advanced level MATH COMP SCI, STAT Limit one each: COMP SCI, STAT

Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Depth of <br> Intermediate/ |
| :--- | :--- |
| Advanced |
| work  <br> Major Declare and complete at least one (1) major <br> Total Credits 120 credits <br> UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR
MATH, CHEMISTRY \& PHYSICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Math-complete one: |  | 5-6 |
| MATH 112 \& MATH 113 | Algebra and Trigonometry |  |
| MATH 114 | Algebra and Trigonometry |  |
| MATH 171 \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| Chemistry-complete one: |  | 5-9 |
| CHEM 103 \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Physics-complete one: |  | 8-10 |
| PHYSICS 103 <br> \& PHYSICS 104 | General Physics and General Physics |  |
| PHYSICS 201 <br> \& PHYSICS 202 | General Physics and General Physics |  |
| PHYSICS 207 <br> \& PHYSICS 208 | General Physics and General Physics |  |


| Total Credits | $18-25$ |
| :--- | :--- |

## 30 CREDITS IN BIOLOGY AND ZOOLOGY COURSEWORK

## Introductory Biology

Code Title
Credits

| ZOOLOGY/ <br> BIOLOGY/ <br> BOTANY 151 <br> \& ZOOLOGY/ <br> BIOLOGY/ <br> BOTANY 152 | Introductory Biology and Introductory Biology |  |
| :---: | :---: | :---: |
| Option 2: BIOCORE-complete both: |  |  |
| BIOCORE 381 <br> \& BIOCORE 382 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory |  |
| BIOCORE 383 <br> \& BIOCORE 384 | Cellular Biology and Cellular Biology Laboratory |  |
| Option 3: Animal Biology ${ }^{1}$ |  |  |
| ZOOLOGY/ BIOLOGY 101 \& ZOOLOGY/ BIOLOGY 102 | Animal Biology and Animal Biology Laboratory |  |
| Total Credits |  | 10-18 |

1 BOTANY/BIOLOGY 130 is recommended, but not required for students pursuing Option 3 (Animal Biology).

| Zoology Electives ${ }^{2}$ |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ZOOLOGY 299 | Directed Studies in Zoology |  |
| ZOOLOGY 300 | Invertebrate Biology and Evolution |  |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab |  |
| ZOOLOGY/ <br> ENTOM 302 | Introduction to Entomology |  |
| ZOOLOGY 303 | Aquatic Invertebrate Biology |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENVIR ST } 315 \end{aligned}$ | Limnology-Conservation of Aquatic Resources |  |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources |  |
| ZOOLOGY/ <br> F\&W ECOL 335 | Human/Animal Relationships: Biological and Philosophical Issues |  |
| ZOOLOGY/ <br> ENTOM/M M \& I/ <br> PATH-BIO 350 | Parasitology |  |
| ZOOLOGY/ <br> M M \& I/PATH- <br> BIO 351 | Parasitology Laboratory |  |
| ZOOLOGY/ <br> ENVIR ST/ <br> F\&W ECOL 360 | Extinction of Species |  |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENTOM } 371 \end{aligned}$ | Medical Entomology |  |
| ZOOLOGY 400 | Topics in Biology |  |
| ZOOLOGY 405 | Introduction to Museum Studies in the Natural Sciences |  |
| ZOOLOGY/ <br> ANTHRO/ <br> BOTANY 410 | Evolutionary Biology |  |
| ZOOLOGY 425 | Behavioral Ecology |  |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates |  |


| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BOTANY } 450 \end{aligned}$ | Midwestern Ecological Issues: A Case Study Approach |
| :---: | :---: |
| ZOOLOGY/ <br> BOTANY 459 | Ecological Techniques for Field Monitoring |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BOTANY/ } \\ & \text { F\&W ECOL } 460 \end{aligned}$ | General Ecology |
| GENETICS 466 | Principles of Genetics |
| ZOOLOGY 470 | Introduction to Animal Development |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BOTANY/ } \\ & \text { ENTOM } 473 \end{aligned}$ | Plant-Insect Interactions |
| ZOOLOGY 500 | Undergraduate Neurobiology Seminar |
| ZOOLOGY 504 | Modeling Animal Landscapes |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { AN SCI/ } \\ & \text { F\&W ECOL } 520 \end{aligned}$ | Ornithology |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { AN SCI/ } \\ & \text { F\&W ECOL } 521 \end{aligned}$ | Birds of Southern Wisconsin |
| ZOOLOGY/ PSYCH 523 | Neurobiology |
| ZOOLOGY 525 | Tropical Herpetology |
| ZOOLOGY/ <br> ENTOM 530 | Insect Behavior |
| ZOOLOGY 535 | Ecosystem Analysis |
| ZOOLOGY/ <br> ENTOM 540 | Theoretical Ecology |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 541 \end{aligned}$ | Paleobiology |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 542 \end{aligned}$ | Invertebrate Paleontology |
| ZOOLOGY/ PSYCH 550 | Animal Communication and the Origins of Language |
| ZOOLOGY 555 | Laboratory in Developmental Biology |
| ZOOLOGY/ <br> GENETICS/ <br> MD GENET 562 | Human Cytogenetics |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { F\&W ECOL/ } \\ & \text { LAND ARC } 565 \end{aligned}$ | Principles of Landscape Ecology |
| ZOOLOGY 570 | Cell Biology |
| ZOOLOGY 603 | Endocrinology |
| ZOOLOGY 604 | Computer-based Gene and Disease/ Disorder Research Lab |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology |
| ZOOLOGY 612 | Comparative Physiology Laboratory |


| ZOOLOGY/ NEURODPT/NTP/ PHYSIOL 616 | Lab Course in Neurobiology and Behavior |
| :---: | :---: |
| ZOOLOGY/ ANTHRO/NTP/ PSYCH 619 | Biology of Mind |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { NTP } 620 \end{aligned}$ | Neuroethology Seminar |
| ZOOLOGY/ ENTOM/ GENETICS 624 | Molecular Ecology |
| ZOOLOGY 625 | Development of the Nervous System |
| ZOOLOGY/ <br> BIOCHEM/ <br> PHMCOL-M 630 | Cellular Signal Transduction Mechanisms |
| ZOOLOGY/ BOTANY/ GENETICS 645 | Modeling in Population Genetics and Evolution |
| ZOOLOGY/ <br> BOTANY/ <br> ENVIR ST/ <br> F\&W ECOL 651 | Conservation Biology |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { F\&W ECOL } 660 \end{aligned}$ | Climate Change Ecology |
| ZOOLOGY/ BOTANY/ <br> F\&W ECOL 672 | Historical Ecology |
| ZOOLOGY/ NEURODPT/ PSYCH 674 | Behavioral Neuroendocrinology Seminar |
| ZOOLOGY 677 | Internship in Ecology |
| ZOOLOGY 681 \& ZOOLOGY 682 | Senior Honors Thesis and Senior Honors Thesis |
| ZOOLOGY 691 <br> \& ZOOLOGY 692 | Senior Thesis and Senior Thesis |
| ZOOLOGY 698 | Directed Study |
| ZOOLOGY 699 | Directed Studies in Zoology |
| Total Credits | 12-20 |
| maximum of 10 credits of Directed Study (ZOOLOGY 299, <br> OOLOGY 698, ZOOLOGY 699), Senior Thesis (ZOOLOGY 691, OOLOGY 692), or Senior Honors Thesis (ZOOLOGY 681, OOLOGY 682) count toward the 30 credits required for the majo <br> Approved Upper-level Biological Coursework Not in the Department of Integrative Biology ${ }^{3}$ |  |
| Code | Title Credits |
| ANAT\&PHY 338 | Human Anatomy Laboratory |
| ANAT\&PHY 335 | Physiology |
| ANTHRO 458 | Primate Behavioral Ecology |
| BIOCHEM 501 | Introduction to Biochemistry |
| BIOCHEM 507 | General Biochemistry I |
| BMOLCHEM 314 | Introduction to Human Biochemistry |
| BMOLCHEM 503 | Human Biochemistry |
| BMOLCHEM 504 | Human Biochemistry Laboratory |



## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all ZOOLOGY and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{5}$

15 credits in ZOOLOGY, or courses that count for the major, taken on the UW-Madison campus

5 ZOOLOGY 299-699, intermediate/advanced BIOCORE, and courses that count toward the major that have an intermediate/advanced designation are considered upper-level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Zoology Major in consultation with a department advisor.

## HONORS IN THE ZOOLOGY MAJOR: REQUIREMENTS

To earn Honors in the Major in Zoology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA in all courses that count toward the major
- Complete 12 credits, taken for Honors, with individual grades of B or better. Select 6 credits from the following list:

| Code | Title | Credits |
| :---: | :---: | :---: |
| ZOOLOGY/ANTHRO/ <br> BOTANY 410 | Evolutionary Biology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/BOTANY/ } \\ & \text { F\&W ECOL } 460 \end{aligned}$ | General Ecology | 4 |
| GENETICS 466 | Principles of Genetics | 3 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | -5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab | 2 |
| ZOOLOGY/AN SCI/ <br> F\&W ECOL 520 | Ornithology | 3 |
| ZOOLOGY/AN SCI/ <br> F\&W ECOL 521 | Birds of Southern Wisconsin | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 523 \end{aligned}$ | Neurobiology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 550 \end{aligned}$ | Animal Communication and the Origins of Language | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY/ <br> BOTANY/ENVIR ST/ <br> F\&W ECOL 651 | Conservation Biology | 3 |
| And complete a two-semester Senior Honors Thesis in ZOOLOGY 681 Senior Honors Thesis and ZOOLOGY 682 Senior Honors Thesis, for a total of 6 credits. ${ }^{\text {. }}$ |  |  |
| A written thesis proposal must be approved by the thesis mentor and a department advisor. While most theses are completed during the fall and spring of a student's senior year, other combinations of terms are possible. More information about the proposal process, timing, and grading of a thesis can be found on the zoology major website. |  |  |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
\(\left.$$
\begin{array}{ll}\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\\
\text { UW-Madison courses offered in distance or online } \\
\text { formats and credits earned in UW-Madison Study }\end{array}
$$ <br>

Abroad/Study Away programs.\end{array}\right\}\)| Quality of | Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or |
| :--- | :--- |
|  | academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Understand the principles of genetics.
2. Understand the principles of cellular biology.
3. Understand the principles of physiology.
4. Understand the principles of ecology.
5. Understand the principles of evolution.
6. Understand current issues in biology.
7. Provide solid connections to related disciplines of chemistry, physics and mathematics.
8. Understand how scientific information is obtained.
9. Understand biological complexity.
10. Understand the interrelationship of humans and natural systems.
11. Develop quantitative reasoning skills (ability to solve problems requiring mathematic/statistical reasoning).
12. Develop critical thinking skills (ability to identify a problem, identify the information needed to solve the problem, and develop methods for solving the problem).
13. Develop skills to effectively communicate scientific information through oral presentations.
14. Develop skills to effectively communicate scientific information through written reports.
15. Develop skills to critically evaluate scientific information.
16. Develop an ability to engage in scientific inquiry.
17. Develop an ability to plan scientific experiments.
18. Access scientific information from various electronic and print sources.
19. Apply scientific knowledge to societal issues.
20. Appreciate the diversity of life.
21. Build a strong foundation for potential graduate study.
22. Develop a sense of competence in the field of study.

## ADVISING AND CAREERS

## ADVISING

Students are encouraged to consult with a department advisor to construct individual programs appropriate to their own needs. Please use scheduling assistant or call either 608-262-2742 or 608-262-3835 to make an appointment with an advisor. Kayla Pelland (https://calendar.wisc.edu/scheduling-assistant/public/profiles/ DIdAlcHP.html;jsessionid=A292232C7EF2B8C801261B668EAE99A8.primary) is available to meet with students on Mondays, Wednesdays, and Fridays in B154 Birge Hall, and India Viola (https://calendar.wisc.edu/schedulingassistant/public/profiles/nPLtQRRK.html) is available on Tuesdays, Wednesdays, and Thursdays in 144 Birge Hall.

## DIRECTED STUDY

For students interested in a short-term undergraduate research experience in a particular area of zoology, the department offers ZOOLOGY 699 Directed Studies in Zoology. ZOOLOGY 699, recommended for juniors and seniors, is graded on an A to F scale. Students cannot take directed studies on a pass/fail basis.

Directed study allows students to gain experience in a wide range of research areas in biology and to learn research techniques that are not easily taught in the classroom. Such experiences allow students to make more informed decisions about their future goals and careers.

Before students can sign up for ZOOLOGY 699, they must set up an appointment with a professor/mentor of their choice, and work with the professor/mentor to:

1. decide the specific number of credits and
2. plan the work required to earn those credits.

Such plans can involve reviewing relevant literature in the area, developing a proposal for independent research, and/or conducting an experiment in the mentor's study area.

Students interested in doing in-depth research as undergraduates in an area of interest can elect to do a Senior Thesis or Senior Honors Thesis (see below). Students should contact a department advisor at the beginning of their junior year to explore possible research areas.

A maximum of 10 credits of directed study (ZOOLOGY 299 , ZOOLOGY 698, ZOOLOGY 699 ), senior thesis (ZOOLOGY 691, ZOOLOGY 692 ), or senior honors thesis (ZOOLOGY 681 , ZOOLOGY 682 ) will count toward the 30 credits required for the major.

## SENIOR THESIS

Students interested in making a longer-term commitment to a research project may consider undertaking a senior thesis. Students should contact a department advisor during their junior year to explore possible research areas in zoology.

Zoology Senior Thesis Requirements:

- approval of a department advisor;
- completion of ZOOLOGY 691 and ZOOLOGY 692, a two-semester thesis research sequence, during the senior year (6 credits).

It is recommended that candidates for the senior thesis take ZOOLOGY 699 during second semester junior year to prepare for the thesis.

## SENIOR THESIS AND DISTINCTION IN THE MAJOR

Upon recommendation of the department to the dean, Distinction in the Major is granted at graduation to students not earning Honors in the Major who have done superior work in the major. In addition to the requirements for a senior thesis, to graduate with Distinction in the Zoology Major, students must maintain an overall GPA of 3.300 and a GPA of 3.500 in all zoology courses in the major.

## CAREERS

The Department of Integrative Biology encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

Professors Hardin (chair, jdhardin@wisc.edu), Bement, Blair, Gammie, Halloran, Ives, Lee, Newmark, Porter, Riters, Stanley, Stretton, Turner, and Vander Zanden

Associate Professors Amann, Damschen, Grinblat, and Orrock
Assistant Professors Dugan, Sharma, and Wolman
Adjunct Professor Peckarsky

## LANGUAGE SCIENCES

Linguistics is the scientific study of language. It investigates the common principles underlying all human languages, as well as the organization of particular languages. It is expected that undergraduates with a major in linguistics will be able to:

- demonstrate a sound knowledge of the fields of phonetics (articulatory and acoustic properties of speech), phonology (the organization of the sound system of languages), morphology (the structure of words), syntax (the structure of sentences), and semantics (the interpretation of structures);
- demonstrate that they are able to analyze data in all these areas of linguistics;
- apply their linguistic training without prejudice, as expected in any science; and
- apply their analytical abilities beyond the study of linguistics.

The linguistics major program can be enriched through linguistics-related courses offered in other departments such as the language departments, the departments of psychology, philosophy, and communicative disorders.

## DEGREES/MAJORS/CERTIFICATES

- Linguistics, B.A. (p. 1037)
- Linguistics, B.S. (p. 1041)


## PEOPLE

Professors Li, Macaulay, Raimy, Salmons, Valentine; Lecturer Shields

## LINGUISTICS, B.A.

Linguistics is the scientific study of language. It investigates the common principles underlying all human languages, as well as the organization of particular languages. It is expected that undergraduates with a major in linguistics will be able to:

- demonstrate a sound knowledge of the fields of phonetics (articulatory and acoustic properties of speech), phonology (the organization of the sound system of languages), morphology (the structure of words), syntax (the structure of sentences), and semantics (the interpretation of structures);
- demonstrate that they are able to analyze data in all these areas of linguistics;
- apply their linguistic training without prejudice, as expected in any science; and
- apply their analytical abilities beyond the study of linguistics.

The linguistics major program can be enriched through linguistics-related courses offered in other departments such as the language departments, the departments of psychology, philosophy, and communicative disorders.

## HOW TO GET IN

Undergraduate students wishing to major in linguistics should consult the Requirements (http://guide.wisc.edu/undergraduate/letters-science/linguistics/linguistics-ba/\#requirementstext) tab. Students must contact the Linguistics undergraduate advisor Rebecca Shields, rashields@wisc.edu, to declare linguistics as a major. Inquire in 1168 Van Hise Hall or call 608-262-2292 for the undergraduate advisor's office hours. All students proposing to major in linguistics must consult the department's undergraduate advisor.

Any exceptions to the departmental requirements must be approved by the Degree Programs Committee of the Department of Language Sciences. Note that the undergraduate advisor of the department cannot authorize exceptions. Students requesting exceptions must prepare a written petition and submit it to the department administrator, who will then forward it to the Degree Programs Committee members.

The petition must justify the exception request by providing detailed information on the circumstances, and by including all relevant documents. The Degree Programs Committee considers each case individually on its merits. Approval is granted rarely, and only under extraordinary circumstances. Not having time to satisfy requirements before graduating is not a valid excuse.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

| L\&S Breadth | Humanities, 12 credits: 6 of the 12 credits must be in |
| :--- | :--- |
|  | literature |
|  | - |


| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

[^38]
# - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work) 

## REQUIREMENTS FOR THE MAJOR <br> LANGUAGE

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Complete the fourth unit or higher in a foreign language, | $0-16$ |
| by course or by examination |  |

Total Credits 0-16

## LINGUISTICS

30 credits as follows:

| Code | Title | Credits |
| :---: | :---: | :---: |
| LINGUIS 101 | Human Language | 3 |
| or LINGUIS/ <br> ANTHRO 301 | Introduction to Linguistics: Descriptive and Theoretical |  |
| LINGUIS 310 | Phonology | 3 |
| LINGUIS 330 | Syntax | 3 |
| LINGUIS 322 | Morphology | 3 |
| LINGUIS 340 | Semantics | 3 |
| 500-Level LINGUIS (1 course) |  | 3 |
| LINGUIS 510 | Phonological Theories |  |
| LINGUIS 522 | Advanced Morphology |  |
| LINGUIS 530 | Syntactic Theories |  |
| LINGUIS 540 | Advanced Semantics |  |
| LINGUIS 561 | Introduction to Experimental Phonetics |  |
| LINGUIS 571 | Structure of a Language |  |
| Capstone |  |  |
| LINGUIS 426 or LINGUIS 427 | Field Methods I <br> Field Methods II | 3 |
| Electives |  | 9 |
| any LINGUIS course ${ }^{1}$ |  |  |
| AFRICAN 301 | Introduction to African Linguistics |  |
| AFRICAN 500 | Language and Society in Africa |  |
| AFRICAN 503 | African Linguistic StructuresMorphology and Syntax |  |
| AMER IND/ <br> ANTHRO 314 | Indians of North America |  |
| AMER IND/ LINGUIS 371 | Survey of North American Indian Languages |  |
| AMER IND/ ANTHRO/ FOLKLORE 431 | American Indian Folklore |  |
| ANTHRO/ <br> LINGUIS 430 | Language and Culture |  |
| CS\&D 110 | Introduction to Communicative Disorders |  |
| CS\&D 201 | Speech Science |  |
| CS\&D 202 | Normal Aspects of Hearing |  |
| CS\&D 210 | Neural Basis of Communication |  |


| CS\&D 240 | Language Development in Children and Adolescents |
| :---: | :---: |
| CS\&D 303 | Speech Acoustics and Perception |
| CS\&D 315 | Phonetics and Phonological Development |
| CS\&D 440 | Child Language Disorders, Assessment and Intervention |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language |
| COMP SCI 545 | Natural Language and Computing |
| CURRIC 368 | The Teaching of Reading |
| E ASIAN 358 | Language in Japanese Society |
| E ASIAN 431 | Introduction to Chinese Linguistics |
| E ASIAN 432 | Introduction to Chinese Linguistics |
| E ASIAN 434 | Introduction to Japanese Linguistics |
| E ASIAN 631 | History of the Chinese Language |
| ENGL 314 | Structure of English |
| ENGL 315 | English Phonology |
| ENGL 316 | English Language Variation in the U.S. |
| ENGL 318 | Second Language Acquisition |
| ENGL 319 | Language, Race, and Identity |
| ENGL 413 | English Words: Grammar, Culture, Mind |
| ENGL 414 | Global Spread of English |
| ENGL 415 | Introduction to TESOL Methods |
| ENGL 416 | English in Society |
| ENGL 417 | History of the English Language |
| ENGL/ <br> GEN\&WS 419 | Gender and Language |
| ENGL 420 | Topics in English Language and Linguistics |
| ENGL 514 | English Syntax |
| ENGL 516 | English Grammar in Use |
| FOLKLORE/ <br> LIS 490 | Field Methods and the Public Presentation of Folklore |
| FOLKLORE/ COM ARTS 522 | Digitally Documenting Everyday Communication |
| ITALIAN 340 | Structures of Italian |
| ITALIAN/FRENCH PORTUG/ SPANISH 429 | Introduction to the Romance Languages |
| GERMAN 351 | Introduction to German Linguistics |
| GERMAN 352 | Topics in German Linguistics |
| GERMAN 650 | History of the German Language |
| HISTORY/ <br> AMER IND 490 | American Indian History |
| LIS 351 | Introduction to Digital Information |
| LIS 640 | Topics in Library and Information Studies (TLAM only) |
| LINGUIS 103 | Language, History, and Society |
| LINGUIS 237 | Language \& Immigration in Wisconsin |
| LINGUIS 303 | Language, History, and Society |


| LINGUIS 306 | General Phonetics |
| :---: | :---: |
| LINGUIS 309 | Grammatical Variability of Language |
| LINGUIS/ AMER IND 371 | Survey of North American Indian Languages |
| LINGUIS 373 | Topics in Linguistics |
| LINGUIS/ <br> ANTHRO 430 | Language and Culture |
| LINGUIS 610 | Topics in Phonological Theory |
| PHILOS 516 | Language and Meaning |
| PSYCH 406 | Psychology of Perception |
| PSYCH 413 | Language, Mind, and Brain |
| PSYCH 414 | Cognitive Psychology |
| PSYCH 460 | Child Development |
| PSYCH 520 | How We Read: The Science of Reading and Its Educational Implications |
| SCAND ST 410 | Introduction to Scandinavian Linguistics |
| SCAND ST 510 | Topics in Scandinavian Linguistics |
| SOC 535 | Talk and Social Interaction |
| SPANISH 320 | Spanish Phonetics |
| SPANISH 321 | The Structure of Modern Spanish |
| SPANISH 327 | Introduction to Spanish Linguistics |
| SPANISH 331 | Spanish Applied Linguistics |
| SPANISH/ <br> FRENCH/ITALIAN/ PORTUG 429 | Introduction to the Romance Languages |
| SPANISH 446 | Topics in Spanish Linguistics |
| SPANISH 543 | Spanish Phonology |
| SPANISH 544 | Contemporary Issues in Applied Spanish Linguistics |
| SPANISH 548 | Structure of the Spanish Language: Morphology and Syntax |
| SPANISH 630 | Topics in Hispanic Linguistics |

Total Credits
30
1 Except LINGUIS 236, LINGUIS 481, LINGUIS 482, LINGUIS 583, LINGUIS 584, LINGUIS 681, LINGUIS 682.

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all LINGUIS and major courses
- 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$
- 15 credits in LINGUIS taken on the UW-Madison campus

1 Intermediate- and advanced-level LINGUIS courses, LINGUIS 340, LINGUIS 373 and some elective courses from other SUBJECTS are upper level in the major (see below).

## Electives from Other SUBJECTS That Are Upper Level in the Major

## Code

AFRICAN 500
AFRICAN 50

CS\&D 201

Structure and Analysis of African
Languages
Title

## Credits

 Speech Science| CS\&D 210 | Neural Basis of Communication |  |
| :---: | :---: | :---: |
| CS\&D 303 | Speech Acoustics and Perception |  |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language |  |
| COMP SCI 545 | Natural Language and Computing |  |
| E ASIAN 358 | Language in Japanese Society |  |
| E ASIAN 431 | Introduction to Chinese Linguistics |  |
| E ASIAN 432 | Introduction to Chinese Linguistics |  |
| E ASIAN 434 | Introduction to Japanese Linguistics |  |
| E ASIAN 631 | History of the Chinese Language |  |
| E ASIAN 632 | History of the Chinese Language |  |
| ENGL/ <br> MEDIEVAL 520 | Old English |  |
| ENGL 417 | History of the English Language |  |
| ENGL 314 | Structure of English |  |
| ENGL 516 | English Grammar in Use |  |
| ENGL 514 | English Syntax |  |
| ENGL 315 | English Phonology |  |
| ENGL 316 | English Language Variation in the U.S. |  |
| ENGL 414 | Global Spread of English |  |
| ENGL 318 | Second Language Acquisition |  |
| ENGL 416 | English in Society |  |
| FRENCH/ITALIAN/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages |  |
| GERMAN 351 | Introduction to German Linguistics |  |
| GERMAN 352 | Topics in German Linguistics |  |
| GERMAN 650 | History of the German Language |  |
| GERMAN/ MEDIEVAL 651 | Introduction to Middle High German |  |
| LCA 441 | Language and Society in Southeast Asia |  |
| PHILOS 516 | Language and Meaning |  |
| $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language |  |
| SCAND ST/ MEDIEVAL 407 | Old Norse |  |
| SCAND ST/ MEDIEVAL 408 | Old Norse |  |
| SCAND ST 410 | Introduction to Scandinavian Linguistics |  |
| SCAND ST 414 | History of the Scandinavian <br> Languages I: Proto- to Common Scandinavian |  |
| SOC 535 | Talk and Social Interaction |  |
| SPANISH/ <br> INTL BUS 329 | Spanish for Business | 3 |
| SPANISH 630 | Topics in Hispanic Linguistics | 3 |

## HONORS IN THE MAJOR

Students may declare Honors in the Linguistics Major in consultation with the Linguistics Undergraduate Advisor (http://guide.wisc.edu/
undergraduate/letters-science/linguistics/linguistics-ba/ \#advisingandcareerstext).

## HONORS IN THE LINGUISTICS MAJOR: REQUIREMENTS

To earn Honors in the Major in Linguistics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all LINGUIS courses, and all courses accepted in the major
- Complete two LINGUIS courses, taken for Honors credit, with individual grades of $B$ or better
- Complete a two-semester Senior Honors Thesis in LINGUIS 681 Honors Seminar-Senior Thesis and LINGUIS 682 Honors SeminarSenior Thesis, leading to submission of an acceptable paper, for a total of 6 credits. $A$ grade of $B$ or better must be earned in the thesis project.

Note that Honors tutorial credits and the Senior Honors Thesis do not count toward the 30 credits required for the major in linguistics.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Familiarity with data from a wide range of languages from different language families.
2. Ability to respond to biased views of language in their communities.
3. Knowledge in all core areas of linguistics: Phonetics, phonology, morphology, syntax, and semantics.
4. Sound grasp of linguistic concepts.
5. Sound grasp of linguistic methodology.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISING

Rebecca Shields, Undergraduate Advisor rashields@wisc.edu

Contact the undergraduate advisor to set up an appointment to learn more about the major, careers in linguistics, and opportunities for the study of language sciences across campus.

## LETTERS \& SCIENCE CAREER SERVICES

The Department of Language Sciences encourages our majors to begin working on their career exploration and preparation soon after declaring their major. Our career advisor also partners with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Professors Li, Macaulay, Raimy, Salmons, Valentine; Lecturer Shields

## LINGUISTICS, B.S.

Linguistics is the scientific study of language. It investigates the common principles underlying all human languages, as well as the organization of particular languages. It is expected that undergraduates with a major in linguistics will be able to:

- demonstrate a sound knowledge of the fields of phonetics (articulatory and acoustic properties of speech), phonology (the organization of the sound system of languages), morphology
(the structure of words), syntax (the structure of sentences), and semantics (the interpretation of structures);
- demonstrate that they are able to analyze data in all these areas of linguistics;
- apply their linguistic training without prejudice, as expected in any science; and
- apply their analytical abilities beyond the study of linguistics.

The linguistics major program can be enriched through linguistics-related courses offered in other departments such as the language departments, the departments of psychology, philosophy, and communicative disorders.

## HOW TO GET IN

Undergraduate students wishing to major in linguistics should consult the Requirements (http://guide.wisc.edu/undergraduate/letters-science/linguistics/linguistics-ba/\#requirementstext) tab. Students must contact the Linguistics undergraduate advisor Rebecca Shields, rashields@wisc.edu, to declare linguistics as a major. Inquire in 1168 Van Hise Hall or call 608-262-2292 for the undergraduate advisor's office hours. All students proposing to major in linguistics must consult the department's undergraduate advisor.

Any exceptions to the departmental requirements must be approved by the Degree Programs Committee of the Department of Language Sciences. Note that the undergraduate advisor of the department cannot authorize exceptions. Students requesting exceptions must prepare a written petition and submit it to the department administrator, who will then forward it to the Degree Programs Committee members.

The petition must justify the exception request by providing detailed information on the circumstances, and by including all relevant documents. The Degree Programs Committee considers each case individually on its merits. Approval is granted rarely, and only under extraordinary circumstances. Not having time to satisfy requirements before graduating is not a valid excuse.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |$\quad$| work |  |
| :--- | :--- |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR
LANGUAGE

| Code Title | Credits |
| :--- | ---: |
| Complete the fourth unit or higher in a foreign language, | $0-16$ |
| by course or by examination |  |


| Total Credits | $0-16$ |
| :--- | :--- |

LINGUISTICS
30 credits as follows:

| Code | Title | Credits |
| :---: | :---: | :---: |
| LINGUIS 101 <br> or LINGUIS/ <br> ANTHRO 301 | Human Language <br> Introduction to Linguistics: Descriptive and Theoretical | 3 |
| LINGUIS 310 | Phonology | 3 |
| LINGUIS 330 | Syntax | 3 |
| LINGUIS 322 | Morphology | 3 |
| LINGUIS 340 | Semantics | 3 |
| 500-Level LINGUIS (1 course) |  | 3 |
| LINGUIS 510 | Phonological Theories |  |
| LINGUIS 522 | Advanced Morphology |  |
| LINGUIS 530 | Syntactic Theories |  |
| LINGUIS 540 | Advanced Semantics |  |
| LINGUIS 561 | Introduction to Experimental Phonetics |  |
| LINGUIS 571 | Structure of a Language |  |
| Capstone |  |  |
| LINGUIS 426 or LINGUIS 427 | Field Methods I <br> Field Methods II | 3 |
| Electives |  | 9 |
| any LINGUIS course ${ }^{1}$ |  |  |
| AFRICAN 301 | Introduction to African Linguistics |  |
| AFRICAN 500 | Language and Society in Africa |  |
| AFRICAN 503 | African Linguistic StructuresMorphology and Syntax |  |
| AMER IND/ ANTHRO 314 | Indians of North America |  |
| AMER IND/ LINGUIS 371 | Survey of North American Indian Languages |  |
| AMER IND/ <br> ANTHRO/ <br> FOLKLORE 431 | American Indian Folklore |  |


| ANTHRO/ <br> LINGUIS 430 | Language and Culture |
| :---: | :---: |
| CS\&D 110 | Introduction to Communicative Disorders |
| CS\&D 201 | Speech Science |
| CS\&D 202 | Normal Aspects of Hearing |
| CS\&D 210 | Neural Basis of Communication |
| CS\&D 240 | Language Development in Children and Adolescents |
| CS\&D 303 | Speech Acoustics and Perception |
| CS\&D 315 | Phonetics and Phonological Development |
| CS\&D 440 | Child Language Disorders, Assessment and Intervention |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language |
| COMP SCI 545 | Natural Language and Computing |
| CURRIC 368 | The Teaching of Reading |
| E ASIAN 358 | Language in Japanese Society |
| E ASIAN 431 | Introduction to Chinese Linguistics |
| E ASIAN 432 | Introduction to Chinese Linguistics |
| E ASIAN 434 | Introduction to Japanese Linguistics |
| E ASIAN 631 | History of the Chinese Language |
| ENGL 314 | Structure of English |
| ENGL 315 | English Phonology |
| ENGL 316 | English Language Variation in the U.S. |
| ENGL 318 | Second Language Acquisition |
| ENGL 319 | Language, Race, and Identity |
| ENGL 413 | English Words: Grammar, Culture, Mind |
| ENGL 414 | Global Spread of English |
| ENGL 415 | Introduction to TESOL Methods |
| ENGL 416 | English in Society |
| ENGL 417 | History of the English Language |
| ENGL/ GEN\&WS 419 | Gender and Language |
| ENGL 420 | Topics in English Language and Linguistics |
| ENGL 514 | English Syntax |
| ENGL 516 | English Grammar in Use |
| FOLKLORE/ <br> LIS 490 | Field Methods and the Public Presentation of Folklore |
| FOLKLORE/ COM ARTS 522 | Digitally Documenting Everyday Communication |
| ITALIAN 340 | Structures of Italian |
| ITALIAN/FRENCH PORTUG/ SPANISH 429 | Introduction to the Romance Languages |
| GERMAN 351 | Introduction to German Linguistics |
| GERMAN 352 | Topics in German Linguistics |
| GERMAN 650 | History of the German Language |
| HISTORY/ <br> AMER IND 490 | American Indian History |


| LIS 351 | Introduction to Digital Information |
| :---: | :---: |
| LIS 640 | Topics in Library and Information Studies (TLAM only) |
| LINGUIS 103 | Language, History, and Society |
| LINGUIS 237 | Language \& Immigration in Wisconsin |
| LINGUIS 303 | Language, History, and Society |
| LINGUIS 306 | General Phonetics |
| LINGUIS 309 | Grammatical Variability of Language |
| LINGUIS/ AMERIND 371 | Survey of North American Indian Languages |
| LINGUIS 373 | Topics in Linguistics |
| LINGUIS/ ANTHRO 430 | Language and Culture |
| LINGUIS 610 | Topics in Phonological Theory |
| PHILOS 516 | Language and Meaning |
| PSYCH 406 | Psychology of Perception |
| PSYCH 413 | Language, Mind, and Brain |
| PSYCH 414 | Cognitive Psychology |
| PSYCH 460 | Child Development |
| PSYCH 520 | How We Read: The Science of Reading and Its Educational Implications |
| SCAND ST 410 | Introduction to Scandinavian Linguistics |
| SCAND ST 510 | Topics in Scandinavian Linguistics |
| SOC 535 | Talk and Social Interaction |
| SPANISH 320 | Spanish Phonetics |
| SPANISH 321 | The Structure of Modern Spanish |
| SPANISH 327 | Introduction to Spanish Linguistics |
| SPANISH 331 | Spanish Applied Linguistics |
| SPANISH/ <br> FRENCH/ITALIAN/ PORTUG 429 | Introduction to the Romance Languages |
| SPANISH 446 | Topics in Spanish Linguistics |
| SPANISH 543 | Spanish Phonology |
| SPANISH 544 | Contemporary Issues in Applied Spanish Linguistics |
| SPANISH 548 | Structure of the Spanish Language: Morphology and Syntax |
| SPANISH 630 | Topics in Hispanic Linguistics |

Total Credits 30
1 Except LINGUIS 236, LINGUIS 481, LINGUIS 482, LINGUIS 583, LINGUIS 584, LINGUIS 681, LINGUIS 682.

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all LINGUIS and major courses
- 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$
- 15 credits in LINGUIS taken on the UW-Madison campus

1 Intermediate- and advanced-level LINGUIS courses, LINGUIS 340, LINGUIS 373 and some elective courses from other SUBJECTS are upper level in the major (see below).

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFRICAN 500 | Language and Society in Africa |  |
| AFRICAN 501 | Structure and Analysis of African Languages |  |
| CS\&D 201 | Speech Science |  |
| CS\&D 210 | Neural Basis of Communication |  |
| CS\&D 303 | Speech Acoustics and Perception |  |
| CS\&D 503 | Neural Mechanisms of Speech, Hearing and Language |  |
| COMP SCI 545 | Natural Language and Computing |  |
| E ASIAN 358 | Language in Japanese Society |  |
| E ASIAN 431 | Introduction to Chinese Linguistics |  |
| E ASIAN 432 | Introduction to Chinese Linguistics |  |
| E ASIAN 434 | Introduction to Japanese Linguistics |  |
| E ASIAN 631 | History of the Chinese Language |  |
| E ASIAN 632 | History of the Chinese Language |  |
| ENGL/ <br> MEDIEVAL 520 | Old English |  |
| ENGL 417 | History of the English Language |  |
| ENGL 314 | Structure of English |  |
| ENGL 516 | English Grammar in Use |  |
| ENGL 514 | English Syntax |  |
| ENGL 315 | English Phonology |  |
| ENGL 316 | English Language Variation in the U.S. |  |
| ENGL 414 | Global Spread of English |  |
| ENGL 318 | Second Language Acquisition |  |
| ENGL 416 | English in Society |  |
| FRENCH/ITALIAN/ PORTUG/ SPANISH 429 | Introduction to the Romance Languages |  |
| GERMAN 351 | Introduction to German Linguistics |  |
| GERMAN 352 | Topics in German Linguistics |  |
| GERMAN 650 | History of the German Language |  |
| GERMAN/ <br> MEDIEVAL 651 | Introduction to Middle High German |  |
| LCA 441 | Language and Society in Southeast Asia |  |
| PHILOS 516 | Language and Meaning |  |
| $\begin{aligned} & \text { PSYCH/ } \\ & \text { ZOOLOGY } 550 \end{aligned}$ | Animal Communication and the Origins of Language |  |
| SCAND ST/ MEDIEVAL 407 | Old Norse |  |
| SCAND ST/ MEDIEVAL 408 | Old Norse |  |
| SCAND ST 410 | Introduction to Scandinavian Linguistics |  |
| SCAND ST 414 | History of the Scandinavian Languages I: Proto- to Common Scandinavian |  |
| SOC 535 | Talk and Social Interaction |  |

SPANISH/

INTL BUS 329
SPANISH 630
Spanish for Business
Topics in Hispanic Linguistics

## HONORS IN THE MAJOR

Students may declare Honors in the Linguistics Major in consultation with the Linguistics Undergraduate Advisor (http://guide.wisc.edu/ undergraduate/letters-science/linguistics/linguistics-ba/ \#advisingandcareerstext).

## HONORS IN THE LINGUISTICS MAJOR: REQUIREMENTS

To earn Honors in the Major in Linguistics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all LINGUIS courses, and all courses accepted in the major
- Complete two LINGUIS courses, taken for Honors credit, with individual grades of $B$ or better
- Complete a two-semester Senior Honors Thesis in LINGUIS 681 Honors Seminar-Senior Thesis and LINGUIS 682 Honors SeminarSenior Thesis, leading to submission of an acceptable paper, for a total of 6 credits. A grade of $B$ or better must be earned in the thesis project.

Note that Honors tutorial credits and the Senior Honors Thesis do not count toward the 30 credits required for the major in linguistics.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Familiarity with data from a wide range of languages from different language families.
2. Ability to respond to biased views of language in their communities.
3. Knowledge in all core areas of linguistics: Phonetics, phonology, morphology, syntax, and semantics.

## ADVISING AND CAREERS

## UNDERGRADUATE ADVISING

Rebecca Shields, Undergraduate Advisor rashields@wisc.edu

Contact the undergraduate advisor to set up an appointment to learn more about the major, careers in linguistics, and opportunities for the study of language sciences across campus.

## LETTERS \& SCIENCE CAREER SERVICES

The Department of Language Sciences encourages our majors to begin working on their career exploration and preparation soon after declaring their major. Our career advisor also partners with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Professors Li, Macaulay, Raimy, Salmons, Valentine; Lecturer Shields

## LETTERS \& SCIENCE - COLLEGEWIDE

## DEGREES/MAJORS/CERTIFICATES

[^39]- Biochemistry, B.S. (L\&S) (p. 1054)
- College of Letters \& Science Honors in the Liberal Arts (http:// guide.wisc.edu/undergraduate/letters-science/college-wide/college-letters-science-honors-liberal-arts)
- Individual Major, B.A. (p. 1063)
- Individual Major, B.S. (p. 1066)
- Microbiology, B.A. (L\&S) (p. 1068)
- Microbiology, B.S. (L\&S) (p. 1072)


## BIOCHEMISTRY, B.A. (L\&S)

Biochemistry is a very broad science that studies the molecules and chemistry of life. Biochemistry focuses on the structure, properties, and interactions of molecules such as proteins, nucleic acids, sugars and lipids. Biochemistry's aim is to understand how these molecules participate in the processes that support the various functions of the living cell. These studies are therefore essential for understanding disease and finding cures, for improving agriculture and the production of food and biofuels, and to produce innovation in biotechnology.

Whereas other biological science majors may focus on cellular, organismal or population level biology, biochemistry focuses on processes that occur at the molecular to cellular levels. Therefore, this major has a greater focus on basic and quantitative sciences, such as math and, particularly, on chemistry.

Biochemistry graduates go on to a variety of careers in science and science-related fields. The major is designed to fit the needs of the student who wishes to achieve bachelor's level training as well as those planning to pursue graduate or professional study. The degree serves as an excellent background for medical school or veterinary school admission, as well as for graduate study in biochemistry or other allied fields (biology, bacteriology, genetics, molecular biology, or oncology).

## HOW TO GET IN

Students may declare the major via an appointment with the undergraduate advisor at any time. Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences (CALS) have the option to declare biochemistry at SOAR. Students may otherwise declare after they have begun their undergraduate studies. The biochemistry major is offered through either CALS or the College of Letters \& Science (L\&S). Students interested in the differences or transferring between CALS and L\&S should meet with the advisor to discuss this in more detail. Students in other schools/colleges (Business, Education, Engineering, etc.) may add biochemistry as an additional major with permission of their home school/college.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for
living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

 Education- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics
Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b$ ( $Q R B$ ) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

Liberal Arts and Science Coursework Intermediate/
Advanced
work

Depth of 60 intermediate or advanced credits

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

108 credits

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

## - Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics) <br> - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work)

## REQUIREMENTS FOR THE MAJOR

## MATHEMATICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following options: |  |  |
| MATH 221 <br> \& MATH 222 | Calculus and Analytic Geometry 1 and Calculus and Analytic Geometry 2 | 9 |
| MATH 171 <br> \& MATH 217 <br> \& MATH 222 | Calculus with Algebra and <br> Trigonometry I <br> and Calculus with Algebra and <br> Trigonometry II <br> and Calculus and Analytic Geometry 2 | 14 |
| MATH 275 <br> \& MATH 276 | Topics in Calculus I and Topics in Calculus II | 10 |
| CHEMISTRY <br> General Chemistry |  |  |
| Code | Title | Credits |
| Select one of the following options: |  |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II | 9 |
| CHEM 109 | Advanced General Chemistry | 5 |
| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II (satisfies both general and analytical chemistry requirements) | 10 |

## Organic Chemistry

## Code Title

Credits
Select ALL of the following courses:
CHEM 343 Introductory Organic Chemistry

| CHEM 345 | Intermediate Organic Chemistry | 3 |
| :--- | :--- | :--- |
| CHEM 344 | Introductory Organic Chemistry | 2 |
|  | Laboratory |  |

## Analytical Chemistry

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following options: |  |  |
| CHEM 327 | Fundamentals of Analytical Science | 4 |
| CHEM 329 | Fundamentals of Analytical Science | 4 |
| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II (satisfies both general and analytical chemistry requirements) | 10 |

## Physical Chemistry

Code Title Credits

Must complete 4 credits of physical chemistry. Select one of the following options:

| CHEM 565 | Biophysical Chemistry <br> (recommended) | 4 |
| :--- | :--- | :---: |
| CHEM 561 | Physical Chemistry <br> \& CHEM 563 | and Physical Chemistry Laboratory |

## BIOLOGY

Students must complete either Option A (introductory + upper-level biology), or Option B (Biocore), for 16 total credits of biological science coursework.

## Option A (Introductory + Upper-Level Biology) Option A Introductory Biology

Code Title Credits

Select one of the following introductory biology options:
BIOLOGY/BOTANY/ Introductory Biology 10
ZOOLOGY 151 and Introductory Biology
\& BIOLOGY/BOTANY/ (recommended)
ZOOLOGY 152
BIOLOGY/ Animal Biology 10
ZOOLOGY 101 and Animal Biology Laboratory
\& BIOLOGY/ and General Botany
ZOOLOGY 102
\& BOTANY/
BIology 130

## AND Option A Upper-Level Biology

At least 6 credits of upper-level biological science coursework are required (to achieve 16 total credits-more than 6 credits may be required if introductory biology totals less than 10 credits due to transfer credits). Select from the course list below. To see courses offered in specific upcoming semesters, please see the Biochemistry website (https:// biochem.wisc.edu/undergraduate_program/advanced-biology-courses-undergraduate-program).

Important: Biochemistry courses on this list can count only for "upper-level biology" if they are above-and-beyond what is needed to fulfill the "biochemistry" portion of the major. For example, if students have taken BIOCHEM 501, they will need one upper-level biochemistry elective to fulfill the biochemistry
requirement, and then any additional biochemistry courses taken can count for upper-level biology. A course may not double count in both the "upper-level biology" and the "biochemistry" requirements for the major.

|  |  |  | ANSCI 512 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Title | Credits | AN SCI/ | Commercial Meat Processing | 2 |
| ANAT\&PHY 335 | Physiology | 5 | FOOD SCI 515 |  |  |
| ANAT\&PHY 337 | Human Anatomy | 3 | AN SCI/F\&W ECOL/ | Ornithology | 3 |
| ANAT\&PHY 435 | Fundamentals of Human Physiology | 5 | AN SCI/F\&W ECOL/ | Birds of Southern Wisconsin | 3 |
| AGRONOMY 300 | Cropping Systems | 3 | ZOOLOGY 521 |  |  |
| AGRONOMY 302 | Forage Management and Utilization | 3 | AN SCI/ <br> NUTR SCI 626 | Experimental Diet Design | 1 |
| AGRONOMY/HORT/ <br> SOIL SCI 326 | Plant Nutrition Management | 3 | B M E/ANATOMY/ MED PHYS/ | Microscopy of Life | 3 |
| AGRONOMY/ <br> HORT 328 | Integrated Weed Management | 4 | PHMCOL-M/ PHYSICS/ |  |  |
| AGRONOMY/ | Plant Breeding and Biotechnology | 3 | RADIOL 619 |  |  |
| HORT 338 | Plant Biotechnology: Principles an | 4 | BIOCHEM/ | Biochemical Principles of Human | 3 |
| BOTANY/HORT 339 | Techniques I |  | BIOCHEM 550 | Topics in Medical Biochemistry | 2 |
| AGRONOMY/ <br> BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering | 4 | BIOCHEM/ <br> M M \& 575 | Biology of Viruses | 2 |
| AGRONOMY/ A A E/INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 | BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 | BIOCHEM/B M I/ <br> BMOLCHEM/ <br> MATH 606 | Mathematical Methods for Structural Biology | 3 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 | BIOCHEM/B M I/ BMOLCHEM/ | Mathematical Methods for Systems Biology | 3 |
| AGRONOMY/ HORT 501 | Principles of Plant Breeding | 3 | MATH 609 | Prokaryotic Molecular Biology | 3 |
| AGRONOMY/ <br> ATM OCN/ | Environmental Biophysics | 3 | GENETICS/ <br> MICROBIO 612 |  |  |
| SOIL SCI 532 |  |  | BIOCHEM/ | Advanced Nutrition: Intermediary | 3 |
| AN SCI/ | Introduction to Meat Science and | 4 | NUTR SCI 619 | Metabolism of Macronutrients |  |
| FOOD SCI 305 | Technology |  | BIOCHEM/ | Eukaryotic Molecular Biology | 3 |
| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 | GENETICS/ <br> MD GENET 620 |  |  |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 | BIOCHEM/ | Plant Biochemistry | 3 |
| AN SCI 314 | Poultry Nutrition | 3 | BOTANY 621 |  |  |
| AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 | BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals | 2 |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 | BIOCHEM/PHMCOL <br> M/ZOOLOGY 630 | Cellular Signal Transduction Mechanisms | 3 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 | BIOCHEM/ | Molecular Control of Metabolism | 3 |
| AN SCI/DY SCl 363 | Principles of Animal Breeding | 2 | NUTR SCI 645 | and Metabolic Disease |  |
| AN SCI/DY SCI 370 | Livestock Production and Health in Agricultural Development | 3 | BSE 349 | Quantitative Techniques for Biological Systems | 3 |
| AN SCI/DY SCI 414 | Ruminant Nutrition | 2 | BSE 364 | Engineering Properties of Food and Biological Materials | 3 |
| AN SCI 415 | Application of Monogastric Nutrition Principles | 2 | BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| AN SCI 430 | Sheep Production | 3 |  |  |  |
| AN SCI 431 | Beef Cattle Production | 3 | BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| AN SCI 432 | Swine Production | 3 | BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| AN SCI/DY SCI 434 | Reproductive Physiology | 3 | BSE 461 | Food and Bioprocessing Operations | 3 |
| AN SCI 503 | Avian Physiology | 3 |  | Food and Bioprocessing Operations |  |


| BSE 472 | Sediment and Bio-Nutrient Engineering and Management | 3 |
| :---: | :---: | :---: |
| BSE/FOOD SCI 542 | Food Engineering Operations | 4 |
| BSE/FOOD SCI 642 | Food and Pharmaceutical Separations | 2-3 |
| BMOLCHEM 504 | Human Biochemistry Laboratory | 3 |
| BMOLCHEM/ MICROBIO 668 | Microbiology at Atomic Resolution | 3 |
| B M I/STAT 541 | Introduction to Biostatistics | 3 |
| B M I/COMP SCI 576 | Introduction to Bioinformatics | 3 |
| BOTANY 300 | Plant Anatomy | 4 |
| BOTANY 305 | Plant Morphology and Evolution | 4 |
| BOTANY 330 | Algae | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi | 4 |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques I | 4 |
| BOTANY 400 | Plant Systematics | 4 |
| BOTANY 401 | Vascular Flora of Wisconsin | 4 |
| botany/ <br> F\&W ECOL 402 | Dendrology | 2 |
| BOTANY/ANTHRO/ ZOOLOGY 410 | Evolutionary Biology | 3 |
| BOTANY 422 | Plant Geography | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology | 4 |
| BOTANY/ENTOM/ ZOOLOGY 473 | Plant-Insect Interactions | 3 |
| BOTANY/AMER IND/ ANTHRO 474 | Ethnobotany | 3-4 |
| BOTANY 500 | Plant Physiology | 3-4 |
| BOTANY/ENTOM/ <br> PLPATH 505 | Plant-Microbe Interactions: Molecular and Ecological Aspects | 3 |
| BOTANY/GENETICS/ <br> HORT 561 | Introductory Cytogenetics | 2-3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| BOTANY/HORT/ <br> SOIL SCI 626 | Mineral Nutrition of Plants | 3 |
| BOTANY/GENETICS/ <br> ZOOLOGY 645 | Modeling in Population Genetics and Evolution | 3 |
| BOTANY/ENVIR ST/ F\&W ECOL/ ZOOLOGY 651 | Conservation Biology | 3 |
| BOTANY/GENETICS/ <br> M M \& I/MICROBIO/ <br> PLPATH 655 | Biology and Genetics of Fungi | 3 |
| BOTANY/ <br> LAND ARC 670 | Adaptive Restoration Lab | 2 |
| CRB 650 | Molecular and Cellular Organogenesis | 3 |
| CRB 675 | Topics in Cell and Regenerative Biology ${ }^{\text {Stem Cell Seminar }}$ | 1-3 |


| DY SCI 305 | Lactation Physiology | 3 |
| :---: | :---: | :---: |
| DY SCI 535 | Dairy Farm Management Practicum | 3 |
| ENTOM/ ZOOLOGY 302 | Introduction to Entomology | 4 |
| ENTOM 321 | Physiology of Insects | 3 |
| ENTOM 331 | Taxonomy of Mature Insects | 4 |
| ENTOM 342 | Insect Ecology | 3 |
| ENTOM 351 | Principles of Economic Entomology | 3 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 371 \end{aligned}$ | Medical Entomology | 3 |
| ENTOM 432 | Taxonomy and Bionomics of Immature Insects | 4 |
| ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 |
| ENTOM/ <br> ZOOLOGY 530 | Insect Behavior | 3 |
| ENTOM/ ZOOLOGY 540 | Theoretical Ecology | 3 |
| ENTOM/GENETICS/ ZOOLOGY 624 | Molecular Ecology | 3 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| ENVIR ST/ POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ POP HLTH 502 | Air Pollution and Human Health | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENVIR ST/ <br> ATM OCN 520 | Bioclimatology | 3 |
| ENVIR ST/A A E/ F\&W ECOL 652 | Decision Methods for Natural Resource Managers | 3-4 |
| FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory | 2 |
| FOOD SCI/ <br> MICROBIO 325 | Food Microbiology | 3 |
| FOOD SCI 410 | Food Chemistry | 3 |
| FOOD SCI 440 | Principles of Food Engineering | 3 |
| FOOD SCI 511 | Chemistry and Technology of Dairy Products | 3 |
| FOOD SCI 512 | Principles of Food Chemistry-Lab | 2 |
| FOOD SCI 514 | Integrated Food Functionality | 4 |
| FOOD SCI 550 | Fermented Foods and Beverages | 2 |
| FOOD SCI 610 | Food Proteins | 2 |
| FOOD SCI 611 | Chemistry and Technology of Dairy Products | 3 |
| FOOD SCI/ <br> MICROBIO 650 | Advanced Microbiology of Foodborne Pathogens | 3 |
| F\&W ECOL 300 | Forest Biometry | 4 |
| F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology | 4 |
| F\&W ECOL/ <br> HORT/LAND ARC/ <br> PL PATH 309 | Diseases of Trees and Shrubs | 3 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |


| F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: Biological and Philosophical Issues | 3 | M M \& I/ENTOM/ PATH-BIO/ | Parasitology | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F\&W ECOL/ | Extinction of Species | 3 | ZOOLOGY 350 |  |  |
| ENVIR ST/ <br> ZOOLOGY 360 |  |  | M M \& I/PATH-BIO/ ZOOLOGY 351 | Parasitology Laboratory | 2 |
| F\&W ECOL 379 | Principles of Wildlife Management | 3 | M M \& 1410 | Medical Mycology | 2 |
| F\&W ECOL 401 | Physiological Animal Ecology | 3 | M M \& 1412 | Medical Mycology Laboratory | 1 |
| F\&W ECOL 404 | Wildlife Damage Management | 3 | M M \& \\| 460 | Techniques in DNA Science for | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 |  | Microbiologists |  |
| F\&W ECOL 415 | Tree Physiology | 3 | M M \& I/MICROBIO/ | Immunology | 3 |
| F\&W ECOL/ | Diseases of Wildlife | 3 | PATH-BIO 528 |  |  |
| SURG SCI 548 |  |  | M M \& I/PATH- | Immunology Laboratory | 2 |
| F\&W ECOL 550 | Forest Ecology | 3 | BIO 529 |  |  |
| F\&W ECOL 561 | Wildlife Management Techniques | 3 | M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 |
| F\&W ECOL/ LAND ARC/ ZOOLOGY 565 | Principles of Landscape Ecology | 2 | M M \& I 555 | Vaccines: Practical Issues for a Global Society | 3 |
| F\&W ECOL 590 | Integrated Resource Management | 3 | M M \& I/ POP HLTH 603 | Clinical and Public Health Microbiology | 5 |
| F\&W ECOL/ AGRONOMY/ ENTOM/ | Ecotoxicology: The Chemical Players | 1 | MED PHYS/ <br> H ONCOL 410 | Radiobiology | 2-3 |
| M\&ENVTOX 632 |  |  | MED PHYS/ | Radiological Physics and Dosimetry | 3 |
| F\&W ECOL/ AGRONOMY/ | Ecotoxicology: Impacts on Individuals | 1 | B M E/H ONCOL/ PHYSICS 501 |  |  |
| ENTOM/ |  |  | MICROBIO 303 | Biology of Microorganisms | 3 |
| M\&ENVTOX 633 |  |  | MICROBIO 304 | Biology of Microorganisms | 2 |
| F\&W ECOL/ | Ecotoxicology: Impacts on | 1 |  | Laboratory |  |
| AGRONOMY/ | Populations, Communities and |  | MICROBIO 330 | Host-Parasite Interactions | 3 |
| ENTOM/ <br> M\&ENVTOX 634 | Ecosystems |  | MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| F\&W ECOL 635 | Forest Stand Dynamics | 1-2 | MICROBIO 450 | Diversity, Ecology and Evolution of | 3 |
| F\&W ECOL 655 | Animal Population Dynamics | 3 |  | Microrrganisms |  |
| GENETICS 466 | Principles of Genetics | 3 | MICROBIO 470 | Microbial Genetics \& Molecular | 3 |
| GENETICS 467 | General Genetics 1 | 3 |  | Machines |  |
| GENETICS 468 | General Genetics 2 | 3 | MICROBIO/ | Soil Microbiology and Biochemistry | 3 |
| GENETICS 545 | Genetics Laboratory | 2 | SOIL SCI 523 |  |  |
| GENETICS/ | Molecular Approaches for Potential | 3 | MICROBIO 526 | Physiology of Microorganisms | 3 |
| HORT 550 | Crop Improvement |  | MICROBIO 527 | Advanced Laboratory Techniques in | 2 |
| GENETICS/ | Human Cytogenetics | 2 |  | Microbiology |  |
| MD GENET/ ZOOLOGY 562 |  |  | MICROBIO 551 | Capstone Research Project in Microbiology | 2 |
| GENETICS/ <br> MD GENET 565 | Human Genetics | 3 | MICROBIO/ <br> PLPATH 622 | Plant-Bacterial Interactions | 2-3 |
| GENETICS 566 | Advanced Genetics | 3 | MICROBIO 625 | Advanced Microbial Physiology | 3 |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics | 3 | MICROBIO 632 | Industrial Microbiology/ Biotechnology | 2 |
| GENETICS/ <br> AN SCI 610 | Quantitative Genetics | 3 | MICROBIO/ ONCOLOGY/ | General Virology-Multiplication of Viruses | 3 |
| HORT 320 | Environment of Horticultural Plants | 3 | PL PATH 640 |  |  |
| HORT/ | Principles of Plant Breeding | 3 | NEURODPT 533 | Molecular Physiology | 2 |
| AGRONOMY 501 |  |  | NTP/ | Cellular and Molecular | 4 |
| M M \& l 301 | Pathogenic Bacteriology | 2 | NEURODPT 610 | Neuroscience |  |
| M M \& 302 | Medical Microbiology Laboratory | 3 | NTP/NEURODPT/ | Systems Neuroscience | 4 |
| M M \& I 341 | Immunology | 3 | PSYCH 611 |  |  |


| NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 |
| :---: | :---: | :---: |
| NUTR SCI 332 | Human Nutritional Needs | 3 |
| NUTR SCI 431 | Nutrition in the Life Span | 3 |
| NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |
| ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| ONCOLOGY/ <br> M\&ENVTOX/ <br> MEDICINE/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| PEDIAT 646 | Cancer Genetics Risk Assessment and Counseling | 2 |
| PHM SCI 310 | Drugs and Their Actions | 2 |
| PHM SCI 401 | Survey of Pharmacology | 3 |
| PHM SCI/B M E 430 | Biological Interactions with Materials | 3 |
| PHYSICS/ <br> ANATOMY/B M E/ <br> MED PHYS/ <br> PHMCOL-M/ <br> RADIOL 619 | Microscopy of Life | 3 |
| PHYSIOL/NTP 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| PL PATH 300 | Introduction to Plant Pathology | 4 |
| PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| PL PATH 517 | Plant Disease Resistance | 2-3 |
| PL PATH 558 | Biology of Plant Pathogens | 3 |
| PL PATH 559 | Diseases of Economic Plants | 3 |
| PL PATH 602 | Ecology, Epidemiology and Control of Plant Diseases | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry | 3 |
| SOIL SCI/ CIV ENGR 623 | Microbiology of Waterborne Pathogens and Indicator Organisms | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: Sources, Distribution, Fate, \& Effects | 3 |
| ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab | 2 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY 425 | Behavioral Ecology | 3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates | 5 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |


| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab | 2 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 523 \end{aligned}$ | Neurobiology | 3 |
| ZOOLOGY 535 | Ecosystem Analysis | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 541 \end{aligned}$ | Paleobiology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { PSYCH } 550 \end{aligned}$ | Animal Communication and the Origins of Language | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory | 2 |
| ZOOLOGY/ANTHRO/ NTP/PSYCH 619 | Biology of Mind | 3 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |

## Option B (Biocore)

Biocore is an honors-level, integrated sequence of lecture and lab courses that covers introductory and intermediate biology topics. Students must apply and be accepted to the program to take BIOCORE classes.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select ALL of the following lecture courses: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics | 3 |
| BIOCORE 383 | Cellular Biology | 3 |
| BIOCORE 485 | Organismal Biology | 3 |
| BIOCORE 587 | Biological Interactions | 3 |
| AND, select two of the following lab classes: |  |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics | 2 |
| BIOCORE 384 | Laboratory | Cellular Biology Laboratory |
| BIOCORE 486 | Organismal Biology Laboratory | 2 |

## PHYSICS (CALCULUS-BASED) ${ }^{1}$

Code Title Credits
Select one of the following options:
PHYSICS 207 General Physics 10
\& PHYSICS 208 and General Physics (recommended)
PHYSICS 201 General Physics 10
\& PHYSICS 202 and General Physics
1 Honors students may use PHYSICS 247 A Modern Introduction to Physics \& PHYSICS 248 A Modern Introduction to Physics to satisfy this requirement. Students should consult with their advisor if they have credit for PHYSICS 103 General Physics and/or PHYSICS 104 General Physics to discuss options.

## BIOCHEMISTRY

One set of introductory coursework and the capstone course are required, for a total of three BIOCHEM courses.

| Introductory Courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select one of the following options: |  |  |
| BIOCHEM 507 <br> \& BIOCHEM 508 | General Biochemistry I and General Biochemistry II (recommended) | 6 |
| OR |  |  |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| AND one of the following upper-level biochemistry electives: |  |  |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition |  |
| BIOCHEM 550 | Topics in Medical Biochemistry |  |
| BIOCHEM/ <br> M M \& I 575 | Biology of Viruses |  |
| BIOCHEM 601 | Protein and Enzyme Structure and Function |  |
| BIOCHEM/B M I/ BMOLCHEM/ MATH 606 | Mathematical Methods for Structural Biology |  |
| BIOCHEM/B M I/ <br> BMOLCHEM/ <br> MATH 609 | Mathematical Methods for Systems Biology |  |
| BIOCHEM/ <br> GENETICS/ <br> MICROBIO 612 | Prokaryotic Molecular Biology |  |
| BIOCHEM/ <br> GENETICS/ <br> MD GENET 620 | Eukaryotic Molecular Biology |  |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry |  |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals |  |
| BIOCHEM/ <br> PHMCOL-M/ <br> ZOOLOGY 630 | Cellular Signal Transduction Mechanisms |  |
| BIOCHEM/ NUTR SCI 645 | Molecular Control of Metabolism and Metabolic Disease |  |


| Capstone Course (required) |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| BIOCHEM 551 | Biochemical Methods | 4 |

## RESIDENCE AND QUALITY OF WORK REQUIREMENTS (AT TIME OF GRADUATION)

- 2.000 GPA in all BIOCHEM and major courses
- 2.000 GPA in at least 15 upper-level major credits in residence (credits taken on campus at UW-Madison or UW-Madison-sponsored study abroad programs). Upper-level major credits are defined as coursework higher than the 300 level that could fulfill major requirements.
- 15 credits in the major/BIOCHEM taken on campus


## RECOMMENDED COURSES

First-year students interested in exploring the major can enroll in Biochemistry Freshman Seminar (BIOCHEM 100). Additional courses in MATH, BIOLOGY, CHEM, BIOCHEM, STAT, and COMP SCI are common elective courses, depending on the student's areas of interest and future career goals.

## HONORS IN THE MAJOR

Students may declare Honors in the Biochemistry Major in consultation with the Biochemistry undergraduate advisor. To be admitted to Honors in the Major in Biochemistry, students must have declared a major in biochemistry and have a 3.300 overall university GPA.

## HONORS IN THE MAJOR IN BIOCHEMISTRY: REQUIREMENTS

To earn Honors in the Major in Biochemistry, students must satisfy the requirements for the major (above) as well as the following requirements. All courses used for Honors in the Major requirements must receive " B " or better grades to fulfill requirements.

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all BIOCHEM courses, and all courses accepted in the major
- Complete BIOCHEM 507 General Biochemistry I and BIOCHEM 508 General Biochemistry II for Honors
- Complete a two-semester Senior Honors Thesis for 6 credits total in either BIOCHEM (BIOCHEM 681 Senior Honors Thesis and BIOCHEM 682 Senior Honors Thesis) CHEM (CHEM 681 Senior Honors Thesis and CHEM 682 Senior Honors Thesis) or related biological science department (other departments must receive approval from the advisor) and present research in a public forum
- Complete at least 14 credits for Honors or equivalent. Any combination of the following coursework may count towards these 14 credits:
- Honors courses that would fulfill the biological science requirement in the major (listed in the major requirements section), including coursework in introductory biology, upper-level biology, and/or BIOCORE
- Statistics coursework, does not need to be taken for Honors (STAT 301 Introduction to Statistical Methods, STAT 371 Introductory Applied Statistics for the Life Sciences, or STAT/ B M I 541 Introduction to Biostatistics)
- Biochemistry elective coursework, does not need to be taken for Honors (NUTR SCI/BIOCHEM 510 Biochemical Principles of Human and Animal Nutrition, BIOCHEM 550 Topics in Medical Biochemistry, M M \& I/BIOCHEM 575 Biology of Viruses, BIOCHEM 601 Protein and Enzyme Structure and Function, MATH/B M I/BIOCHEM/BMOLCHEM 606 Mathematical Methods for Structural Biology, MATH/B M I/BIOCHEM/ BMOLCHEM 609 Mathematical Methods for Systems Biology, MICROBIO/BIOCHEM/GENETICS 612 Prokaryotic Molecular Biology, MD GENET/BIOCHEM/GENETICS 620 Eukaryotic Molecular Biology, BOTANY/BIOCHEM 621 Plant Biochemistry, BIOCHEM 625 Mechanisms of Action of Vitamins and Minerals, BIOCHEM/PHMCOL-M/ZOOLOGY 630 Cellular Signal Transduction Mechanisms, BIOCHEM/NUTR SCI 645 Molecular Control of Metabolism and Metabolic Disease)
- Honors coursework in math, chemistry, and/or physics from the list below:

| Math |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| MATH 275 | Topics in Calculus I | 5 |
| MATH 276 | Topics in Calculus II | 5 |
| MATH 341 | Linear Algebra | 3 |
| MATH 375 | Topics in Multi-Variable Calculus and Linear Algebra | 5 |
| MATH 376 | Topics in Multi-Variable Calculus and Differential Equations | 5 |
| MATH 521 | Analysis I | 3 |
| MATH 522 | Analysis II | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |
| Chemistry |  |  |
| Code | Title | Credits |
| CHEM 109 | Advanced General Chemistry | 5 |
| CHEM 115 | Chemical Principles I | 5 |
| CHEM 116 | Chemical Principles II | 5 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 329 | Fundamentals of Analytical Science | 4 |
| CHEM 547 | Advanced Organic Chemistry | 3 |
| CHEM 561 | Physical Chemistry | 3 |
| CHEM 565 | Biophysical Chemistry | 4 |
| CHEM 563 | Physical Chemistry Laboratory | 1-2 |
| CHEM 562 | Physical Chemistry | 3 |
| CHEM 564 | Physical Chemistry Laboratory | 1 |

## Physics

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHYSICS 201 | General Physics | 5 |
| PHYSICS 202 | General Physics | 5 |
| PHYSICS 207 | General Physics | 5 |
| PHYSICS 208 | General Physics | 5 |
| PHYSICS 241 | Introduction to Modern Physics | 3 |
| PHYSICS 247 | A Modern Introduction to Physics | 5 |
| PHYSICS 248 | A Modern Introduction to Physics | 5 |
| PHYSICS 249 | A Modern Introduction to Physics | 4 |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

> Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
> Quality of Work

> Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Identify the fundamental biochemical principles that underlie all biological processes.
2. Communicate biochemical knowledge in both written reports and oral presentations to scientists and non-scientists.
3. Evaluate how biochemistry relates to other scientific disciplines and to contemporary issues in our society.
4. Demonstrate professional and ethical responsibility in scientific research.
5. Design and conduct quantitative experiments and/or interpret data to address a scientific question.

## ADVISING AND CAREERS

## HOW TO SEEK ADVISING

- To schedule an appointment with the advisor, use the Scheduling Assistant.
- Send an email with brief questions to undergradadvisor@biochem.wisc.edu.
- Drop-in advising hours for quick (10-15 minute) questions, on a first-come, first-serve basis, are posted on the Biochemistry website (https://biochem.wisc.edu/undergraduate_program/advising-information-undergraduate-program) each semester.


## CAREER EXAMPLES

- Take your skills to a rewarding career in product development, quality control, hospitals, biotechnology, university labs, pharmaceuticals, forensics, and more. Possibilities at top organizations and leading companies include positions such as protein purification scientist, lab manager, medical scribe, clinical research coordinator, and food safety and quality chemist.
- Pursue a professional degree in medical, dental, or veterinary school, using your background in biochemistry to aid your admission and success.
- Build on your research experience and continue graduate studies in biochemistry or a related field to shape a career in academia as a professor or in industry.
- Use your science background to inform patent law, science policy and ethics, sales and marketing for science and technology companies, scientific article publishing, and related fields.


## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## PROFESSORS

Amasino, Rick
Ansari, Aseem
Attie, Alan
Bednarek, Sebastian
Butcher, Sam
Clagett-Dame, Margaret
Cox, Mike
Craig, Elizabeth
Fox, Brian (Chair)
Friesen, Paul
Hayes, Colleen
Holden, Hazel
Kimble, Judith
Landick, Bob
Markley, John
Martin, Tom
Mitchell, Julie
Ntambi, James
Palmenberg, Ann
Pike, Wes
Ralph, John
Rayment, Ivan
Record, Tom
Sussman, Mike
Weibel, Doug
Wickens, Marv

## ASSOCIATE PROFESSORS

Henzler-Wildman, Katie
Pagliarini, Dave

Senes, Alessandro

## ASSISTANT PROFESSORS

Hoskins, Aaron
Raman, Vatsan
Romero, Phil
Venturelli, Ophelia
Wildonger, Jill

## ASSOCIATE FACULTY ASSOCIATES

Prost, Lynne
Pennella, Mario

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in biochemistry, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- The American Society for Biochemistry and Molecular Biology (ASBMB) UW-Madison Student Chapter (https://win.wisc.edu/ organization/ASBMB) is a student organization for students interested in biochemistry. ASBMB provides information about careers and job opportunities, how to get involved in research, and volunteer and outreach opportunities.
- Several biochemistry faculty members offer experiential study abroad programs, where students can immerse themselves in research or global health field experiences. Students can review the Biochemistry Major Advising Page (https://www.studyabroad.wisc.edu/ map_biochem.asp) on the International Academic Programs website for information on these and other programs, as well as requirements that can typically be fulfilled abroad and things to consider when fitting study abroad into an academic plan.
Students are encouraged to get involved in research, whether in the biochemistry department or through other life science or chemistryrelated departments. Research can be performed for either course credit or pay, depending on the opportunity. The Biochemistry website (https://biochem.wisc.edu/undergraduate_program/research-opportunities-undergraduate-program) and the advisor can provide more information on finding research opportunities. Summer funding awards for research are available through the department.


## BIOCHEMISTRY, B.S. (L\&S)

Biochemistry is a very broad science that studies the molecules and chemistry of life. Biochemistry focuses on the structure, properties, and interactions of molecules such as proteins, nucleic acids, sugars and lipids. Biochemistry's aim is to understand how these molecules participate in the processes that support the various functions of the living cell. These studies are therefore essential for understanding disease and finding cures, for improving agriculture and the production of food and biofuels, and to produce innovation in biotechnology.

Whereas other biological science majors may focus on cellular, organismal or population level biology, biochemistry focuses on processes that occur at the molecular to cellular levels. Therefore, this major has a greater focus on basic and quantitative sciences, such as math and, particularly, on chemistry.

Biochemistry graduates go on to a variety of careers in science and science-related fields. The major is designed to fit the needs of the student who wishes to achieve bachelor's level training as well as those planning to pursue graduate or professional study. The degree serves as an excellent background for medical school or veterinary school admission, as well as for graduate study in biochemistry or other allied fields (biology, bacteriology, genetics, molecular biology, or oncology).

## HOW TO GET IN

Students may declare the major via an appointment with the undergraduate advisor at any time. Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences (CALS) have the option to declare biochemistry at SOAR. Students may otherwise declare after they have begun their undergraduate studies. The biochemistry major is offered through either CALS or the College of Letters \& Science (L\&S). Students interested in the differences or transferring between CALS and L\&S should meet with the advisor to discuss this in more detail. Students in other schools/colleges (Business, Education, Engineering, etc.) may add biochemistry as an additional major with permission of their home school/college.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of

Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits
and Science
Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work
Major Declare and complete at least one (1) major
Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit
Minimum 2.000 in all coursework at UW-Madison
GPAs
2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

MATHEMATICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following options: |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 <br> \& MATH 222 | and Calculus and Analytic Geometry <br> 2 |


| MATH 171 | Calculus with Algebra and | 14 |
| :---: | :---: | :---: |
| \& MATH 217 | Trigonometry I |  |
| \& MATH 222 | and Calculus with Algebra and |  |
|  | Trigonometry II |  |
|  | and Calculus and Analytic Geometry |  |
|  | 2 |  |
| MATH 275 | Topics in Calculus I | 10 |
| \& MATH 276 | and Topics in Calculus II |  |
| CHEMISTR |  |  |
| General |  |  |
| Code | Title | Credits |
| Select one of | owing options: |  |
| CHEM 103 | General Chemistry I | 9 |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry | 5 |
| CHEM 115 | Chemical Principles I | 10 |
| \& CHEM 116 | and Chemical Principles II (satisfies |  |
|  | both general and analytical |  |
|  |  |  |

## Organic Chemistry

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select ALL of the following courses: |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry | 2 |
|  | Laboratory |  |

## Analytical Chemistry

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following options: |  |  |
| CHEM 327 | Fundamentals of Analytical Science | 4 |
| CHEM 329 | Fundamentals of Analytical Science | 4 |
| CHEM 115 | Chemical Principles I <br> \& CHEM 116 | and Chemical Principles II (satisfies <br> both general and analytical <br> chemistry requirements) |

## Physical Chemistry

| Code | Title | Credits |
| :--- | :--- | ---: |
| Must complete <br> of the following <br> options: | 4 |  |
| CHEM 565 | Biophysical Chemistry <br> (recommended) | $4-5$ |
| CHEM 561 | Physical Chemistry <br> \& CHEM 563 | and Physical Chemistry Laboratory |

## BIOLOGY

Students must complete either Option A (introductory + upper-level biology), or Option B (Biocore), for 16 total credits of biological science coursework.

## Option A (Introductory + Upper-Level Biology) Option A Introductory Biology

Code
Title
Credits
Select one of the following introductory biology options:
BIOLOGY/BOTANY/ Introductory Biology 10
ZOOLOGY 151 and Introductory Biology
\& BIOLOGY/BOTANY/ (recommended)
ZOOLOGY 152
BIOLOGY/
ZOOLOGY 101
\& BIOLOGY/
ZOOLOGY 102
\& BOTANY/
BIology 130
Animal Biology 10
and Animal Biology Laboratory
and General Botany

## AND Option A Upper-Level Biology

At least 6 credits of upper-level biological science coursework are required (to achieve 16 total credits-more than 6 credits may be required if introductory biology totals less than 10 credits due to transfer credits). Select from the course list below. To see courses offered in specific upcoming semesters, please see the Biochemistry website (https:// biochem.wisc.edu/undergraduate_program/advanced-biology-courses-undergraduate-program).

Important: Biochemistry courses on this list can count only for "upper-level biology" if they are above-and-beyond what is needed to fulfill the "biochemistry" portion of the major. For example, if students have taken BIOCHEM 501, they will need one upper-level biochemistry elective to fulfill the biochemistry requirement, and then any additional biochemistry courses taken can count for upper-level biology. A course may not double count in both the "upper-level biology" and the "biochemistry" requirements for the major.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ANAT\&PHY 335 | Physiology | 5 |
| ANAT\&PHY 337 | Human Anatomy | 3 |
| ANAT\&PHY 435 | Fundamentals of Human Physiology | 5 |
| AGRONOMY 300 | Cropping Systems | 3 |
| AGRONOMY 302 | Forage Management and Utilization | 3 |
| AGRONOMY/HORT/ <br> SOIL SCI 326 | Plant Nutrition Management | 3 |
| AGRONOMY/ <br> HORT 328 | Integrated Weed Management | 4 |
| AGRONOMY/ HORT 338 | Plant Breeding and Biotechnology | 3 |
| AGRONOMY/ <br> BOTANY/HORT 339 | Plant Biotechnology: Principles and Techniques I | 4 |
| AGRONOMY/ BOTANY/HORT 340 | Plant Cell Culture and Genetic Engineering | 4 |
| AGRONOMY/ A A E/INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| AGRONOMY/ BOTANY/ SOIL SCI 370 | Grassland Ecology | 3 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |


| AGRONOMY/ <br> HORT 501 | Principles of Plant Breeding | 3 |
| :---: | :---: | :---: |
| AGRONOMY/ ATM OCN/ SOIL SCI 532 | Environmental Biophysics | 3 |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { FOOD SCI } 305 \end{aligned}$ | Introduction to Meat Science and Technology | 4 |
| AN SCI/DY SCI/ NUTR SCI 311 | Comparative Animal Nutrition | 3 |
| AN SCI/DY SCI 313 | Animal Feeds and Diet Formulation | 1 |
| AN SCI 314 | Poultry Nutrition | 3 |
| AN SCI/DY SCI 320 | Animal Health and Disease Management | 3 |
| AN SCI/DY SCI 361 | Introduction to Animal and Veterinary Genetics | 2 |
| AN SCI/DY SCI 362 | Veterinary Genetics | 2 |
| AN SCI/DY SCI 363 | Principles of Animal Breeding | 2 |
| AN SCI/DY SCI 370 | Livestock Production and Health in Agricultural Development | 3 |
| AN SCI/DY SCI 414 | Ruminant Nutrition | 2 |
| AN SCI 415 | Application of Monogastric Nutrition Principles | 2 |
| AN SCI 430 | Sheep Production | 3 |
| AN SCI 431 | Beef Cattle Production | 3 |
| AN SCI 432 | Swine Production | 3 |
| AN SCI/DY SCI 434 | Reproductive Physiology | 3 |
| AN SCI 503 | Avian Physiology | 3 |
| AN SCI 508 | Poultry Products Technology | 3 |
| AN SCI 511 | Breeder Flock and Hatchery Management | 3 |
| AN SCI 512 | Management for Avian Health | 3 |
| $\begin{aligned} & \text { AN SCI/ } \\ & \text { FOOD SCI } 515 \end{aligned}$ | Commercial Meat Processing | 2 |
| AN SCI/F\&W ECOL/ ZOOLOGY 520 | Ornithology | 3 |
| AN SCI/F\&W ECOL/ <br> ZOOLOGY 521 | Birds of Southern Wisconsin | 3 |
| AN SCI/ <br> NUTR SCI 626 | Experimental Diet Design | 1 |
| B M E/ANATOMY/ <br> MED PHYS/ <br> PHMCOL-M/ <br> PHYSICS/ <br> RADIOL 619 | Microscopy of Life | 3 |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition | 3 |
| BIOCHEM 550 | Topics in Medical Biochemistry | 2 |
| BIOCHEM/ <br> M M \& I 575 | Biology of Viruses | 2 |
| BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 |
| BIOCHEM/B M I/ BMOLCHEM/ MATH 606 | Mathematical Methods for Structural Biology | 3 |


| BIOCHEM/B M I/ BMOLCHEM/ MATH 609 | Mathematical Methods for Systems Biology | 3 |
| :---: | :---: | :---: |
| BIOCHEM/ GENETICS/ MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| BIOCHEM/ <br> NUTR SCI 619 | Advanced Nutrition: Intermediary Metabolism of Macronutrients | 3 |
| BIOCHEM/ GENETICS/ MD GENET 620 | Eukaryotic Molecular Biology | 3 |
| BIOCHEM/ BOTANY 621 | Plant Biochemistry | 3 |
| BIOCHEM 625 | Mechanisms of Action of Vitamins and Minerals | 2 |
| BIOCHEM/PHMCOL- <br> M/ZOOLOGY 630 | Cellular Signal Transduction Mechanisms | 3 |
| BIOCHEM/ <br> NUTR SCI 645 | Molecular Control of Metabolism and Metabolic Disease | 3 |
| BSE 349 | Quantitative Techniques for Biological Systems | 3 |
| BSE 364 | Engineering Properties of Food and Biological Materials | 3 |
| BSE 365 | Measurements and Instrumentation for Biological Systems | 3 |
| BSE/ENVIR ST 367 | Renewable Energy Systems | 3 |
| BSE 460 | Biorefining: Energy and Products from Renewable Resources | 3 |
| BSE 461 | Food and Bioprocessing Operations | 3 |
| BSE 472 | Sediment and Bio-Nutrient Engineering and Management | 3 |
| BSE/FOOD SCI 542 | Food Engineering Operations | 4 |
| BSE/FOOD SCI 642 | Food and Pharmaceutical Separations | 2-3 |
| BMOLCHEM 504 | Human Biochemistry Laboratory | 3 |
| BMOLCHEM/ MICROBIO 668 | Microbiology at Atomic Resolution | 3 |
| B M I/STAT 541 | Introduction to Biostatistics | 3 |
| B M I/COMP SCI 576 | Introduction to Bioinformatics | 3 |
| BOTANY 300 | Plant Anatomy | 4 |
| BOTANY 305 | Plant Morphology and Evolution | 4 |
| BOTANY 330 | Algae | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi | 4 |
| BOTANY/ AGRONOMY/ HORT 339 | Plant Biotechnology: Principles and Techniques I | 4 |
| BOTANY 400 | Plant Systematics | 4 |
| BOTANY 401 | Vascular Flora of Wisconsin | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology | 2 |
| BOTANY/ANTHRO/ <br> ZOOLOGY 410 | Evolutionary Biology | 3 |
| BOTANY 422 | Plant Geography | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |


| BOTANY/F\&W ECOL/ <br> ZOOLOGY 460 | General Ecology | 4 | ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BOTANY/ENTOM/ <br> ZOOLOGY 473 | Plant-Insect Interactions | 3 | ENVIR ST/ <br> ATM OCN 520 | Bioclimatology | 3 |
| BOTANY/AMER IND/ <br> ANTHRO 474 | Ethnobotany | 3-4 | ENVIR ST/A A E/ <br> F\&W ECOL 652 | Decision Methods for Natural Resource Managers | 3-4 |
| BOTANY 500 | Plant Physiology | 3-4 | FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory | 2 |
| BOTANY/ENTOM/ | Plant-Microbe Interactions: | 3 |  |  |  |
| PLPATH 505 | Molecular and Ecological Aspects |  | FOOD SCI/ | Food Microbiology | 3 |
| BOTANY/GENETICS/ | Introductory Cytogenetics | 2-3 | MICROBIO 325 |  |  |
| HORT 561 |  |  | FOOD SCI 410 | Food Chemistry | 3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 | FOOD SCI 440 | Principles of Food Engineering | 3 |
|  |  |  | FOOD SCI 511 | Chemistry and Technology of Dairy | 3 |
| BOTANY/HORT/ | Mineral Nutrition of Plants | 3 |  | Products |  |
| SOIL SCI 626 |  |  | FOOD SCI 512 | Principles of Food Chemistry-Lab | 2 |
| BOTANY/GENETICS/ | Modeling in Population Genetics and Evolution | 3 | FOOD SCI 514 | Integrated Food Functionality | 4 |
| ZOOLOGY 645 |  |  | FOOD SCI 550 | Fermented Foods and Beverages | 2 |
| BOTANY/ENVIR ST/ F\&W ECOL/ | Conservation Biology | 3 | FOOD SCI 610 | Food Proteins | 2 |
| ZOOLOGY 651 |  |  | FOOD SCI 611 | Chemistry and Technology of Dairy Products | 3 |
| BOTANY/GENETICS/ <br> M M \& I/MICROBIO/ <br> PLPATH 655 | Biology and Genetics of Fungi | 3 | FOOD SCI/ <br> MICROBIO 650 | Advanced Microbiology of Foodborne Pathogens | 3 |
| BOTANY/ | Adaptive Restoration Lab | 2 | F\&W ECOL 300 | Forest Biometry | 4 |
| LAND ARC 670 CRB 650 |  |  | F\&W ECOL 306 | Terrestrial Vertebrates: Life History and Ecology | 4 |
| CRB 650 | Organogenesis | 3 | F\&W ECOL/ | Diseases of Trees and Shrubs | 3 |
| CRB 675 | Topics in Cell and Regenerative Biology ${ }^{\text {Stem Cell Seminar }}$ | 1-3 | HORT/LAND ARC/ <br> PLPATH 309 |  |  |
| DY SCI 305 | Lactation Physiology | 3 | F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| DY SCI 535 | Dairy Farm Management Practicum | 3 | F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: <br> Biological and Philosophical Issues | 3 |
| ENTOM/ <br> ZOOLOGY 302 | Introduction to Entomology | 4 | F\&W ECOL/ | Extinction of Species | 3 |
| ENTOM 321 | Physiology of Insects | 3 | $\text { ZOOLOGY } 360$ |  |  |
| ENTOM 331 | Taxonomy of Mature Insects | 4 | F\&W ECOL 379 | Principles of Wildlife Management | 3 |
| ENTOM 342 | Insect Ecology | 3 | F\&W ECOL 401 | Physiological Animal Ecology | 3 |
| ENTOM 351 | Principles of Economic Entomology | 3 | F\&W ECOL 404 | Wildlife Damage Management | 3 |
| ENTOM/ <br> ZOOLOGY 371 | Medical Entomology | 3 | F\&W ECOL 410 | Principles of Silviculture | 3 |
| ENTOM 432 |  |  | F\&W ECOL 415 | Tree Physiology | 3 |
| ENTOM 432 | Immature Insects |  | F\&W ECOL/ <br> SURG SCI 548 | Diseases of Wildlife | 3 |
| ENTOM/ <br> F\&W ECOL 500 | Insects in Forest Ecosystem Function and Management | 2 | F\&W ECOL 550 | Forest Ecology | 3 |
| ENTOM/ | Insect Behavior | 3 | F\&W ECOL 561 | Wildlife Management Techniques | 3 |
| ZOOLOGY 530 |  |  | F\&W ECOL/ | Principles of Landscape Ecology | 2 |
| $\begin{aligned} & \text { ENTOM/ } \\ & \text { ZOOLOGY } 540 \end{aligned}$ | Theoretical Ecology | 3 | LAND ARC/ ZOOLOGY 565 |  |  |
| ENTOM/GENETICS/ | Molecular Ecology | 3 | F\&W ECOL 590 | Integrated Resource Management | 3 |
| ZOOLOGY 624 |  |  | F\&W ECOL/ | Ecotoxicology: The Chemical | 1 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 | AGRONOMY/ <br> ENTOM/ <br> M\&ENVTOX 632 | Players |  |
| ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 | F\&W ECOL/ | Ecotoxicology: Impacts on | 1 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 | ENTOM/ <br> M\&ENVTOX 633 |  |  |


| F\&W ECOL/ AGRONOMY/ | Ecotoxicology: Impacts on Populations, Communities and | 1 | MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENTOM/ <br> M\&ENVTOX 634 | Ecosystems |  | MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| F\&W ECOL 635 | Forest Stand Dynamics | 1-2 | MICROBIO 470 | Microbial Genetics \& Molecular | 3 |
| F\&W ECOL 655 | Animal Population Dynamics | 3 |  | Machines |  |
| GENETICS 466 | Principles of Genetics | 3 | MICROBIO/ | Soil Microbiology and Biochemistry | 3 |
| GENETICS 467 | General Genetics 1 | 3 | SOIL SCI 523 |  |  |
| GENETICS 468 | General Genetics 2 | 3 | MICROBIO 526 | Physiology of Microorganisms | 3 |
| GENETICS 545 | Genetics Laboratory | 2 | MICROBIO 527 | Advanced Laboratory Techniques in Microbiology | 2 |
| GENETICS/ | Molecular Approaches for Potential | 3 |  |  |  |
| HORT 550 | Crop Improvement |  | MICROBIO 551 | Capstone Research Project in Microbiology | 2 |
| GENETICS/ | Human Cytogenetics | 2 |  |  |  |
| MD GENET/ ZOOLOGY 562 |  |  | MICROBIO/ <br> PLPATH 622 | Plant-Bacterial Interactions | 2-3 |
| GENETICS/ | Human Genetics | 3 | MICROBIO 625 | Advanced Microbial Physiology | 3 |
| MD GENET 565 |  |  | MICROBIO 632 | Industrial Microbiology/ | 2 |
| GENETICS 566 | Advanced Genetics | 3 |  | Biotechnology |  |
| GENETICS/ MICROBIO 607 | Advanced Microbial Genetics | 3 | MICROBIO/ ONCOLOGY/ PLPATH 640 | General Virology-Multiplication of Viruses | 3 |
| GENETICS/ | Quantitative Genetics | 3 |  |  |  |
| AN SCI 610 |  |  | NEURODPT 533 | Molecular Physiology | 2 |
| HORT 320 | Environment of Horticultural Plants | 3 | NTP/ <br> NEURODPT 610 | Cellular and Molecular Neuroscience | 4 |
| HORT/ | Principles of Plant Breeding | 3 |  |  |  |
| AGRONOMY 501 |  |  | NTP/NEURODPT/ | Systems Neuroscience | 4 |
| M M \& I 301 | Pathogenic Bacteriology | 2 | PSYCH 611 |  |  |
| M M \& I 302 | Medical Microbiology Laboratory | 3 | NTP/ <br> NEURODPT 630 | Neuronal Mechanisms for Sensation and Memory in Cerebral Cortex | 3 |
| M M \& I 341 | Immunology | 3 |  |  |  |
| M M \& I/ENTOM/ PATH-BIO/ | Parasitology | 3 | NUTR SCI 332 | Human Nutritional Needs | 3 |
| $\text { ZOOLOGY } 350$ |  |  | NUTR SCI 431 | Nutrition in the Life Span | 3 |
| M M \& I/PATH-BIO/ ZOOLOGY 351 | Parasitology Laboratory | 2 | NUTR SCI/ PHM PRAC 672 | Herbals, Homeopathy, and Dietary Supplements | 2-3 |
| M M \& I 410 | Medical Mycology | 2 | ONCOLOGY 401 | Introduction to Experimental Oncology | 2 |
| M M \& 1412 | Medical Mycology Laboratory | 1 |  |  |  |
| M M \& I 460 | Techniques in DNA Science for Microbiologists | 3 | ONCOLOGY/ <br> M\&ENVTOX/ <br> MEDICINE/PATH/ <br> PHM SCI/PHMCOL- <br> M/POP HLTH 625 | Toxicology I | 3 |
| M M \& I/MICROBIO/ PATH-BIO 528 | Immunology | 3 |  |  |  |
| M M \& I/PATHBIO 529 | Immunology Laboratory | 2 | PEDIAT 646 | Cancer Genetics Risk Assessment and Counseling | 2 |
| M M \& I 554 | Emerging Infectious Diseases and Bioterrorism | 2 | PHM SCI 310 | Drugs and Their Actions | 2 |
|  |  |  | PHM SCI 401 | Survey of Pharmacology | 3 |
| M M \& I 555 | Vaccines: Practical Issues for a Global Society | 3 | PHM SCI/B M E 430 | Biological Interactions with Materials | 3 |
| M M \& I/ POP HLTH 603 | Clinical and Public Health Microbiology | 5 | PHYSICS/ <br> ANATOMY/B M E/ <br> MED PHYS/ <br> PHMCOL-M/ <br> RADIOL 619 | Microscopy of Life | 3 |
| MED PHYS/ H ONCOL 410 | Radiobiology | 2-3 |  |  |  |
| MED PHYS/ | Radiological Physics and Dosimetry | 3 |  |  |  |
| B M E/H ONCOL/ PHYSICS 501 |  |  | PHYSIOL/NTP 629 | Molecular and Cellular Mechanisms of Memory | 3 |
| MICROBIO 303 | Biology of Microorganisms | 3 | PL PATH 300 | Introduction to Plant Pathology | 4 |
| MICROBIO 304 | Biology of Microorganisms Laboratory | 2 | PL PATH/ SOIL SCI 323 | Soil Biology | 3 |
| MICROBIO 330 | Host-Parasite Interactions | 3 |  |  |  |


| PL PATH 517 | Plant Disease Resistance | 2-3 |
| :---: | :---: | :---: |
| PL PATH 558 | Biology of Plant Pathogens | 3 |
| PL PATH 559 | Diseases of Economic Plants | 3 |
| PL PATH 602 | Ecology, Epidemiology and Control of Plant Diseases | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| SOIL SCI/ <br> F\&W ECOL 451 | Environmental Biogeochemistry | 3 |
| SOIL SCI/ <br> CIV ENGR 623 | Microbiology of Waterborne Pathogens and Indicator Organisms | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: <br> Sources, Distribution, Fate, \& Effects | 3 |
| ZOOLOGY 300 | Invertebrate Biology and Evolution | 3 |
| ZOOLOGY 301 | Invertebrate Biology and Evolution Lab | 2 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| ZOOLOGY 425 | Behavioral Ecology | 3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates | 5 |
| ZOOLOGY 470 | Introduction to Animal Development | 3 |
| ZOOLOGY 504 | Modeling Animal Landscapes | 3-5 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |
| ZOOLOGY/ <br> ENVIR ST 511 | Ecology of Fishes Lab | 2 |
| ZOOLOGY/ <br> PSYCH 523 | Neurobiology | 3 |
| ZOOLOGY 535 | Ecosystem Analysis | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 541 \end{aligned}$ | Paleobiology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { GEOSCI } 542 \end{aligned}$ | Invertebrate Paleontology | 3 |
| ZOOLOGY/ <br> PSYCH 550 | Animal Communication and the Origins of Language | 3 |
| ZOOLOGY 555 | Laboratory in Developmental Biology | 3 |
| ZOOLOGY 570 | Cell Biology | 3 |
| ZOOLOGY 603 | Endocrinology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory | 2 |
| ZOOLOGY/ANTHRO/ NTP/PSYCH 619 | Biology of Mind | 3 |
| ZOOLOGY 625 | Development of the Nervous System | 2 |

## Option B (Biocore)

Biocore is an honors-level, integrated sequence of lecture and lab courses that covers introductory and intermediate biology topics. Students must apply and be accepted to the program to take BIOCORE classes.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select ALL of the following lecture courses: |  |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics | 3 |
| BIOCORE 383 | Cellular Biology | 3 |
| BIOCORE 485 | Organismal Biology | 3 |
| BIOCORE 587 | Biological Interactions | 3 |
| AND, select two of the following lab classes: |  |  |
| BIOCORE 382 | Evolution, Ecology, and Genetics |  |
|  | Laboratory | 2 |
| BIOCORE 384 | Cellular Biology Laboratory | 2 |
| BIOCORE 486 | Organismal Biology Laboratory | 2 |

## PHYSICS (CALCULUS-BASED) ${ }^{1}$

Code Title Credits

Select one of the following options:

| PHYSICS 207 | General Physics <br> and General Physics <br> (recommended) | 10 |
| :--- | :--- | :---: |
| PHYSICS 201 208 | General Physics | 10 |
| \& PHYSICS 202 | and General Physics |  |

1 Honors students may use PHYSICS 247 A Modern Introduction to Physics \& PHYSICS 248 A Modern Introduction to Physics to satisfy this requirement. Students should consult with their advisor if they have credit for PHYSICS 103 General Physics and/or PHYSICS 104 General Physics to discuss options.

## BIOCHEMISTRY

One set of introductory coursework and the capstone course are required, for a total of three BIOCHEM courses.

## Introductory Courses

Code Title Credits

Select one of the following options:
BIOCHEM 507 General Biochemistry I 6
\& BIOCHEM 508 and General Biochemistry II
(recommended)
OR
BIOCHEM 501 Introduction to Biochemistry 3
AND one of the following upper-level biochemistry electives:

| BIOCHEM/ | Biochemical Principles of Human |
| :--- | :--- |
| NUTR SCI 510 | and Animal Nutrition |

BIOCHEM 550 Topics in Medical Biochemistry
BIOCHEM/ Biology of Viruses
M M \& I 575

| BIOCHEM 601 | Protein and Enzyme Structure and <br> Function |
| :--- | :--- |
| BIOCHEM/B M I/ Mathematical Methods for <br> BMOLCHEM/ Structural Biology <br> MATH 606  <br> BIOCHEM/B M I/ Mathematical Methods for Systems <br> BMOLCHEM/ Biology <br> MATH 609  <br> BIOCHEM/ Prokaryotic Molecular Biology <br> GENETICS/  <br> MICROBIO 612  |  |


| BIOCHEM/ | Eukaryotic Molecular Biology |
| :--- | :--- |
| GENETICS/ |  |
| MD GENET 620 |  |
| BIOCHEM/ | Plant Biochemistry |
| BOTANY 621 |  |
| BIOCHEM 625 | Mechanisms of Action of Vitamins <br> and Minerals |
| BIOCHEM/ | Cellular Signal Transduction <br> PHMCOL-M/ <br> ZOOLOGY 630 |
| BIOCHEM/ | Molecular Control of Metabolism |
| NUTR SCI 645 | and Metabolic Disease |


| Capstone Course (required) |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| BIOCHEM 551 | Biochemical Methods | 4 |

## RESIDENCE AND QUALITY OF WORK REQUIREMENTS (AT TIME OF GRADUATION)

- 2.000 GPA in all BIOCHEM and major courses
- 2.000 GPA in at least 15 upper-level major credits in residence (credits taken on campus at UW-Madison or UW-Madison-sponsored study abroad programs). Upper-level major credits are defined as coursework higher than the 300 level that could fulfill major requirements.
- 15 credits in the major/BIOCHEM taken on campus


## RECOMMENDED COURSES

First-year students interested in exploring the major can enroll in Biochemistry Freshman Seminar (BIOCHEM 100). Additional courses in MATH, BIOLOGY, CHEM, BIOCHEM, STAT, and COMP SCI are common elective courses, depending on the student's areas of interest and future career goals.

## HONORS IN THE MAJOR

Students may declare Honors in the Biochemistry Major in consultation with the Biochemistry undergraduate advisor. To be admitted to Honors in the Major in Biochemistry, students must have declared a major in biochemistry and have a 3.300 overall university GPA.

## HONORS IN THE MAJOR IN BIOCHEMISTRY: REQUIREMENTS

To earn Honors in the Major in Biochemistry, students must satisfy the requirements for the major (above) as well as the following requirements. All courses used for Honors in the Major requirements must receive "B" or better grades to fulfill requirements.

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all BIOCHEM courses, and all courses accepted in the major
- Complete BIOCHEM 507 General Biochemistry I and BIOCHEM 508 General Biochemistry II for Honors
- Complete a two-semester Senior Honors Thesis for 6 credits total in either BIOCHEM (BIOCHEM 681 Senior Honors Thesis and BIOCHEM 682 Senior Honors Thesis) CHEM (CHEM 681 Senior Honors Thesis and CHEM 682 Senior Honors Thesis) or related biological science department (other departments must receive approval from the advisor) and present research in a public forum
- Complete at least 14 credits for Honors or equivalent. Any combination of the following coursework may count towards these 14 credits:
- Honors courses that would fulfill the biological science requirement in the major (listed in the major requirements section), including coursework in introductory biology, upper-level biology, and/or BIOCORE
- Statistics coursework, does not need to be taken for Honors (STAT 301 Introduction to Statistical Methods, STAT 371 Introductory Applied Statistics for the Life Sciences, or STAT/ B M I 541 Introduction to Biostatistics)
- Biochemistry elective coursework, does not need to be taken for Honors (NUTR SCI/BIOCHEM 510 Biochemical Principles of Human and Animal Nutrition, BIOCHEM 550 Topics in Medical Biochemistry, M M \& I/BIOCHEM 575 Biology of Viruses, BIOCHEM 601 Protein and Enzyme Structure and Function, MATH/B M I/BIOCHEM/BMOLCHEM 606 Mathematical Methods for Structural Biology, MATH/B M I/BIOCHEM/ BMOLCHEM 609 Mathematical Methods for Systems Biology, MICROBIO/BIOCHEM/GENETICS 612 Prokaryotic Molecular Biology, MD GENET/BIOCHEM/GENETICS 620 Eukaryotic Molecular Biology, BOTANY/BIOCHEM 621 Plant Biochemistry, BIOCHEM 625 Mechanisms of Action of Vitamins and Minerals, BIOCHEM/PHMCOL-M/ZOOLOGY 630 Cellular Signal Transduction Mechanisms, BIOCHEM/NUTR SCI 645 Molecular Control of Metabolism and Metabolic Disease)
- Honors coursework in math, chemistry, and/or physics from the list below:

Math

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 275 | Topics in Calculus I | 5 |
| MATH 276 | Topics in Calculus II | 5 |
| MATH 341 | Linear Algebra | 3 |
| MATH 375 | Topics in Multi-Variable Calculus |  |
|  | and Linear Algebra | 5 |
| MATH 376 | Topics in Multi-Variable Calculus | 5 |
| MATH 521 | and Differential Equations | 3 |
| MATH 522 | Analysis I | 3 |
| MATH 541 | Analysis II | 3 |
| MATH 542 | Modern Algebra | 3 |


| Chemistry |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| CHEM 109 | Advanced General Chemistry | 5 |
| CHEM 115 | Chemical Principles I | 5 |
| CHEM 116 | Chemical Principles II | 5 |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry | 2 |
|  | Laboratory | 4 |
| CHEM 329 | Fundamentals of Analytical Science | 3 |
| CHEM 547 | Advanced Organic Chemistry | 3 |
| CHEM 561 | Physical Chemistry | 4 |
| CHEM 565 | Biophysical Chemistry | $1-2$ |
| CHEM 563 | Physical Chemistry Laboratory | 3 |


| CHEM 564 | Physical Chemistry Laboratory | 1 |
| :--- | :--- | ---: |
| Physics |  |  |
| Code | Title | Credits |
| PHYSICS 201 | General Physics | 5 |
| PHYSICS 202 | General Physics | 5 |
| PHYSICS 207 | General Physics | 5 |
| PHYSICS 208 | General Physics | 5 |
| PHYSICS 241 | Introduction to Modern Physics | 3 |
| PHYSICS 247 | A Modern Introduction to Physics | 5 |
| PHYSICS 248 | A Modern Introduction to Physics | 5 |
| PHYSICS 249 | A Modern Introduction to Physics | 4 |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Identify the fundamental biochemical principles that underlie all biological processes.
2. Communicate biochemical knowledge in both written reports and oral presentations to scientists and non-scientists.
3. Evaluate how biochemistry relates to other scientific disciplines and to contemporary issues in our society.
4. Demonstrate professional and ethical responsibility in scientific research.
5. Design and conduct quantitative experiments and/or interpret data to address a scientific question.

## ADVISING AND CAREERS

## HOW TO SEEK ADVISING

- To schedule an appointment with the advisor, use the Scheduling Assistant.
- Send an email with brief questions to undergradadvisor@biochem.wisc.edu.
- Drop-in advising hours for quick (10-15 minute) questions, on a first-come, first-serve basis, are posted on the Biochemistry website (https://biochem.wisc.edu/undergraduate_program/advising-information-undergraduate-program) each semester.


## CAREER EXAMPLES

- Take your skills to a rewarding career in product development, quality control, hospitals, biotechnology, university labs, pharmaceuticals, forensics, and more. Possibilities at top organizations and leading companies include positions such as protein purification scientist, lab manager, medical scribe, clinical research coordinator, and food safety and quality chemist.
- Pursue a professional degree in medical, dental, or veterinary school, using your background in biochemistry to aid your admission and success.
- Build on your research experience and continue graduate studies in biochemistry or a related field to shape a career in academia as a professor or in industry.
- Use your science background to inform patent law, science policy and ethics, sales and marketing for science and technology companies, scientific article publishing, and related fields.


## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## PROFESSORS

## Amasino, Rick

Ansari, Aseem
Attie, Alan
Bednarek, Sebastian
Butcher, Sam
Clagett-Dame, Margaret
Cox, Mike
Craig, Elizabeth
Fox, Brian (Chair)
Friesen, Paul
Hayes, Colleen

Holden, Hazel
Kimble, Judith
Landick, Bob
Markley, John
Martin, Tom
Mitchell, Julie
Ntambi, James
Palmenberg, Ann
Pike, Wes
Ralph, John
Rayment, Ivan
Record, Tom
Sussman, Mike
Weibel, Doug
Wickens, Marv

ASSOCIATE PROFESSORS<br>Henzler-Wildman, Katie<br>Pagliarini, Dave<br>Senes, Alessandro

## ASSISTANT PROFESSORS

Hoskins, Aaron
Raman, Vatsan
Romero, Phil
Venturelli, Ophelia
Wildonger, Jill

## ASSOCIATE FACULTY ASSOCIATES

Prost, Lynne
Pennella, Mario

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in biochemistry, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- The American Society for Biochemistry and Molecular Biology (ASBMB) UW-Madison Student Chapter (https://win.wisc.edu/ organization/ASBMB) is a student organization for students interested in biochemistry. ASBMB provides information about careers and job opportunities, how to get involved in research, and volunteer and outreach opportunities.
- Several biochemistry faculty members offer experiential study abroad programs, where students can immerse themselves in research or global health field experiences. Students can review the Biochemistry Major Advising Page (https://www.studyabroad.wisc.edu/ map_biochem.asp) on the International Academic Programs website for information on these and other programs, as well as requirements that can typically be fulfilled abroad and things to consider when fitting study abroad into an academic plan.
- Students are encouraged to get involved in research, whether in the biochemistry department or through other life science or chemistryrelated departments. Research can be performed for either course credit or pay, depending on the opportunity. The Biochemistry website (https://biochem.wisc.edu/undergraduate_program/research-opportunities-undergraduate-program) and the advisor can provide more information on finding research opportunities. Summer funding awards for research are available through the department.


## INDIVIDUAL MAJOR, B.A.

The individual major within the College of Letters \& Science is a method of fulfilling the depth requirement for students whose interests bridge existing departments and disciplines in ways not accommodated by an existing major or interdisciplinary program. The individual major must consist of a coherent pattern of courses in more than one department or recognized interdisciplinary program in the College of Letters \& Science and must be approved by a faculty committee consisting of faculty from appropriate faculty from the College of Letters and Science.

Getting approval to pursue an individual major is never guaranteed. Thus, students should discuss alternative majors with their academic advisors and be willing to pursue them. Students interested in learning more about the individual major should contact L\&S Undergraduate Academic Deans' Services at 608-262-0617 in 110 Ingraham Hall and set up an individual appointment with the coordinator for the individual major prior to starting this process.

## HOW TO GET IN

## ELIGIBILITY

Any undergraduate student working toward an L\&S degree with a minimum cumulative grade point average of 2.000 may elect to develop an individual major. (Students earning degrees in other undergraduate schools and colleges on the UW-Madison campus are not eligible to pursue an individual major within Letters \& Science.) The individual major must receive approval during the second-semester of the sophomore year or first semester of junior year to ensure that they can complete the major within four years. All students are required to earn at least $\mathbf{3 0}$ degree credits after the term in which approval is given. A student may complete only one individual major.

## APPLYING FOR AN INDIVIDUAL MAJOR

Applications for the individual major are accepted up to Friday of the fourth week of classes in the fall and spring semesters only. Applications received after that deadline will be reviewed during the following term. Individual major applications are not reviewed during the summer.

The application must include all items outlined below:

1. The individual major application form;
2. A cover letter from the student to the Faculty Committee on Individual Majors describing the area of interest, explaining why the academic goals of the individual major cannot be achieved through an existing major or combination of majors and certificates, and discussing the individual major's applicability to future goals and plans;
3. A list of courses that will be included in the major along with a narrative explaining how the courses included on the list apply to the proposed individual major program;
4. A letter of recommendation and support for the proposal from the individual major advisor; and
5. The student's current student record (unofficial transcript).

Additional supporting materials may also be included. Students must submit the original completed application with all supporting documentation in an electronic format to the individual major coordinator by the deadline.

Each individual major application is reviewed by a committee of three faculty members from the College of Letters \& Science, each representing a department related to the proposed major. The faculty committee evaluates the proposal for coherence, appropriate breadth and depth, and similarity to existing majors. The committee may approve the proposal as submitted, recommend modifications, reject the proposal altogether, or reject it with an invitation to revise and resubmit in a later semester.
The committee's decision is final. Committee approval is necessary for the student to declare the individual major.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :---: | :---: |
| Language | - Complete the third unit of a foreign language and the second unit of an additional foreign language |
|  | Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature |
|  | - Social Sciences, 12 credits |
|  | - Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences |

Liberal Arts 108 credits and Science Coursework

Depth of Intermediate/
Advanced
work
Major Declare and complete at least one (1) major

Total Credits 120 credits
UW-Madison 30 credits in residence, overall
Experience 30 credits in residence after the 90th credit
Minimum 2.000 in all coursework at UW-Madison
GPAs
2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR <br> DEVELOPING AN INDIVIDUAL MAJOR

Any undergraduate student working toward completing an undergraduate degree in the College of Letters \& Science with a minimum cumulative grade point average (CUM GPA) of 2.000 may apply to develop an individual major. (Students earning degrees in other undergraduate schools and colleges on the UW-Madison campus are not eligible to pursue an Individual Major within Letters \& Science.) This major must receive approval during the second-semester of the sophomore year or first semester of junior year. Students in the individual major are required to earn at least 30 degree credits after the term in which approval is given. A student may complete only one individual major.

Developing an Individual Major. The student takes primary responsibility for developing an individual major proposal. A well-written proposal must
meet the requirements and rigor for a major in the College of Letters \& Science; therefore, a proposal must be more than a list of courses that are similar in content area or subject matter. The student proposing an individual major must also demonstrate that the proposed individual major is not currently available as an option in any of the L\&S majors or certificate programs.

Students interested in the individual major should consult with the individual major coordinator as part of the process of defining the theme or topic for the individual major. The coordinator will provide information and feedback about the construction of the major and how it might relate to other majors in the college as well.

Once a theme or topic has been identified, the student must find a tenured faculty member in the College of Letters \& Science who is willing to serve as the individual major adviser. This designated faculty advisor will:

- assist the student in constructing the individual major proposal by defining the relevant themes, learning objectives, and rationale for the major and by sharpening presentation of the student's individual major proposal;
- assist in the review and selection of courses for the major plan included in the proposal;
- advise the student in course selection after the proposal is approved and, in consultation with the individual major coordinator, track progress toward completion of the major.

As soon as the topic and the advisor (i.e., a tenured faculty member in an L\&S academic department) are known, the student should meet with the individual major coordinator within L\&S Academic Deans' Services by calling 608-262-0617 to set up a meeting. The purpose of this meeting is to review the details of individual major requirements and to review procedures.

Applying for an Individual Major. Applications for the individual major are accepted up to Friday of the fourth week of classes in the fall and spring semesters. Applications received after that deadline will be reviewed during the following term. Individual major applications are not reviewed during the summer.

The application must include:

1. the individual major application form (https://Issaa.wiscweb.wisc.edu/wpcontent/uploads/sites/144/2018/02/ Individual_Major_General_Application__Information.pdf);
2. A cover letter from the student to the Faculty Committee on Individual Majors describing the area of interest, explaining why the academic goals of the individual major cannot be achieved through an existing major or combination of majors and certificates, and discussing the individual major's applicability to future goals and plans;
3. A list of courses that will be included in the major along with a narrative explaining how the courses included on the list apply to the proposed individual major program;
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Additional supporting materials may also be included. Students must submit the original completed application with all supporting
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The committee's decision is final. Committee approval is necessary for the student to declare the individual major.

## INDIVIDUAL MAJOR WITH HONORS

Students may propose to complete an Individual Major with Honors by appending an Honors in the Major proposal to their regular individual major proposal.

## HONORS IN THE INDIVIDUAL MAJOR: REQUIREMENTS

To earn Honors in the Individual Major, students must:

- Complete 36 credits toward the individual major
- Complete 20 credits, taken for Honors, with individual grades of B or better, toward the individual major, to include a two-semester Senior Honors Thesis for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## ADVISING AND CAREERS

Students interested in learning more about the individual major should contact L\&S Undergraduate Academic Deans' Services at 608-262-0617 in 110 Ingraham Hall and set up an individual appointment with the coordinator for the individual major prior to starting this process.
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liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

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- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## INDIVIDUAL MAJOR, B.S.

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## HOW TO GET IN

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## APPLYING FOR AN INDIVIDUAL MAJOR

Applications for the individual major are accepted up to Friday of the fourth week of classes in the fall and spring semesters only. Applications received after that deadline will be reviewed during the following term. Individual major applications are not reviewed during the summer.

The application must include all items outlined below:

1. The individual major application form;
2. A cover letter from the student to the Faculty Committee on Individual Majors describing the area of interest, explaining why the academic goals of the individual major cannot be achieved through an existing major or combination of majors and certificates, and discussing the individual major's applicability to future goals and plans;
3. A list of courses that will be included in the major along with a narrative explaining how the courses included on the list apply to the proposed individual major program;
4. A letter of recommendation and support for the proposal from the individual major advisor; and
5. The student's current student record (unofficial transcript).

Additional supporting materials may also be included. Students must submit the original completed application with all supporting documentation in an electronic format to the individual major coordinator by the deadline.

Each individual major application is reviewed by a committee of three faculty members from the College of Letters \& Science, each representing a department related to the proposed major. The faculty committee evaluates the proposal for coherence, appropriate breadth and depth, and similarity to existing majors. The committee may approve the proposal as submitted, recommend modifications, reject the proposal altogether, or reject it with an invitation to revise and resubmit in a later semester.
The committee's decision is final. Committee approval is necessary for the student to declare the individual major.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT |
| Limit one each: COMP SCI, STAT |  |

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR DEVELOPING AN INDIVIDUAL MAJOR

Any undergraduate student working toward completing an undergraduate degree in the College of Letters \& Science with a minimum cumulative grade point average (CUM GPA) of 2.000 may apply to develop an individual major. (Students earning degrees in other undergraduate schools and colleges on the UW-Madison campus are not eligible to pursue an Individual Major within Letters \& Science.) This major must receive approval during the second-semester of the sophomore year or first semester of junior year. Students in the individual major are required to earn at least 30 degree credits after the term in which approval is given. A student may complete only one individual major.

Developing an Individual Major. The student takes primary responsibility for developing an individual major proposal. A well-written proposal must meet the requirements and rigor for a major in the College of Letters \& Science; therefore, a proposal must be more than a list of courses that are similar in content area or subject matter. The student proposing an individual major must also demonstrate that the proposed individual major is not currently available as an option in any of the L\&S majors or certificate programs.

Students interested in the individual major should consult with the individual major coordinator as part of the process of defining the theme or topic for the individual major. The coordinator will provide information and feedback about the construction of the major and how it might relate to other majors in the college as well.

Once a theme or topic has been identified, the student must find a tenured faculty member in the College of Letters \& Science who is willing to serve as the individual major adviser. This designated faculty advisor will:

- assist the student in constructing the individual major proposal by defining the relevant themes, learning objectives, and rationale for the major and by sharpening presentation of the student's individual major proposal;
- assist in the review and selection of courses for the major plan included in the proposal;
- advise the student in course selection after the proposal is approved and, in consultation with the individual major coordinator, track progress toward completion of the major.

As soon as the topic and the advisor (i.e., a tenured faculty member in an L\&S academic department) are known, the student should meet with the individual major coordinator within L\&S Academic Deans' Services by calling 608-262-0617 to set up a meeting. The purpose of this meeting is to review the details of individual major requirements and to review procedures.

Applying for an Individual Major. Applications for the individual major are accepted up to Friday of the fourth week of classes in the fall and spring semesters. Applications received after that deadline will be reviewed during the following term. Individual major applications are not reviewed during the summer.

The application must include:

1. the individual major application form (https://Issaa.wiscweb.wisc.edu/wpcontent/uploads/sites/144/2018/02/ Individual_Major_General_Application__Information.pdf);
2. A cover letter from the student to the Faculty Committee on Individual Majors describing the area of interest, explaining why the academic goals of the individual major cannot be achieved through an existing major or combination of majors and certificates, and discussing the individual major's applicability to future goals and plans;
3. A list of courses that will be included in the major along with a narrative explaining how the courses included on the list apply to the proposed individual major program;
4. A letter of recommendation and support for the proposal from the individual major advisor; and
5. The student's current student record (unofficial transcript).

Additional supporting materials may also be included. Students must submit the original completed application with all supporting documentation in an electronic format to the individual major coordinator by the deadline.

Each individual major application is reviewed by a committee of three faculty members from the College of Letters \& Science, each representing a department related to the proposed major. The faculty committee evaluates the proposal for coherence, appropriate breadth and depth, and similarity to existing majors. The committee may approve the proposal as submitted, recommend modifications, reject the proposal altogether, or reject it with an invitation to revise and resubmit in a later semester.
The committee's decision is final. Committee approval is necessary for the student to declare the individual major.

## INDIVIDUAL MAJOR WITH HONORS

Students may propose to complete an Individual Major with Honors by appending an Honors in the Major proposal to their regular individual major proposal.

## HONORS IN THE INDIVIDUAL MAJOR: REQUIREMENTS

To earn Honors in the Individual Major, students must:

- Complete 36 credits toward the individual major
- Complete 20 credits, taken for Honors, with individual grades of B or better, toward the individual major, to include a two-semester Senior Honors Thesis for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## ADVISING AND CAREERS

Students interested in learning more about the individual major should contact L\&S Undergraduate Academic Deans' Services at 608-262-0617 in 110 Ingraham Hall and set up an individual appointment with the coordinator for the individual major prior to starting this process.
The purpose of this meeting is to review the details of individual major requirements and to review procedures.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## MICROBIOLOGY, B.A. (L\&S)

Microbiology, the study of microorganisms, helps us understand our world and solve major problems. Microorganisms, or microbes, were the first life forms on earth and influence our lives and our planet in innumerable ways. The field of microbiology is constantly expanding as we learn more about the role of microbes in infectious disease, environmental remediation, bioenergy, food safety, antibiotic resistance, biotechnology and much more. Communities of microbes (or "microbiomes") are critically important in human health, global warming, agricultural yield, criminal justice, economic development and other issues of national concern.

The microbiology major, offered by the Department of Bacteriology, is a rigorous path of study, providing a curriculum packed with deep knowledge on broad aspects of microbiology and emphasizing modern laboratory skills. The core courses focus on the diversity, genetics, biochemistry, and physiology of microorganisms. A variety of elective courses provide the opportunity to study environmental microbiology, food microbiology, microbial pathogenesis, immunology, virology, microbiomes and microbial biotechnology, as well as advanced topics in
microbial genetics and physiology. In the instructional laboratory courses, students learn beginning through advanced laboratory techniques-gaining the type of hands-on experiences with modern equipment that employers and graduate schools seek. Additionally, students can conduct mentored and independent research projects in faculty laboratories.

The bachelor's degree provides a strong background in the biological sciences for students planning to enter medical, dental, veterinary or other professional schools, as well as those planning graduate studies in any branch of microbiology or other biological sciences such as biochemistry, pathology, and molecular or cell biology.

Students who end their training with a bachelor's degree are wellprepared for a variety of career opportunities, including laboratory positions in pharmaceutical and biotechnology firms and in university and government laboratories. They also work as specialists in industrial quality testing and control, and as regulatory workers in government agencies and public health laboratories. Exposure to the scientific process as well as training in microbiology allows microbiology graduates to enter fields as diverse as business, technical service, sales, and technical writing.

## HOW TO GET IN

Incoming or current students in good academic standing may declare the microbiology major at any time.

Schedule an appointment (https://calendar.wisc.edu/ scheduling-assistant/schedule/RAUHTzYt/ view.html;jsessionid=89D5FEA38114F159C48E4959F05B91E1.primary) with Katy France to discuss the microbiology major, appropriate coursework, how to declare, and so on.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of | 60 intermediate or advanced credits |
| Intermediate/ |  |


| Minimum | 2.000 in all coursework at UW-Madison |
| :--- | :--- |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics |  |  |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| Statistics |  |  |
| Select one of the following: |  | 3 |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| STAT/B M I 541 | Introduction to Biostatistics |  |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| Select ALL of the following: |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| Biology Foundation |  |  |
| Select one of the fo | wing: | 10-13 |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 \& BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology and Introductory Biology ${ }^{2}$ |  |


| BIOCORE 381 | Evolution, Ecology, and Genetics <br> \& BIOCORE 382 <br> and Evolution, Ecology, and |
| :--- | :--- |
| \& BIOCORE 383 | Genetics Laboratory |
| \& BIOCORE 384 | and Cellular Biology |
| \& BIOCORE 485 | and Cellular Biology Laboratory <br> and Organismal Biology ${ }^{2}$ |
| ZOOLOGY/ | Animal Biology |
| BIOLOGY 101 | and Animal Biology Laboratory |
| \& ZOOLOGY/ | and General Botany |
| BIOLOGY 102 |  |
| \& BOTANY/ |  |
| BIOLOGY 130 |  |

Physics
Select one of the following: 8-10

| PHYSICS 103 | General Physics <br> \&PHYSICS 104 <br> and General Physics |
| :--- | :--- |
| 3 |  |

Biochemistry
Select one of the following: 3-6
BIOCHEM 501 Introduction to Biochemistry
BIOCHEM 507 General Biochemistry I
\& BIOCHEM 508 and General Biochemistry II
Microbiology Courses
Microbiology Core (all required):
Except where noted, all Microbiology Core courses are
offered every fall and spring semester.
MICROBIO 303 Biology of Microorganisms 3
MICROBIO 304 Biology of Microorganisms 2
Laboratory
MICROBIO 305 Critical Analyses in Microbiology 1
MICROBIO 450 Diversity, Ecology and Evolution of 3
Microrrganisms
MICROBIO $470 \quad$ Microbial Genetics \& Molecular 3
Machines
MICROBIO 526 Physiology of Microorganisms 3
MICROBIO 527 Advanced Laboratory Techniques in 2
Microbiology (FALL ONLY)
Microbiology Capstone (required):

| MICROBIO 551 | Capstone Research Project in <br> Microbiology (SPRING ONLY) | 2 |
| :--- | :--- | :--- |

Microbiology Electives
Select at least 6 credits; at least 3 credits must come from
Set A. Note that not all elective courses are offered every semester.
Set A:
3-6

| MICROBIO/ | Food Microbiology Laboratory |
| :--- | :--- |
| FOOD SCI 324 |  |
| MICROBIO/ | Food Microbiology |
| FOOD SCI 325 |  |
| MICROBIO 330 | Host-Parasite Interactions |
| MICROBIO 375 | Special Topics |
| MICROBIO/SOIL <br> SCI 425 | Environmental Microbiology |

MICROBIO/SOIL Soil Microbiology and Biochemistry SCI 523
MICROBIO/ Immunology
M M \& I/PATH-
BIO 528
MICROBIO/ Topics in Biotechnology (topics vary
ONCOLOGY 545 by semester)
MICROBIO/ Advanced Microbial Genetics
GENETICS 607
MICROBIO/
Prokaryotic Molecular Biology
BIOCHEM/
GENETICS 612
MICROBIO/
PL PATH 622
MICROBIO 632 Industrial Microbiology/
Biotechnology
MICROBIO/ General Virology-Multiplication of
ONCOLOGY/PL Viruses
PATH 640
MICROBIO/
Biology and Genetics of Fungi
BOTANY/
GENETICS/M M \&
I/PL PATH 655
MICROBIO/ Microbiology at Atomic Resolution
BMOLCHEM 668
Set B:
BIOCHEM/M M \& Biology of Viruses
I 575

| BIOCHEM 601 | Protein and Enzyme Structure and <br> Function |
| :--- | :--- |
| BOTANY 330 | Algae |

BOTANY/PL PATH Fungi
332
BOTANY/ENTOM/ Plant-Microbe Interactions:
PL PATH 505 Molecular and Ecological Aspects
CHEM 565 Biophysical Chemistry
COMP SCI/ Introduction to Bioinformatics
B M I 576
F\&W ECOL/SURG Diseases of Wildlife
SCI 548
FOOD SCI 550 Fermented Foods and Beverages
M M \& I $301 \quad$ Pathogenic Bacteriology
M M \& I/ENTOM/ Parasitology
PATH-BIO/
ZOOLOGY 350
M M \& I $410 \quad$ Medical Mycology
M M \& I $554 \quad$ Emerging Infectious Diseases and Bioterrorism
M M \& I/POP Clinical and Public Health
HLTH 603 Microbiology
Total Credits
1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry requirement.

2 (BIOLOGY/BOTANY/ZOOLOGY 151 and BIOLOGY/BOTANY/ ZOOLOGY 152) or (BIOCORE 381 / BIOCORE 382 / BIOCORE 383 / BIOCORE 384 / BIOCORE 485) are recommended.
3
(PHYSICS 103 / PHYSICS 104) or (PHYSICS 207 / PHYSICS 208) are recommended.

## L\&S RESIDENCE AND QUALITY OF WORK

2.000 GPA in all MICROBIO courses and courses counting toward the major
2.000 GPA on 15 upper-level major credits, in residence ${ }^{1}$

15 credits of MICROBIO or courses counting toward the major, taken on campus

1 MICROBIO 300 through 699 count as upper level in the major, excluding MICROBIO 303 and MICROBIO 304. Intermediate- and advanced-level courses outside of MICROBIO that count for the major are also considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Microbiology Major in consultation with the Microbiology undergraduate advisor.

## HONORS IN THE MICROBIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Microbiology, students must satisfy both the requirements for the major (above) and the following requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all courses accepted in the major
- Complete 15 credits, taken for Honors, with individual grades of B or better. 6 credits must come from a two-semester Senior Honors Thesis in MICROBIO 681 Senior Honors Thesis and MICROBIO 682 Senior Honors Thesis. Select remaining courses from the following list:

| Code | Title | Credits |
| :---: | :---: | :---: |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory | 2 |
| MICROBIO 330 | Host-Parasite Interactions | 3 |
| MICROBIO/ <br> SOIL SCI 425 | Environmental Microbiology | 3 |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines | 3 |
| MICROBIO 526 | Physiology of Microorganisms | 3 |
| MICROBIO/M M \& I/ <br> PATH-BIO 528 | Immunology | 3 |
| MICROBIO/ GENETICS 607 | Advanced Microbial Genetics | 3 |
| miCROBIO/ BIOCHEM/ GENETICS 612 | Prokaryotic Molecular Biology | 3 |
| MICROBIO/ <br> PLPATH 622 | Plant-Bacterial Interactions | 2-3 |


| MICROBIO 632 | Industrial Microbiology/ <br> Biotechnology | 2 |
| :--- | :--- | ---: |
| MICROBIO/ | General Virology-Multiplication of <br> ONCOLOGY/ | Viruses |
| PL PATH 640 | Advanced Microbiology of | 3 |
| MICROBIO/ FOOD SCI 650 | Foodborne Pathogens | 3 |
| MICROBIO/ <br> BMOLCHEM 668 | Microbiology at Atomic Resolution | 3 |

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |

## LEARNING OUTCOMES

1. Develop a fundamental understanding of the principles of microbiology and the necessary skills for a professional career in microbiology.
2. Apply the scientific method to questions. Formulate a hypothesis, gather data, and analyze that data to assess the degree to which their work supports the hypothesis.
3. Demonstrate proficiency in the techniques used in microbiology and an ability to critically analyze data and integrate ideas for problem solving.
4. Access the primary and secondary literature and, in combination with their own findings, effectively communicate their ideas both orally and in written form.
5. Learn about and demonstrate personal and professional ethics.

## ADVISING AND CAREERS

Current UW-Madison students can schedule initial advising (https:// calendar.wisc.edu/scheduling-assistant/schedule/RAUHTzYt/view.html) in the microbiology major with Katy France.

Prospective/future UW-Madison students should send an email to Katy France, katy.france@wisc.edu, to set up an appointment, which can be conducted in person or via phone call.

Read about and explore possible microbiology careers at the American Society for Microbiology (https://www.asm.org/index.php/learn-aboutcareers) website.

Learn more about health-related careers through the
ExploreHealthCareers.org (https://explorehealthcareers.org) website.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Charles Kaspar (chair), Jean-Michel Ané, Cameron Currie, Timothy Donohue, Marcin Filutowicz, Katrina Forest, Richard Gourse, Eric Johnson, Katherine "Trina" McMahon, Michael Thomas, Jue "Jade" Wang, Karen Wassarman, and Jae-Hyuk Yu

Associate Professor Garret Suen

Assistant Professors Daniel Amador-Noguez, Karthik Anantharaman, Briana Burton, Federico Rey, and Kalin Vetsigian

## MICROBIOLOGY, B.S. (L\&S)

Microbiology, the study of microorganisms, helps us understand our world and solve major problems. Microorganisms, or microbes, were the first life forms on earth and influence our lives and our planet in innumerable ways. The field of microbiology is constantly expanding as we learn more about the role of microbes in infectious disease, environmental remediation, bioenergy, food safety, antibiotic resistance, biotechnology and much more. Communities of microbes (or "microbiomes") are critically important in human health, global warming, agricultural yield, criminal justice, economic development and other issues of national concern.

The microbiology major, offered by the Department of Bacteriology, is a rigorous path of study, providing a curriculum packed with deep knowledge on broad aspects of microbiology and emphasizing modern laboratory skills. The core courses focus on the diversity, genetics, biochemistry, and physiology of microorganisms. A variety of elective courses provide the opportunity to study environmental microbiology,
food microbiology, microbial pathogenesis, immunology, virology, microbiomes and microbial biotechnology, as well as advanced topics in microbial genetics and physiology. In the instructional laboratory courses, students learn beginning through advanced laboratory techniques-gaining the type of hands-on experiences with modern equipment that employers and graduate schools seek. Additionally, students can conduct mentored and independent research projects in faculty laboratories.

The bachelor's degree provides a strong background in the biological sciences for students planning to enter medical, dental, veterinary or other professional schools, as well as those planning graduate studies in any branch of microbiology or other biological sciences such as biochemistry, pathology, and molecular or cell biology.

Students who end their training with a bachelor's degree are wellprepared for a variety of career opportunities, including laboratory positions in pharmaceutical and biotechnology firms and in university and government laboratories. They also work as specialists in industrial quality testing and control, and as regulatory workers in government agencies and public health laboratories. Exposure to the scientific process as well as training in microbiology allows microbiology graduates to enter fields as diverse as business, technical service, sales, and technical writing.

## HOW TO GET IN

Incoming or current students in good academic standing may declare the microbiology major at any time.

Schedule an appointment (https://calendar.wisc.edu/ scheduling-assistant/schedule/RAUHTzYt/ view.html;jsessionid=89D5FEA38114F159C48E4959F05B91E1.primary) with Katy France to discuss the microbiology major, appropriate coursework, how to declare, and so on.

## REQUIREMENTS

## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

| General Education | - Breadth-Humanities/Literature/Arts: 6 c <br> - Breadth-Natural Science: 4 to 6 credits, one 4 - or 5 -credit course with a laboratory or two courses providing a total of 6 cred <br> - Breadth-Social Studies: 3 credits <br> - Communication Part A \& Part B * <br> - Ethnic Studies * <br> - Quantitative Reasoning Part A \& Part B * <br> * The mortarboard symbol appears before th course that fulfills one of the Communication Part B, Ethnic Studies, or Quantitative Reason Part B requirements. |
| :---: | :---: |
| -0U | MENTS FOR THE MAJOR |


| Code | Title | Credits |
| :---: | :---: | :---: |
| Mathematics |  |  |
| Select one of the following: |  | 5-10 |
| MATH 171 <br> \& MATH 217 | Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |
| Statistics |  |  |
| Select one of the following: |  | 3 |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| STAT/B M I 541 | Introduction to Biostatistics |  |
| General Chemistry |  |  |
| Select one of the following: ${ }^{1}$ |  | 5-9 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| Organic Chemistry |  |  |
| Select ALL of the following: |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry Laboratory | 2 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| Biology Foundation |  |  |
| Select one of the fo | wing: | 10-13 |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 151 <br> \& BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology and Introductory Biology ${ }^{2}$ |  |
| BIOCORE 381 <br> \& BIOCORE 382 <br> \& BIOCORE 383 <br> \& BIOCORE 384 <br> \& BIOCORE 485 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory and Cellular Biology and Cellular Biology Laboratory and Organismal Biology ${ }^{2}$ |  |


| ZOOLOGY/ | Animal Biology |
| :--- | :--- |
| BIOLOGY 101 | and Animal Biology Laboratory |
| \& ZOOLOGY/ | and General Botany |
| BIOLOGY 102 |  |
| \& BOTANY/ |  |
| BIOLOGY 130 |  |

## Physics

Select one of the following: 8-10

| PHYSICS 103 | General Physics <br> \& PHYSICS 104 <br> and General Physics |
| :--- | :--- |
| 3 |  |

Biochemistry

| Select one of the following: | $3-6$ |  |
| :--- | :--- | :--- |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| BIOCHEM 507 | General Biochemistry I |  |
| \& BIOCHEM 508 | and General Biochemistry II |  |

Microbiology Courses
Microbiology Core (all required):
Except where noted, all Microbiology Core courses are offered every fall and spring semester.
MICROBIO 303 Biology of Microorganisms 3
MICROBIO $304 \quad$ Biology of Microorganisms 2

## Laboratory

MICROBIO $305 \quad$ Critical Analyses in Microbiology 1
MICROBIO 450 Diversity, Ecology and Evolution of 3
Microrrganisms
MICROBIO 470 Microbial Genetics \& Molecular 3
Machines
MICROBIO 526 Physiology of Microorganisms 3
MICROBIO 527 Advanced Laboratory Techniques in 2
Microbiology (FALL ONLY)
Microbiology Capstone (required):

| MICROBIO 551 | Capstone Research Project in <br> Microbiology (SPRING ONLY) | 2 |
| :--- | :--- | :--- |

Microbiology Electives
Select at least 6 credits; at least 3 credits must come from
Set A. Note that not all elective courses are offered every semester.

## Set A:

| MICROBIO/ | Food Microbiology Laboratory |
| :--- | :--- |
| FOOD SCI 324 |  |
| MICROBIO/ | Food Microbiology |
| FOOD SCI 325 |  |
| MICROBIO 330 | Host-Parasite Interactions |
| MICROBIO 375 | Special Topics |
| MICROBIO/SOIL | Environmental Microbiology |
| SCI 425 |  |
| MICROBIO/SOIL | Soil Microbiology and Biochemistry |
| SCI 523 |  |
| MICROBIO/ | Immunology |
| M M \& I/PATH- |  |
| BIO 528 |  |


| MICROBIO/ | Topics in Biotechnology (topics vary |
| :--- | :--- |
| ONCOLOGY 545 | by semester) |
| MICROBIO/ | Advanced Microbial Genetics |
| GENETICS 607 |  |
| MICROBIO/ | Prokaryotic Molecular Biology |
| BIOCHEM/ |  |
| GENETICS 612 |  |
| MICROBIO/ | Plant-Bacterial Interactions |
| PL PATH 622 |  |
| MICROBIO 632 | Industrial Microbiology/ |
| MICROBIO/ | Biotechnology |
| ONCOLOGY/PL | Viruses Virology-Multiplication of |
| PATH 640 |  |
| MICROBIO/ | Biology and Genetics of Fungi |
| BOTANY/ |  |
| GENETICS/M M \& |  |
| I/PL PATH 655 |  |
| MICROBIO/ | Microbiology at Atomic Resolution |
| BMOLCHEM 668 |  |

Set B: 0-3

BIOCHEM/M M \& Biology of Viruses
I 575
BIOCHEM 601 Protein and Enzyme Structure and Function
BOTANY 330 Algae
BOTANY/PL PATH Fungi
332
BOTANY/ENTOM/ Plant-Microbe Interactions:
PL PATH 505 Molecular and Ecological Aspects
CHEM 565 Biophysical Chemistry
COMP SCI/ Introduction to Bioinformatics
B M I 576
F\&W ECOL/SURG Diseases of Wildlife
SCI 548
FOOD SCI $550 \quad$ Fermented Foods and Beverages
M M \& I $301 \quad$ Pathogenic Bacteriology
M M \& I/ENTOM/ Parasitology
PATH-BIO/
ZOOLOGY 350
M M \& I 410
Medical Mycology
M M \& I $554 \quad$ Emerging Infectious Diseases and Bioterrorism
M M \& I/POP Clinical and Public Health
HLTH 603 Microbiology
Total Credits 64-87
1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry requirement.
2 (BIOLOGY/BOTANY/ZOOLOGY 151 and BIOLOGY/BOTANY/ ZOOLOGY 152) or (BIOCORE 381 / BIOCORE 382 / BIOCORE 383 / BIOCORE 384 / BIOCORE 485) are recommended.
3
(PHYSICS 103 / PHYSICS 104) or (PHYSICS 207 / PHYSICS 208) are recommended.

## L\&S RESIDENCE AND QUALITY OF WORK

2.000 GPA in all MICROBIO courses and courses counting toward the major
2.000 GPA on 15 upper-level major credits, in residence ${ }^{1}$

15 credits of MICROBIO or courses counting toward the major, taken on campus

1 MICROBIO 300 through 699 count as upper level in the major, excluding MICROBIO 303 and MICROBIO 304. Intermediate- and advanced-level courses outside of MICROBIO that count for the major are also considered upper level.

## HONORS IN THE MAJOR

Students may declare Honors in the Microbiology Major in consultation with the Microbiology undergraduate advisor.

## HONORS IN THE MICROBIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Microbiology, students must satisfy both the requirements for the major (above) and the following requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all courses accepted in the major
- Complete 15 credits, taken for Honors, with individual grades of B or better. 6 credits must come from a two-semester Senior Honors Thesis in MICROBIO 681 Senior Honors Thesis and MICROBIO 682 Senior Honors Thesis. Select remaining courses from the following list:

| Code | Title | Credits |
| :---: | :---: | :---: |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO 304 | Biology of Microorganisms Laboratory | 2 |
| MICROBIO 330 | Host-Parasite Interactions | 3 |
| MICROBIO/ SOIL SCI 425 | Environmental Microbiology | 3 |
| MICROBIO 450 | Diversity, Ecology and Evolution of Microrrganisms | 3 |
| MICROBIO 470 | Microbial Genetics \& Molecular Machines | 3 |
| MICROBIO 526 | Physiology of Microorganisms | 3 |
| MICROBIO/M M \& I/ PATH-BIO 528 | Immunology | 3 |
| MICROBIO/ GENETICS 607 | Advanced Microbial Genetics | 3 |
| MICROBIO/ BIOCHEM/ GENETICS 612 | Prokaryotic Molecular Biology | 3 |
| MICROBIO/ <br> PL PATH 622 | Plant-Bacterial Interactions | 2-3 |
| MICROBIO 632 | Industrial Microbiology/ Biotechnology | 2 |
| MICROBIO/ <br> ONCOLOGY/ <br> PL PATH 640 | General Virology-Multiplication of Viruses | 3 |
| MICROBIO/ FOOD SCI 650 | Advanced Microbiology of Foodborne Pathogens | 3 |

MICROBIO/

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Develop a fundamental understanding of the principles of microbiology and the necessary skills for a professional career in microbiology.
2. Apply the scientific method to questions. Formulate a hypothesis, gather data, and analyze that data to assess the degree to which their work supports the hypothesis
3. Demonstrate proficiency in the techniques used in microbiology and an ability to critically analyze data and integrate ideas for problem solving.
4. Access the primary and secondary literature and, in combination with their own findings, effectively communicate their ideas both orally and in written form
5. Learn about and demonstrate personal and professional ethics.

## ADVISING AND CAREERS

Current UW-Madison students can schedule initial advising (https:// calendar.wisc.edu/scheduling-assistant/schedule/RAUHTzYt/view.html) in the microbiology major with Katy France.

Prospective/future UW-Madison students should send an email to Katy France, katy.france@wisc.edu, to set up an appointment, which can be conducted in person or via phone call.

Read about and explore possible microbiology careers at the American Society for Microbiology (https://www.asm.org/index.php/learn-aboutcareers) website.

Learn more about health-related careers through the ExploreHealthCareers.org (https://explorehealthcareers.org) website.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Charles Kaspar (chair), Jean-Michel Ané, Cameron Currie, Timothy Donohue, Marcin Filutowicz, Katrina Forest, Richard Gourse, Eric Johnson, Katherine "Trina" McMahon, Michael Thomas, Jue "Jade" Wang, Karen Wassarman, and Jae-Hyuk Yu

Associate Professor Garret Suen
Assistant Professors Daniel Amador-Noguez, Karthik Anantharaman Briana Burton, Federico Rey, and Kalin Vetsigian

## MATHEMATICS

Mathematics is classified with both the humanities and the sciences. Its position among the humanities is based on the study of mathematics as one of the liberal arts for more than two thousand years. Still an expanding subject, mathematics offers more new and challenging frontiers than at any time in its long history-with many new fields, requiring new techniques and ideas for exploration.

The place of mathematics among the sciences is well founded. The natural sciences have invariably turned to mathematics for techniques needed to explore the consequences of scientific theories. In the last few decades social scientists have increasingly found higher mathematics of value in their training and research.

In recent years graduating math majors have obtained employment in a variety of jobs in business, industry, and governmental agencies and also have obtained teaching positions at the secondary school level (such teaching positions normally require teaching certification). Others have continued their education at the graduate level in mathematics and other fields. Departments in a variety of fields which use mathematics, including some in the social and biological sciences as well as in engineering and the physical sciences, are interested in attracting math majors into their graduate programs. Math Ph.D.'s obtain academic positions at the college and university level and nonacademic positions
entailing consulting and research. The math major requirements are flexible enough to allow preparation for various goals.

Students interested in mathematics might also consider the related degree program in applied mathematics, engineering and physics (p. 1077).

## DEGREES/MAJORS/CERTIFICATES

- Applied Mathematics, Engineering, and Physics, B.S. AMEP (p. 1077)
- Mathematics, B.A. (p. 1080)
- Mathematics, B.S. (p. 1089)
- Mathematics, Certificate (p. 1099)


## PEOPLE

## FACULTY

Professors Angenent, Arinkin, Assadi, Bolotin, Boston, Caldararu, Craciun, Denissov, Ellenberg, Feldman, Gong, Jin, Lempp, Mari-Beffa, Maxim, Miller, Mitchell, Paul, Roch, Seeger, Seppalainen, Smith, Terwilliger, Thiffeault, Valko, Viaclovsky, Waleffe, Yang.

Associate Professors Anderson, Gurevich, Stechmann, Street, Kent.
Assistant Professors Andrews, Dymarz, Erman, Kim, Marshall, Sam, Spagnolie, Stovall, Tran, B. Wang, L. Wang, M. Matchett Wood, P. Matchett Wood, Li.

## ACADEMIC STAFF

Anzaldo (Precalculus Coordinator), Benguria-Andrews (Calculus Coordinator), Hanhart (Associate Director of Undergraduate Studies), Kwon (Math 13X Coordinator), Malekpour (Director of the Instructional Excellence Program, WISCEL), Rivard (Placement and Enrollment Coordinator)

## APPLIED MATHEMATICS, ENGINEERING, AND PHYSICS, B.S. AMEP

This four-year degree program in the interdisciplinary physical sciences offers a strong theoretical foundation in related areas of engineering sciences, mathematics, and physics for professional work in the field of industrial research and technology. It also provides a foundation for graduate degree work in applied mathematics, engineering sciences, and physics.

The AMEP program is an excellent choice for the student with broad interests in mathematics, physics and engineering. AMEP emphasizes an integrated mathematics and physics curriculum and strives to achieve an optimum balance of breadth and depth in the physical sciences within the confines of a four-year degree.

## HOW TO GET IN

## ENTRANCE REQUIREMENTS

Because admission into AMEP is internal to UW-Madison, a student must be admitted to UW-Madison or already be a UW-Madison student to join AMEP.

Admission into AMEP as a freshman requires placement into MATH 222 at least, although placement into MATH 234 (4 or 5 on the AP Calculus BC exam) is preferred. Admission into AMEP as a sophomore or junior requires a 2.750 GPA in introductory core courses taken in the mathematics and physics departments.

## DECLARING APPLIED MATHEMATICS, ENGINEERING, AND PHYSICS UNDERGRADUATE DEGREE PROGRAM (AMEP)

Students should declare AMEP as soon as possible. The first step in declaring the AMEP degree is to visit an AMEP math faculty advisor.

Students fill out an AMEP degree declaration form (https://www.math.wisc.edu/sites/default/files/private/ AMEP_MAJOR_Declaration_form.pdf)(PDF) to change to the "AMP" designation and meet with an AMEP math faculty advisor (see AMEP faculty advisors (https://www.math.wisc.edu/amep/advising/ \#advisors)) who needs to approve and sign the declaration form.

Look for AMEP faculty advisors' office hours in the MATH ADVISING CALENDAR (https://www.math.wisc.edu/undergraduate/math-major-advising-calendar) or on the professor's web page (see Declaring AMEP (https://www.math.wisc.edu/amep/advising/\#declare)). When contacting a professor, students should make sure they put "AMEP (https://www.math.wisc.edu/amep)" in the subject line and send a brief clear message, since professors receive many emails.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 LIBERAL ARTS AND SCIENCE: B.S.AMEP
## LIBERAL ARTS AND SCIENCE (LAS) REQUIREMENT

A minimum of 20 credits in Liberal Arts and Science courses outside the physical and mathematical sciences are required. Courses may not carry a Physical Science designation or be listed (or cross-listed) in the MATH or COMP SCI subjects.

1. Complete a minimum of 12 credits in humanities and/or social studies (including a minimum of 6 credits of humanities and 3 credits of social studies as part of the University General Education Requirements).
2. Credits may include a maximum of 8 credits in biological sciences.
3. Additional L\&S credits outside physical sciences (excluding computer science and mathematics).

## FOREIGN LANGUAGE REQUIREMENT

AMEP degree candidates must complete the 2 nd unit of a foreign language either through high school language study or college coursework. A unit of a foreign language is equivalent to one year of high school work or one semester/term of college-level work.

## REQUIREMENTS FOR THE MAJOR

A total of at least 125 credits with a minimum GPA of 2.000 is required.

## REQUIREMENTS

| Code |  | Credits |
| :---: | :---: | :---: |
| Mathematics (2.750 GPA ) ${ }^{1}$ |  |  |
| MATH 221 or MATH 275 | Calculus and Analytic Geometry 1 Topics in Calculus I | 5 |
| MATH 222 or MATH 276 | Calculus and Analytic Geometry 2 Topics in Calculus II | 4-5 |
| MATH 234 | Calculus--Functions of Several Variables | 4 |
| FOUNDATION: P | s (2.750 GPA) | 13-14 |
| First Introductory course |  |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 247 | A Modern Introduction to Physics |  |
| $\begin{aligned} & \text { E M A } 201 \\ & \& \text { E M A } 202 \end{aligned}$ | Statics and Dynamics ${ }^{1}$ |  |

Second Introductory course

| PHYSICS 202 | General Physics |  |
| :---: | :---: | :---: |
| PHYSICS 208 | General Physics |  |
| PHYSICS 248 | A Modern Introduction to Physics |  |
| Third Introductory course |  |  |
| PHYSICS 205 | Modern Physics for Engineers |  |
| PHYSICS/ <br> ECE 235 | Introduction to Solid State Electronics |  |
| PHYSICS 241 | Introduction to Modern Physics |  |
| PHYSICS 249 | A Modern Introduction to Physics |  |
| CORE: Chemistry |  | 5-9 |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CORE: Mathematics |  | 18 |
| MATH 321 | Applied Mathematical Analysis |  |
| MATH 322 | Applied Mathematical Analysis |  |
| MATH 320 | Linear Algebra and Differential Equations ${ }^{2}$ |  |
| Additional CORE MATH electives from: |  |  |
| MATH 415 | Applied Dynamical Systems, Chaos and Modeling |  |
| MATH/STAT 431 | Introduction to the Theory of Probability |  |
| MATH/ COMP SCI 513 | Numerical Linear Algebra |  |
| MATH/ COMP SCI 514 | Numerical Analysis |  |
| MATH/I SY E/ OTM/STAT 632 | Introduction to Stochastic Processes |  |
| CORE Physics |  | 15 |
| PHYSICS 311 | Mechanics |  |
| PHYSICS 322 | Electromagnetic Fields |  |
| Additional CORE PHYSICS electives from: |  |  |
| PHYSICS 321 | Electric Circuits and Electronics |  |
| PHYSICS 325 | Wave Motion and Optics |  |
| PHYSICS 406 | Special Topics in Physics |  |
| PHYSICS 415 | Thermal Physics |  |
| PHYSICS 448 | Atomic and Quantum Physics |  |
| PHYSICS 449 | Atomic and Quantum Physics |  |
| CORE Engineering |  |  |
| 21 credits in Engineering courses approved by your AMEP Engineering advisor |  | 21 |
| Laboratory Experience ${ }^{3}$ |  |  |
| PHYSICS 307 | Intermediate Laboratory-Mechanics and Modern Physics |  |
| PHYSICS 308 | Intermediate LaboratoryElectromagnetic Fields and Optics |  |
| PHYSICS 321 | Electric Circuits and Electronics |  |
| PHYSICS 407 | Advanced Laboratory |  |
| Computational Experience ${ }^{4}$ |  |  |
| COMP SCI 310 | Problem Solving Using Computers |  |
| COMP SCI 412 | Introduction to Numerical Methods |  |


| MATH/ | Numerical Linear Algebra |
| :--- | :--- |
| COMP SCI 513 |  |
| MATH/ | Numerical Analysis |
| COMP SCI 514 |  |

## Total Credits

85-91

## RESIDENCE AND QUALITY OF WORK REQUIREMENT

Minimum 2.000 GPA in AMEP program courses
Minimum 2.000 GPA and 15 upper-level AMEP program credits, taken in residence ${ }^{5}$

15 credits in AMEP program courses, taken on the UW-Madison campus
1 M E 240 Dynamics substitutes for E M A 202 Dynamics
2 MATH 319 \& MATH 340 or MATH 375-MATH 376 may substitute for MATH 320
3
Laboratory experience credits may double-count in Physics and/or Engineering CORE
4
Computational experience credits may double-count in Mathematics CORE
5 The following course numbers are considered upper level in AMEP. MATH 300-699
PHYSICS 311-699
E C E 310-699
EM A 405-699
I SY E 313-699
M E 303-699
Courses meeting CORE, Lab, and Computation that are numbered 300-699

## DISTINCTION IN THE MAJOR

Students earning an AMEP program GPA of 3.500 and higher will be nominated for Distinction in the Major.

## HONORS IN THE MAJOR

Honors in the Major is not available in Applied Mathematics, Engineering, and Physics.

## UNIVERSITY DEGREE REQUIREMENTS

$\left.\left.\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\ \text { students must earn a minimum of } 120 \text { degree credits. } \\ \text { The requirements for some programs may exceed 120 } \\ \text { degree credits. Students should consult with their college } \\ \text { or department advisor for information on specific credit } \\ \text { requirements. }\end{array} \\ \text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of 30 } \\ \text { credits in residence at UW-Madison. "In residence" means } \\ \text { on the UW-Madison campus with an undergraduate } \\ \text { degree classification. "In residence" credit also includes }\end{array} \\ \text { UW-Madison courses offered in distance or online } \\ \text { formats and credits earned in UW-Madison Study }\end{array}\right\} \begin{array}{l}\text { Abroad/Study Away programs. }\end{array}\right\}$

## LEARNING OUTCOMES

1. State, explain and apply principal theorems and techniques of applied mathematics, including (but not limited to) the subject areas of vector and complex calculus, linear algebra, and differential equations.
2. State, explain and apply theory and methods of classical and modern physics such as mechanics (classical, statistical, quantum), electricity, magnetism, thermodynamics, radiation and atomic physics.
3. Develop strategies to synthesize applied mathematics and physical sciences to address engineering problems, with emphasis on problems of current interest.
4. Design and conduct experiments to explore hypotheses regarding science and/or technology and/or engineering problems, and will use mathematics to help interpret experimental results.
5. Work in multidisciplinary groups of mathematicians, physical scientists, and engineers to formulate and solve STEM problems, which includes the creation and evaluation of models for natural phenomena.
6. Through written and oral presentations, students will communicate technical/scientific ideas and results to experts and non-experts.

## ADVISING AND CAREERS

For information about advising for the special Letters \& Science degree program, students should refer to AMEP Advising (https:// www.math.wisc.edu/amep/advising).

Students can also get questions answered about declaring the major and getting advising by contacting the Department of Mathematics at 608-263-2546.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## MATHEMATICS, B.A.

Mathematics is classified with both the humanities and the sciences. Its position among the humanities is based on the study of mathematics as one of the liberal arts for more than two thousand years. Still an expanding subject, mathematics offers more new and challenging frontiers than at any time in its long history-with many new fields, requiring new techniques and ideas for exploration.

The place of mathematics among the sciences is well founded. The natural sciences have invariably turned to mathematics for techniques needed to explore the consequences of scientific theories. In the last few decades social scientists have increasingly found higher mathematics of value in their training and research.

In recent years graduating math majors have obtained employment in a variety of jobs in business, industry, and governmental agencies and also have obtained teaching positions at the secondary school level (such teaching positions normally require teaching certification). Others have continued their education at the graduate level in mathematics and other fields. Departments in a variety of fields which use mathematics, including some in the social and biological sciences as well as in engineering and the physical sciences, are interested in attracting math majors into their graduate programs. Math Ph.D.'s obtain academic positions at the college and university level and nonacademic positions entailing consulting and research. The math major requirements are flexible enough to allow preparation for various goals.

Students interested in mathematics might also consider the related degree program in applied mathematics, engineering and physics (p. 1077).

## HOW TO GET IN

## ACCEPTANCE

To be accepted as a major in mathematics a student must complete MATH 221 Calculus and Analytic Geometry 1, MATH 222 Calculus and Analytic Geometry 2, and MATH 234 Calculus--Functions of Several Variables with a grade point average of 2.500 or better in this sequence. However, a higher grade point average is advisable. Students should meet with a math advisor before declaring in order to discuss course selection and major plan. Majors are provided with math advisor information at the math advising page (http://www.math.wisc.edu/undergraduate/ advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as
needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Foreign
Language

L\&S Breadth

Liberal Arts and Science Coursework

Depth of Intermediate/
Advanced
work

Total Credits
UW-Madison

Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

08 credits

60 intermediate or advanced credits
Major Declare and complete at least one (1) major

Experience 30 credits in residence after the 90th credit
Declare and complete at least one (1) major
120 credits
30 credits in residence, overall

| Minimum | 2.000 in all coursework at UW-Madison |
| :--- | :--- |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

There are two tracks: Option I or Option II. Both are flexible, so students should plan their programs with the advice of their math advisors. In particular, those following Option II must have their programs formally approved by their mathematics advisors.

## OPTION I

The Option I package requires exposure to at least two areas of mathematics at the advanced undergraduate level. This package is best for students who have a broad interest in many areas of mathematics. Students interested in honors in the major should also choose this option.

The Option I major requires a minimum of seven mathematics courses numbered 307-699. ${ }^{1}$

| Code <br> Linear Algebra | Title |
| :--- | :--- | Credits

## Additional Math $\mathbf{5 0 0}$ or higher

Select one course from Math 500-679 (see course list A
below)
Select additional courses to reach 7 courses in the major (see course list B below)

1 Only one of these courses will count toward the major.

## Course list A

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH/ COMP SCI 513 | Numerical Linear Algebra | 3 |
| MATH/ COMP SCI 514 | Numerical Analysis | 3 |
| MATH 519 | Ordinary Differential Equations | 3 |
| MATH 521 | Analysis I | 3 |
| MATH 522 | Analysis II | 3 |
| MATH/COMP SCI/ I SY E/STAT 525 | Linear Programming Methods | 3 |
| MATH 531 | Probability Theory | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |
| MATH 551 | Elementary Topology | 3 |
| MATH 552 | Elementary Geometric and Algebraic Topology | 3 |
| MATH 561 | Differential Geometry | 3 |
| MATH 567 | Elementary Number Theory | 3 |
| MATH 570 | Fundamentals of Set Theory | 3 |
| MATH/PHILOS 571 | Mathematical Logic | 3 |
| MATH 605 | Stochastic Methods for Biology | 3 |
| MATH/B M I/ BIOCHEM/ BMOLCHEM 606 | Mathematical Methods for Structural Biology | 3 |
| MATH 607 | Topics in Mathematics Study Abroad | 1-5 |
| MATH 608 | Mathematical Methods for Continuum Modeling in Biology | 3 |
| MATH/B M I/ BIOCHEM/ BMOLCHEM 609 | Mathematical Methods for Systems Biology | 3 |
| MATH 619 | Analysis of Partial Differential Equations | 3 |
| MATH 621 | Analysis III | 3 |
| MATH 623 | Complex Analysis | 3 |
| MATH 627 | Introduction to Fourier Analysis | 3 |
| MATH 629 | Introduction to Measure and Integration | 3 |
| MATH/I SY E/OTM/ STAT 632 | Introduction to Stochastic Processes | 3 |
| MATH/I SY E/ OTM 633 | Queuing Theory and Stochastic Modeling | 3 |
| MATH 635 | An Introduction to Brownian Motion and Stochastic Calculus | 3 |
| MATH/E C E 641 | Introduction to Error-Correcting Codes | 3 |

## Course list ${ }^{1}$

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH/STAT 309 | Introduction to Probability and | 3 |
| MATH/STAT 310 | Mathematical Statistics I |  |
|  | Introduction to Probability and <br> Mathematical Statistics II | 3 |
| MATH 319 | Techniques in Ordinary Differential <br> Equations | 3 |


| MATH 321 | Applied Mathematical Analysis | 3 |
| :---: | :---: | :---: |
| MATH 322 | Applied Mathematical Analysis | 3 |
| MATH 331 | An Introduction to Probability and Markov Chain Models | 3 |
| MATH 341 | Linear Algebra | 3 |
| MATH 376 | Topics in Multi-Variable Calculus and Differential Equations | 5 |
| MATH 407 | Topics in Mathematics Study Abroad | 1-5 |
| MATH 415 | Applied Dynamical Systems, Chaos and Modeling | 3 |
| MATH/COMP SCI/ <br> ISYE 425 | Introduction to Combinatorial Optimization ${ }^{2}$ | 3 |
| MATH/STAT 431 | Introduction to the Theory of Probability | 3 |
| MATH/COMP SCI/ <br> ECE 435 | Introduction to Cryptography | 3 |
| MATH 441 | Introduction to Modern Algebra | 3 |
| MATH 443 | Applied Linear Algebra | 3 |
| MATH 461 | College Geometry I | 3 |
| MATH/HIST SCI 473 | History of Mathematics | 3 |
| MATH/COMP SCI/ <br> STAT 475 | Introduction to Combinatorics | 3 |
| MATH 491 | Topics in Undergraduate Mathematics | 3 |
| MATH/ COMP SCI 513 | Numerical Linear Algebra | 3 |
| MATH/ COMP SCI 514 | Numerical Analysis | 3 |
| MATH 519 | Ordinary Differential Equations | 3 |
| MATH 521 | Analysis I | 3 |
| MATH 522 | Analysis II | 3 |
| MATH/COMP SCI/ I SY E/STAT 525 | Linear Programming Methods | 3 |
| MATH 531 | Probability Theory | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |
| MATH 551 | Elementary Topology | 3 |
| MATH 552 | Elementary Geometric and Algebraic Topology | 3 |
| MATH 561 | Differential Geometry | 3 |
| MATH 567 | Elementary Number Theory | 3 |
| MATH 570 | Fundamentals of Set Theory | 3 |
| MATH/PHILOS 571 | Mathematical Logic | 3 |
| MATH 605 | Stochastic Methods for Biology | 3 |
| MATH/B M I/ BIOCHEM/ <br> BMOLCHEM 606 | Mathematical Methods for Structural Biology | 3 |
| MATH 607 | Topics in Mathematics Study Abroad | 1-5 |
| MATH 608 | Mathematical Methods for Continuum Modeling in Biology | 3 |
| MATH/B M I/ BIOCHEM/ BMOLCHEM 609 | Mathematical Methods for Systems Biology | 3 |


| MATH 619 | Analysis of Partial Differential Equations |
| :---: | :---: |
| MATH 621 | Analysis III |
| MATH 623 | Complex Analysis |
| MATH 627 | Introduction to Fourier Analysis |
| MATH 629 | Introduction to Measure and Integration |
| MATH/I SY E/OTM/ <br> STAT 632 | Introduction to Stochastic Processes |
| MATH/I SY E/ OTM 633 | Queuing Theory and Stochastic Modeling |
| MATH 635 | An Introduction to Brownian Motion and Stochastic Calculus |
| MATH/E C E 641 | Introduction to Error-Correcting Codes |
| MATH 681 | Senior Honors Thesis |
| MATH 682 | Senior Honors Thesis |
| MATH 691 | Undergraduate Thesis |
| MATH 692 | Undergraduate Thesis |
| 1 There are two subgroups within this course list where only one course from each subgroup will count towards the major. <br> 1. Differential Equations: MATH 319, MATH 376 <br> 2. Probability: MATH/STAT 309, MATH 331, MATH/STAT 431, STAT 311 |  |
| This course will | nly count if taken after summer 2015. |
| OPTION II |  |
| This option allows students to focus on mathematics associated to one specific area or application. Students interested in a focused mathematics program (i.e., actuary mathematics, elementary education, etc.) or a dual major program often choose this option. A mathematics advisor must approve the collection of courses used to complete major requirements prior to major declaration. |  |
| Mathematics Core Code | Title Credits |
| Linear Algebra |  |
| Select one of the following: ${ }^{1}$ |  |
| MATH 320 | Linear Algebra and Differential Equations |
| MATH 340 | Elementary Matrix and Linear Algebra |
| MATH 341 | Linear Algebra |
| MATH 375 | Topics in Multi-Variable Calculus and Linear Algebra |

## Advanced Courses

Select two courses from MATH 500-679 (see course list A below). These courses must be approved by a mathematics advisor.

## Intermediate Courses

Select three courses from MATH 307- 692 (see course list $B$ below). These courses must be approved by a mathematics advisor.

1 Only one of these courses will count toward the major.



## Applied Concentration Area

Select four additional courses. These courses may be from any department and should be appropriate for the focused nature of the option II major. The following concentration areas have been preapproved and may be useful for planning purposes, though any collection of four courses approved by a mathematics advisor can be used to fulfill this program requirement. Note that math courses may fulfill the requirements in the concentration, but cannot also count for the core mathematics course requirements listed above (p. 1083).


| Code | Title | Credits |
| :--- | :--- | ---: |
| ACT SCI/MATH 303 | Theory of Interest and Life |  |
|  | Insurance | 3 |
| ACT SCI 650 | Actuarial Mathematics I | 6 |
| \& ACT SCI 652 | and Loss Models I |  |
| ACT SCI 651 | Actuarial Mathematics II | 3 |
| or ACT SCI 653 | Loss Models II |  |


| Astronomy |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| Select two from the following: |  |  |
| ASTRON 310 | Stellar Astrophysics | 3 |
| ASTRON 320 | The Interstellar Medium | 3 |
| ASTRON 335 | Cosmology | 3 |

Any two 3-credit PHYSICS courses numbered 400 and above excluding labs

| Atmospheric \& Oceanic Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I | 3 |
| ATM OCN 311 | Dynamics of the Atmosphere and Ocean II | 3 |
| ATM OCN 330 | Physics of the Atmosphere and Ocean I | 3 |
| PHYSICS 208 or PHYSICS 248 | General Physics <br> A Modern Introduction to Physics | 5 |
| Bio-Informatics |  |  |
| Code | Title | Credits |
| B M I/COMP SCI 576 | Introduction to Bioinformatics | 3 |
| COMP SCI 300 | Programming II | 3 |
| COMP SCI 400 | Programming III | 3 |
| GENETICS 466 | Principles of Genetics | 3 |
| Bio-Statistics |  |  |
| Code | Title | Credits |
| STAT 333 | Applied Regression Analysis | 3 |
| STAT/M E 424 | Statistical Experimental Design | 3 |
| STAT 575 | Statistical Methods for Spatial Data | 3 |
| STAT/B M I 641 | Statistical Methods for Clinical Trials | 3 |
| STAT/B M I 642 | Statistical Methods for Epidemiology | 3 |

## Business

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH/COMP SCI/ | Linear Programming Methods | 3 |
| I SY E/STAT 525 |  | 3 |
| OTM 410 | Operations Research I | 3 |


| Select two from the following: |  |  |
| :--- | :--- | :--- |
| GEN BUS 306 | Business Analytics I | 3 |
| GEN BUS 307 | Business Analytics II | 3 |
| OTM 451 | Service Operations Management | 3 |
| OTM 411 | Operations Research II | 3 |
| OTM/I SY E/ | Queuing Theory and Stochastic | 3 |
| MATH 633 | Modeling |  |
| OTM 654 | Production Planning and Control | 3 |

Chemical Engineering
Code Title Credits
CBE/B M E 320 Introductory Transport Phenomena 4

| CBE 326 | Momentum and Heat Transfer <br> Operations | 3 |
| :--- | :--- | :--- |
| CBE 426 | Mass Transfer Operations | 3 |
| CBE 470 | Process Dynamics and Control | 3 |

Chemistry

## Code

Title
Credits
Fundamentals of Analytical Science
4

CHEM 327
or CHEM 329

Fundamentals of Analytical Science

| CHEM 561 | Physical Chemistry | 3 |
| :--- | :--- | :--- |
| CHEM 562 | Physical Chemistry | 3 |
| PHYSICS 208 | General Physics | 5 |
| or PHYSICS 248 | A Modern Introduction to Physics |  |


| Civil and Environmental Engineering |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| CIV ENGR 310 | Fluid Mechanics | 3 |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 340 | Structural Analysis I | 4 |
| Select one of the following: |  |  |
| CIV ENGR 440 | Structural Analysis II | 3 |
| CIV ENGR 442 | Wood Structures I | 3 |
| CIV ENGR 445 | Steel Structures I | 3 |
| CIV ENGR 447 | Concrete Structures I | 3 |


| Computer Sciences (Computational Methods) |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select four of the following: |  |  |
| COMP SCI/E C E 352 | Digital System Fundamentals | 3 |
| COMP SCI 400 | Programming III | 3 |
| COMP SCI 412 | Introduction to Numerical Methods | 3 |
| $\begin{aligned} & \text { COMP SCI/E C E/ } \\ & \text { MATH } 435 \end{aligned}$ | Introduction to Cryptography | 3 |
| COMP SCI/MATH/ <br> STAT 475 | Introduction to Combinatorics | 3 |
| COMP SCI/ <br> MATH 513 | Numerical Linear Algebra | 3 |
| COMP SCI/ <br> MATH 514 | Numerical Analysis | 3 |
| COMP SCI/I SY E/ MATH/STAT 525 | Linear Programming Methods | 3 |
| COMP SCI/E C E 533 | Image Processing | 3 |
| COMP SCI 540 | Introduction to Artificial Intelligence | 3 |
| COMP SCI 545 | Natural Language and Computing | 3 |
| COMP SCI/I SY E/ <br> ME 558 | Introduction to Computational Geometry | 3 |
| COMP SCI 559 | Computer Graphics | 3 |


| Cryptography (Cryptography) |  |
| :---: | :---: |
| Code |  |
| Title | Credits |

COMP SCI $300 \quad$ Programming II 3
COMP SCI $400 \quad$ Programming III 3

Select two of the following:

| COMP SCI 537 | Introduction to Operating Systems |  |
| :---: | :---: | :---: |
| COMP SCI 642 | Introduction to Information Security |  |
| ECE/ COMP SCI 352 | Digital System Fundamentals |  |
| ECE/MATH 641 | Introduction to Error-Correcting Codes |  |
| Computer Sciences (Theory) |  |  |
| Code | Title | Credits |
| COMP SCI 520 | Introduction to Theory of Computing | 3 |
| COMP SCI 577 | Introduction to Algorithms | 4 |

Select two of the following:

| COMP SCI/ | Digital System Fundamentals |
| :--- | :--- |
| E C E 352 |  |
| COMP SCI 400 | Programming III |
| COMP SCI 412 | Introduction to Numerical Methods |
| COMP SCI/E C E/ Introduction to Cryptography <br> MATH 435  <br> COMP SCI/MATH/ Introduction to Combinatorics <br> STAT 475  <br> COMP SCI/ Numerical Linear Algebra <br> MATH 513  <br> COMP SCI/ Numerical Analysis <br> MATH 514  <br> COMP SCI/I SY E/ Linear Programming Methods <br> MATH/STAT 525  <br> COMP SCI/ Image Processing <br> E C E 533  <br> COMP SCI 540 Introduction to Artificial Intelligence <br> COMP SCI 545 Natural Language and Computing <br> COMP SCI/I SY E/ Introduction to Computational <br> M E 558 Geometry <br> COMP SCI 559 Computer Graphics |  |

## Ecology

Code
Title Credits
COMP SCI 412 Introduction to Numerical Methods 3
ENVIR ST/A A E/ Decision Methods for Natural 3-4
F\&W ECOL 652 Resource Managers
ZOOLOGY 504 Modeling Animal Landscapes 3-5
ZOOLOGY/BOTANY/ General Ecology 4
F\&W ECOL 460
ZOOLOGY 535 Ecosystem Analysis 3
ZOOLOGY/ Theoretical Ecology 3
ENTOM 540

## Ecology, Forestry, Wildlife Ecology

Code Title Credits
MATH/STAT 310 Introduction to Probability and 3
Mathematical Statistics II
COMP SCI 412 Introduction to Numerical Methods 3
Select two of the following:
ZOOLOGY/BOTANY/ General Ecology 4
F\&W ECOL 460
ZOOLOGY 504 Modeling Animal Landscapes 3-5
ZOOLOGY/ Theoretical Ecology 3
ENTOM 540
F\&W ECOL $300 \quad$ Forest Biometry 4
F\&W ECOL $410 \quad$ Principles of Silviculture 3
F\&W ECOL/BOTANY/ General Ecology 4
ZOOLOGY 460
F\&W ECOL/A A E/ Natural Resource Economics 3
ECON 531
F\&W ECOL/A A E/ Decision Methods for Natural 3-4
ENVIR ST 652 Resource Managers
F\&W ECOL 655 Animal Population Dynamics 3


| Select one of the following: |  |
| :--- | :--- |
| CBE 255 | Introduction to Chemical Process <br> Modeling |
| COMP SCI 300 | Programming II |
| COMP SCI 310 | Problem Solving Using Computers |
| E C E 230 | Circuit Analysis |
| E C E 376 | Electrical and Electronic Circuits |
| E C E 303 | Introduction to Real-Time Digital <br> Signal Processing |
| PHYSICS 321 | Electric Circuits and Electronics |
| STAT/M E 424 | Statistical Experimental Design |

## Nuclear Engineering

| Code | Title | Credits |
| :--- | :--- | ---: |
| N E 305 | Fundamentals of Nuclear | 3 |
|  | Engineering | 3 |
| N E 405 | Nuclear Reactor Theory | 3 |

Select one of the following:

| N E 411 | Nuclear Reactor Engineering |
| :--- | :--- |
| PHYSICS 321 | Electric Circuits and Electronics |
| PHYSICS 322 | Electromagnetic Fields |
| E C E 376 | Electrical and Electronic Circuits |
| B M E/H ONCOL/ | Radiological Physics and Dosimetry |
| MED PHYS/ |  |
| PHYSICS 501 |  |


| Physics |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| PHYSICS 311 | Mechanics | 3 |
| PHYSICS 322 | Electromagnetic Fields | 3 |
| Any two 3-credit physics course above the 400 level <br> (excluding labs) |  |  |
| Select two from the following: |  |  |
| PHYSICS 415 | Thermal Physics | 3 |
| PHYSICS 448 | Atomic and Quantum Physics | 3 |
| PHYSICS 449 | Atomic and Quantum Physics | 3 |
| PHYSICS/E C E/ | Introduction to Plasmas | 3 |
| N E 525 |  | 3 |
| PHYSICS 531 | Introduction to Quantum Mechanics | 3 |
| PHYSICS 535 | Introduction to Particle Physics | 3 |
| PHYSICS 545 | Introduction to Atomic Structure | 3 |
| PHYSICS 551 | Solid State Physics | 3 |

Secondary Education
Code Title

Credits
MATH/CURRIC 471 Mathematics for Secondary School
Teachers
MATH/HIST SCI 473 History of Mathematics3

Select two from the following:

| COMP SCI 300 | Programming II |
| :--- | :--- |
| MATH 421 | The Theory of Single Variable |
|  | Calculus |

MATH/COMP SCI/ Introduction to Combinatorics STAT 475

| MATH 561 | Differential Geometry |  |
| :--- | :--- | ---: |
| MATH 567 | Elementary Number Theory |  |
| PHYSICS 207 | General Physics |  |
| Statistics |  | Credits |
| Code | Title | 3 |
| STAT 333 | Applied Regression Analysis | 3 |
| STAT/M E 424 | Statistical Experimental Design |  |


| Select two from the following: |  |
| :---: | :---: |
| STAT/MATH 309 | Introduction to Probability and Mathematical Statistics I |
| STAT/MATH 310 | Introduction to Probability and Mathematical Statistics II |
| STAT 349 | Introduction to Time Series |
| STAT 351 | Introductory Nonparametric Statistics |
| STAT 411 | An Introduction to Sample Survey Theory and Methods |
| STAT 421 | Applied Categorical Data Analysis |
| STAT 456 | Applied Multivariate Analysis |
| STAT/ COMP SCI 471 | Introduction to Computational Statistics |
| STAT/COMP SCI/ MATH 475 | Introduction to Combinatorics |
| STAT 479 | Special Topics in Statistics |
| STAT 609 | Mathematical Statistics I |
| STAT 610 | Introduction to Statistical Inference |
| STAT/I SY E/ MATH/OTM 632 | Introduction to Stochastic Processes |


| Structural Biology |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| MATH/B M I/ | Mathematical Methods for | 3 |
| BIOCHEM/ Structural Biology <br> BMOLCHEM 606  <br> CHEM 327 Fundamentals of Analytical Science |  |  |
| or CHEM 329 Fundamentals of Analytical Science |  |  |
| CHEM 561 | Physical Chemistry | 4 |
| CHEM 562 | Physical Chemistry | 3 |

Systems Biology

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| CHEM 341 | Elementary Organic Chemistry | 3 |
| or CHEM 343 | Introductory Organic Chemistry |  |
| MATH/B M I/ | Mathematical Methods for Systems | 3 |
| BIOCHEM/ <br> BMOLCHEM 609 | Biology |  |
| Any one BIOCHEM course numbered 600 and higher |  |  |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all MATH and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in MATH, taken on the UW-Madison campus

1 MATH courses numbered 307-699 are considered upper level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Mathematics Major in consultation with the Mathematics Honors advisor (https://www.math.wisc.edu/ undergraduate/advising); this should be done by the start of the junior year.

## HONORS IN THE MATHEMATICS MAJOR REQUIREMENTS

To earn Honors in the Major in Mathematics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all MATH courses, and all courses accepted in the major
- Complete the following courses, with individual grades of B or better.

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 521 | Analysis I (Taken for Honors) |  |
| MATH 522 | Analysis II (Taken for Honors) |  |
| MATH 541 | Modern Algebra (Taken for Honors) |  |
| MATH 542 | Modern Algebra (Taken for Honors) |  |
| Select at least two more courses from MATH 500 through MATH/E C E 641, the following will usually be one of the courses: ${ }^{1}$ |  |  |
| MATH 551 | Elementary Topology |  |
| Select one of the following Capstone projects: ${ }^{1}$ |  |  |
| MATH 681 \& MATH 682 | Senior Honors Thesis and Senior Honors Thesis (For a total of 6 credits) |  |

A sequence of two upper-level mathematics courses
deemed acceptable by the Mathematics Honors advisor ${ }^{1}$
1 Chosen in consultation with the Mathematics Honors advisor.
At least one of the two sequences (MATH 521 Analysis I-MATH 522 Analysis II or MATH 541 Modern Algebra-MATH 542 Modern Algebra) must be completed prior to enrollment in the Capstone project.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. State, explain, and apply the principal results, definitions, and theorems of a wide collection of mathematical areas including at least one area of advanced undergraduate mathematics.
2. Construct and evaluate mathematical proofs and arguments.
3. Acquire a diverse set of skills and strategies in mathematical reasoning/problem solving.
4. Use mathematics to model and analyze phenomena in other disciplines.
5. Write, explain, and present mathematics to both experts and non-experts.

## ADVISING AND CAREERS

## ADVISING

Students who are interested in the math major should visit a faculty advisor. During the fall and spring semesters several faculty advisors have regular drop-in office hours. The current list of advisors and the schedule of the office hours can be found at the Math advising page (https://www.math.wisc.edu/undergraduate/advising). During the winter break and the summer semester there is no drop-in advising, students should contact one of the advisors to set up an appointment.

For advice on college algebra, pre-calculus, and calculus, see the placement advising pages (https://www.math.wisc.edu/ undergraduate/placement) of the department.

## TRANSITION COURSES

Students are strongly recommended to include one of the following courses in their major program before moving into MATH 500 and higher.

| Code | Title | Credits |
| :---: | :--- | :--- |
| MATH 341 | Linear Algebra |  |
| MATH 375 | Topics in Multi-Variable Calculus <br> and Linear Algebra |  |
| MATH 421 | The Theory of Single Variable <br> Calculus |  |

## GRADUATE STUDY

Students preparing for graduate work in mathematics should take the following courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 341 | Linear Algebra | 3 |
| or MATH 375 | Topics in Multi-Variable Calculus and Linear |  |
|  | Algebra | 3 |


| MATH 522 | Analysis II | 3 |
| :--- | :--- | :--- |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |
| MATH 551 | Elementary Topology | 3 |

Select at least two other courses at the 500 level or higher
Students who plan to enter a mathematics Ph.D. program should acquire a reading knowledge of at least one foreign language as early as possible. For mathematics study, the most useful languages are French, German, and Russian.

## CAREERS

In recent years graduating math majors have obtained employment in a variety of jobs in business, industry, and governmental agencies and also have obtained teaching positions at the secondary school level (such teaching positions normally require teaching certification). Others have continued their education at the graduate level in mathematics and other fields. Departments in a variety of fields which use mathematics, including the social and biological sciences as well as in engineering and the physical sciences, are interested in attracting math majors into their graduate programs. Math Ph.D.'s obtain academic positions at the college and university level and nonacademic positions entailing consulting and research. The math major requirements are flexible enough to allow preparation for various goals.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

Professors Angenent, Arinkin, Assadi, Bolotin, Boston, Caldararu, Craciun, Denissov, Ellenberg, Feldman, Gong, Jin, Lempp, Mari-Beffa, Maxim, Miller, Mitchell, Paul, Roch, Seeger, Seppalainen, Smith, Terwilliger, Thiffeault, Valko, Viaclovsky, Waleffe, Yang.

Associate Professors Anderson, Gurevich, Stechmann, Street, Kent.

Assistant Professors Andrews, Dymarz, Erman, Kim, Marshall, Sam, Spagnolie, Stovall, Tran, B. Wang, L. Wang, M. Matchett Wood, P. Matchett Wood, Li.

## ACADEMIC STAFF

Anzaldo (Precalculus Coordinator), Benguria-Andrews (Calculus Coordinator), Hanhart (Associate Director of Undergraduate Studies), Kwon (Math 13X Coordinator), Malekpour (Director of the Instructional Excellence Program, WISCEL), Rivard (Placement and Enrollment Coordinator)

## MATHEMATICS, B.S.

Mathematics is classified with both the humanities and the sciences. Its position among the humanities is based on the study of mathematics as one of the liberal arts for more than two thousand years. Still an expanding subject, mathematics offers more new and challenging frontiers than at any time in its long history-with many new fields, requiring new techniques and ideas for exploration.

The place of mathematics among the sciences is well founded. The natural sciences have invariably turned to mathematics for techniques needed to explore the consequences of scientific theories. In the last few decades social scientists have increasingly found higher mathematics of value in their training and research.

In recent years graduating math majors have obtained employment in a variety of jobs in business, industry, and governmental agencies and also have obtained teaching positions at the secondary school level (such teaching positions normally require teaching certification). Others have continued their education at the graduate level in mathematics and other fields. Departments in a variety of fields which use mathematics, including some in the social and biological sciences as well as in engineering and the physical sciences, are interested in attracting math majors into their graduate programs. Math Ph.D.'s obtain academic positions at the college and university level and nonacademic positions entailing consulting and research. The math major requirements are flexible enough to allow preparation for various goals.

Students interested in mathematics might also consider the related degree program in applied mathematics, engineering and physics (p. 1077).

## HOW TO GET IN

## ACCEPTANCE

To be accepted as a major in mathematics a student must complete MATH 221 Calculus and Analytic Geometry 1, MATH 222 Calculus and Analytic Geometry 2, and MATH 234 Calculus--Functions of Several Variables with a grade point average of 2.500 or better in this sequence. However, a higher grade point average is advisable. Students should meet with a math advisor before declaring in order to discuss course selection and major plan. Majors are provided with math advisor information at the math advising page (http://www.math.wisc.edu/undergraduate/ advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |

Liberal Arts 108 credits
and Science
Coursework

Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

There are two tracks: Option I or Option II. Both are flexible, so students should plan their programs with the advice of their math advisors. In particular, those following Option II must have their programs formally approved by their mathematics advisors.

## OPTION I

The Option I package requires exposure to at least two areas of mathematics at the advanced undergraduate level. This package is best for students who have a broad interest in many areas of mathematics. Students interested in honors in the major should also choose this option.

The Option I major requires a minimum of seven mathematics courses numbered 307-699. ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| Linear Algebra |  |  |
| Select one of the following: ${ }^{1}$ |  |  |
| MATH 340 | Elementary Matrix and Linear Algebra |  |
| MATH 341 | Linear Algebra |  |
| MATH 375 | Topics in Multi-Variable Calculus and Linear Algebra |  |
| Calculus, Topology, Algebra |  |  |
| Select two of the following: |  |  |
| MATH 521 | Analysis I |  |
| MATH 541 | Modern Algebra |  |
| MATH 551 | Elementary Topology |  |

Additional Math 500 or higher

Select one course from Math 500-679 (see course list A below)
Select additional courses to reach 7 courses in the major (see course list $B$ below)

1 Only one of these courses will count toward the major.

## Course list A

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH/ <br> COMP SCI 513 | Numerical Linear Algebra | 3 |
| MATH/ <br> COMP SCI 514 | Numerical Analysis | 3 |
| MATH 519 | Ordinary Differential Equations | 3 |
| MATH 521 | Analysis I | 3 |
| MATH 522 | Analysis II | 3 |
| MATH/COMP SCI/ I SY E/STAT 525 | Linear Programming Methods | 3 |
| MATH 531 | Probability Theory | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |
| MATH 551 | Elementary Topology | 3 |
| MATH 552 | Elementary Geometric and Algebraic Topology | 3 |
| MATH 561 | Differential Geometry | 3 |
| MATH 567 | Elementary Number Theory | 3 |
| MATH 570 | Fundamentals of Set Theory | 3 |
| MATH/PHILOS 571 | Mathematical Logic | 3 |
| MATH 605 | Stochastic Methods for Biology | 3 |
| MATH/B M I/ BIOCHEM/ BMOLCHEM 606 | Mathematical Methods for Structural Biology | 3 |
| MATH 607 | Topics in Mathematics Study Abroad | 1-5 |
| MATH 608 | Mathematical Methods for Continuum Modeling in Biology | 3 |
| MATH/B M I/ BIOCHEM/ <br> BMOLCHEM 609 | Mathematical Methods for Systems Biology | 3 |
| MATH 619 | Analysis of Partial Differential Equations | 3 |
| MATH 621 | Analysis III | 3 |
| MATH 623 | Complex Analysis | 3 |
| MATH 627 | Introduction to Fourier Analysis | 3 |
| MATH 629 | Introduction to Measure and Integration | 3 |
| MATH/I SY E/OTM/ STAT 632 | Introduction to Stochastic Processes | 3 |
| MATH/I SY E/ OTM 633 | Queuing Theory and Stochastic Modeling | 3 |
| MATH 635 | An Introduction to Brownian Motion and Stochastic Calculus | 3 |
| MATH/E C E 641 | Introduction to Error-Correcting Codes | 3 |

## Course list ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH/STAT 309 | Introduction to Probability and Mathematical Statistics I | 3 |
| MATH/STAT 310 | Introduction to Probability and Mathematical Statistics II | 3 |
| MATH 319 | Techniques in Ordinary Differential Equations | 3 |
| MATH 321 | Applied Mathematical Analysis | 3 |
| MATH 322 | Applied Mathematical Analysis | 3 |
| MATH 331 | An Introduction to Probability and Markov Chain Models | 3 |
| MATH 341 | Linear Algebra | 3 |
| MATH 376 | Topics in Multi-Variable Calculus and Differential Equations | 5 |
| MATH 407 | Topics in Mathematics Study Abroad | 1-5 |
| MATH 415 | Applied Dynamical Systems, Chaos and Modeling | 3 |
| MATH/COMP SCI/ <br> ISYE 425 | Introduction to Combinatorial Optimization ${ }^{2}$ | 3 |
| MATH/STAT 431 | Introduction to the Theory of Probability | 3 |
| MATH/COMP SCI/ ECE 435 | Introduction to Cryptography | 3 |
| MATH 441 | Introduction to Modern Algebra | 3 |
| MATH 443 | Applied Linear Algebra | 3 |
| MATH 461 | College Geometry I | 3 |
| MATH/HIST SCI 473 | History of Mathematics | 3 |
| MATH/COMP SCI/ STAT 475 | Introduction to Combinatorics | 3 |
| MATH 491 | Topics in Undergraduate Mathematics | 3 |
| MATH/ COMP SCI 513 | Numerical Linear Algebra | 3 |
| MATH/ COMP SCI 514 | Numerical Analysis | 3 |
| MATH 519 | Ordinary Differential Equations | 3 |
| MATH 521 | Analysis I | 3 |
| MATH 522 | Analysis II | 3 |
| MATH/COMP SCI/ I SY E/STAT 525 | Linear Programming Methods | 3 |
| MATH 531 | Probability Theory | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |
| MATH 551 | Elementary Topology | 3 |
| MATH 552 | Elementary Geometric and Algebraic Topology | 3 |
| MATH 561 | Differential Geometry | 3 |
| MATH 567 | Elementary Number Theory | 3 |
| MATH 570 | Fundamentals of Set Theory | 3 |
| MATH/PHILOS 571 | Mathematical Logic | 3 |
| MATH 605 | Stochastic Methods for Biology | 3 |


| MATH/B M I/ BIOCHEM/ <br> BMOLCHEM 606 | Mathematical Methods for Structural Biology | 3 |
| :---: | :---: | :---: |
| MATH 607 | Topics in Mathematics Study Abroad | 1-5 |
| MATH 608 | Mathematical Methods for Continuum Modeling in Biology | 3 |
| MATH/B M I/ <br> BIOCHEM/ <br> BMOLCHEM 609 | Mathematical Methods for Systems Biology | 3 |
| MATH 619 | Analysis of Partial Differential Equations | 3 |
| MATH 621 | Analysis III | 3 |
| MATH 623 | Complex Analysis | 3 |
| MATH 627 | Introduction to Fourier Analysis | 3 |
| MATH 629 | Introduction to Measure and Integration | 3 |
| MATH/I SY E/OTM/ STAT 632 | Introduction to Stochastic Processes | 3 |
| MATH/I SY E/ OTM 633 | Queuing Theory and Stochastic Modeling | 3 |
| MATH 635 | An Introduction to Brownian Motion and Stochastic Calculus | 3 |
| MATH/E C E 641 | Introduction to Error-Correcting Codes | 3 |
| MATH 681 | Senior Honors Thesis | 3 |
| MATH 682 | Senior Honors Thesis | 3 |
| MATH 691 | Undergraduate Thesis | 2-4 |
| MATH 692 | Undergraduate Thesis | 2-4 |

1 There are two subgroups within this course list where only one course from each subgroup will count towards the major:

1. Differential Equations: MATH 319, MATH 376
2. Probability: MATH/STAT 309, MATH 331, MATH/STAT 431, STAT 311

2 This course will only count if taken after summer 2015.

## OPTION II

This option allows students to focus on mathematics associated to one specific area or application. Students interested in a focused mathematics program (i.e., actuary mathematics, elementary education, etc.) or a dual major program often choose this option. A mathematics advisor must approve the collection of courses used to complete major requirements prior to major declaration.

## Mathematics Core

| Code | Title | Credits |
| :--- | :--- | :--- |
| Linear Algebra |  |  |$\quad$| Select one of the following: ${ }^{1}$ |  |
| :--- | :--- |
| MATH 320 | Linear Algebra and Differential <br> Equations |
| MATH 340 | Elementary Matrix and Linear <br> Algebra |
| MATH 341 | Linear Algebra <br> MATH 375Topics in Multi-Variable Calculus <br> and Linear Algebra |

## Advanced Courses

Select two courses from MATH 500-679 (see course list A below). These courses must be approved by a mathematics advisor.

## Intermediate Courses

Select three courses from MATH 307- 692 (see course list B below). These courses must be approved by a mathematics advisor.

1 Only one of these courses will count toward the major.

## Course List A

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH/ | Numerical Linear Algebra |  |
| COMP SCI 513 |  | 3 |
| MATH/ | Numerical Analysis |  |
| COMP SCI 514 |  | 3 |
| MATH 519 | Ordinary Differential Equations | 3 |
| MATH 521 | Analysis I | 3 |
| MATH 522 | Analysis II | 3 |
| MATH/COMP SCI/ | Linear Programming Methods | 3 |
| I SY E/STAT 525 |  | 3 |
| MATH 531 | Probability Theory | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |
| MATH 551 | Elementary Topology | 3 |
| MATH 552 | Elementary Geometric and | 3 |
| MATH 561 | Algebraic Topology | 3 |
| MATH 567 | Differential Geometry | 3 |
| MATH 570 | Elementary Number Theory | 3 |
| MATH/PHILOS 571 | Fundamentals of Set Theory | 3 |
| MATH 605 | Stochastic Methods for Biology | 3 |
| MATH/B M I/ | Mathematical Methods for | 3 |
| MOCH M/ | Structural Biolog | 3 |

BIOCHEM/ Structural Biology
BMOLCHEM 606

| MATH 607 | Topics in Mathematics Study <br> Abroad | $1-5$ |
| :--- | :--- | :---: |
| MATH 608 | Mathematical Methods for <br> Continuum Modeling in Biology | 3 |
| MATH/B M I/ <br> BIOCHEM/ <br> BMOLCHEM 609 | Mathematical Methods for Systems <br> Biology | 3 |
| MATH 619 | Analysis of Partial Differential | 3 |

Equations

| MATH 621 | Analysis III | 3 |
| :--- | :--- | :--- |
| MATH 623 | Complex Analysis | 3 |


| MATH 627 | Introduction to Fourier Analysis | 3 |
| :--- | :--- | :--- |

MATH 629 Introduction to Measure and 3
MATH/I SY E/OTM/ Introduction to Stochastic 3

| STAT 632 | Processes | 3 |
| :--- | :--- | :--- |

OTM 633 Modeling
MATH 635 An Introduction to Brownian Motion 3

MATH/E C E 641 Introduction to Error-Correcting Codes

| Course List B ${ }^{1}$ |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| MATH/STAT 309 | Introduction to Probability and Mathematical Statistics I | 3 |
| MATH/STAT 310 | Introduction to Probability and Mathematical Statistics II | 3 |
| MATH 319 | Techniques in Ordinary Differential Equations | 3 |
| MATH 320 | Linear Algebra and Differential Equations | 3 |
| MATH 321 | Applied Mathematical Analysis | 3 |
| MATH 322 | Applied Mathematical Analysis | 3 |
| MATH 331 | An Introduction to Probability and Markov Chain Models | 3 |
| MATH 340 | Elementary Matrix and Linear Algebra | 3 |
| MATH 341 | Linear Algebra | 3 |
| MATH 375 | Topics in Multi-Variable Calculus and Linear Algebra | 5 |
| MATH 376 | Topics in Multi-Variable Calculus and Differential Equations | 5 |
| MATH 407 | Topics in Mathematics Study Abroad | 1-5 |
| MATH 415 | Applied Dynamical Systems, Chaos and Modeling | 3 |
| MATH 421 | The Theory of Single Variable Calculus | 3 |
| MATH/COMP SCI/ I SY E 425 | Introduction to Combinatorial Optimization | 3 |
| MATH/STAT 431 | Introduction to the Theory of Probability | 3 |
| MATH/COMP SCI/ <br> ECE 435 | Introduction to Cryptography | 3 |
| MATH 441 | Introduction to Modern Algebra | 3 |
| MATH 443 | Applied Linear Algebra | 3 |
| MATH 461 | College Geometry I | 3 |
| MATH/CURRIC 471 | Mathematics for Secondary School Teachers | 3 |
| MATH/HIST SCI 473 | History of Mathematics | 3 |
| MATH/COMP SCI/ STAT 475 | Introduction to Combinatorics | 3 |
| MATH/ COMP SCI 513 | Numerical Linear Algebra | 3 |
| MATH/ COMP SCI 514 | Numerical Analysis | 3 |
| MATH 519 | Ordinary Differential Equations | 3 |
| MATH 521 | Analysis I | 3 |
| MATH 522 | Analysis II | 3 |
| MATH/COMP SCI/ I SY E/STAT 525 | Linear Programming Methods | 3 |
| MATH 531 | Probability Theory | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |


| MATH 551 | Elementary Topology | 3 |
| :---: | :---: | :---: |
| MATH 552 | Elementary Geometric and Algebraic Topology | 3 |
| MATH 561 | Differential Geometry | 3 |
| MATH 567 | Elementary Number Theory | 3 |
| MATH 570 | Fundamentals of Set Theory | 3 |
| MATH/PHILOS 571 | Mathematical Logic | 3 |
| MATH 605 | Stochastic Methods for Biology | 3 |
| MATH/B M I/ <br> BIOCHEM/ <br> BMOLCHEM 606 | Mathematical Methods for Structural Biology | 3 |
| MATH 607 | Topics in Mathematics Study Abroad | 1-5 |
| MATH 608 | Mathematical Methods for Continuum Modeling in Biology | 3 |
| MATH/B M I/ <br> BIOCHEM/ <br> BMOLCHEM 609 | Mathematical Methods for Systems Biology | 3 |
| MATH 619 | Analysis of Partial Differential Equations | 3 |
| MATH 621 | Analysis III | 3 |
| MATH 623 | Complex Analysis | 3 |
| MATH 627 | Introduction to Fourier Analysis | 3 |
| MATH 629 | Introduction to Measure and Integration | 3 |
| MATH/I SY E/OTM/ STAT 632 | Introduction to Stochastic Processes | 3 |
| MATH/I SY E/ OTM 633 | Queuing Theory and Stochastic Modeling | 3 |
| MATH 635 | An Introduction to Brownian Motion and Stochastic Calculus | 3 |
| MATH/E C E 641 | Introduction to Error-Correcting Codes | 3 |

1 There are two subgroups within this course list where only one course from each subgroup will count toward the major:

1. Differential Equations: MATH 319, MATH 376
2. Probability: MATH/STAT 309, MATH 331, MATH/STAT 431, STAT 311

## Applied Concentration Area

Select four additional courses. These courses may be from any department and should be appropriate for the focused nature of the option II major. The following concentration areas have been preapproved and may be useful for planning purposes, though any collection of four courses approved by a mathematics advisor can be used to fulfill this program requirement. Note that math courses may fulfill the requirements in the concentration, but cannot also count for the core mathematics course requirements listed above (p. 1093).

## Actuarial Mathematics

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACT SCI/MATH 303 | Theory of Interest and Life <br> Insurance | 3 |
| ACT SCI 650 | Actuarial Mathematics I |  |
| \& ACT SCI 652 | and Loss Models I | 6 |
| ACT SCI 651 | Actuarial Mathematics II | 3 |
| or ACT SCI 653 | Loss Models II |  |


| Astronomy |  | Credits |
| :---: | :---: | :---: |
| Code | Title |  |
| Select two from the following: |  |  |
| ASTRON 310 | Stellar Astrophysics | 3 |
| ASTRON 320 | The Interstellar Medium | 3 |
| ASTRON 335 | Cosmology | 3 |
| Any two 3-credit PHYSICS courses numbered 400 and above excluding labs |  |  |
| Atmospheric \& Oceanic Studies |  |  |
| Code | Title | Credits |
| ATM OCN 310 | Dynamics of the Atmosphere and Ocean I | 3 |
| ATM OCN 311 | Dynamics of the Atmosphere and Ocean II | 3 |
| ATM OCN 330 | Physics of the Atmosphere and Ocean I | 3 |
| PHYSICS 208 or PHYSICS 248 | General Physics <br> A Modern Introduction to Physics | 5 |
| Bio-Informatics |  |  |
| Code | Title | Credits |
| B M I/COMP SCI 576 | Introduction to Bioinformatics | 3 |
| COMP SCI 300 | Programming II | 3 |
| COMP SCI 400 | Programming III | 3 |
| GENETICS 466 | Principles of Genetics | 3 |


| Bio-Statistics |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 3 |
| STAT 333 | Applied Regression Analysis | 3 |
| STAT/M E 424 | Statistical Experimental Design | 3 |
| STAT 575 | Statistical Methods for Spatial Data | 3 |
| STAT/B M I 641 | Statistical Methods for Clinical |  |
|  | Trials | 3 |


| Business |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 3 |
| MATH/COMP SCI// | Linear Programming Methods |  |
| I SY E/STAT 525 |  | 3 |
| OTM 410 | Operations Research I |  |
| Select two from the following: | 3 |  |
| GEN BUS 306 | Business Analytics I | 3 |
| GEN BUS 307 | Business Analytics II | 3 |
| OTM 451 | Service Operations Management | 3 |
| OTM 411 | Operations Research II | 3 |
| OTM/I SY E/ | Queuing Theory and Stochastic |  |
| MATH 633 | Modeling | 3 |
| OTM 654 | Production Planning and Control | 3 |


| Chemical Engineering |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| CBE/B M E 320 | Introductory Transport Phenomena | 4 |
| CBE 326 | Momentum and Heat Transfer <br> Operations | 3 |


| CBE 426 | Mass Transfer Operations | 3 |
| :--- | :--- | :--- |
| CBE 470 | Process Dynamics and Control | 3 |


| Chemistry |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 4 |
| CHEM 327 | Fundamentals of Analytical Science |  |
| or CHEM 329 | Fundamentals of Analytical Science | 3 |
| CHEM 561 | Physical Chemistry | 3 |
| CHEM 562 | Physical Chemistry | 5 |
| PHYSICS 208 | General Physics |  |

Civil and Environmental Engineering

| Code | Title | Credits |
| :--- | :--- | ---: |
| CIV ENGR 310 | Fluid Mechanics | 3 |
| CIV ENGR 311 | Hydroscience | 3 |
| CIV ENGR 340 | Structural Analysis I | 4 |
| Select one of the following: | 3 |  |
| CIV ENGR 440 | Structural Analysis II | 3 |
| CIV ENGR 442 | Wood Structures I | 3 |
| CIV ENGR 445 | Steel Structures I | 3 |
| CIV ENGR 447 | Concrete Structures I |  |

Computer Sciences (Computational Methods)
Code Title

Credits
Select four of the following:
COMP SCI/E C E 352 Digital System Fundamentals 3
COMP SCI 400 Programming III 3
COMP SCI 412 Introduction to Numerical Methods 3

COMP SCI/E C E/ Introduction to Cryptography 3
MATH 435
COMP SCI/MATH/ Introduction to Combinatorics 3
STAT 475
COMP SCI/ Numerical Linear Algebra 3

| MATH 513 |  |  |
| :--- | :--- | :--- |
| COMP SCI/ Numerical Analysis | 3 |  |

MATH 514

| MATH/STAT 525 |  |
| :--- | :--- |
| COMP SCI/E C E 533 Image Processing | 3 |

COMP SCI 540 Introduction to Artificial Intelligence 3
COMP SCI $545 \quad$ Natural Language and Computing 3
COMP SCI/I SY E/ Introduction to Computational 3

M E 558 Geometry
COMP SCI 559 Computer Graphics 3

Cryptography (Cryptography)

| Code | Title | Credits |
| :--- | :--- | ---: |
| COMP SCI 300 | Programming II | 3 |
| COMP SCI 400 | Programming III | 3 |

Select two of the following:

| COMP SCI 537 | Introduction to Operating Systems |
| :--- | :--- |
| COMP SCI 642 | Introduction to Information Security |
| EC E/ | Digital System Fundamentals |
| COMP SCI 352 |  |

ECE/MATH $641 \begin{aligned} & \text { Introduction to Error-Correcting } \\ & \text { Codes }\end{aligned}$

| Computer Sciences (Theory) |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 3 |
| COMP SCI 520 | Introduction to Theory of <br> Computing | 4 |
| COMP SCI 577 | Introduction to Algorithms |  |

Select two of the following:

| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { ECE } 352 \end{aligned}$ | Digital System Fundamentals |
| :---: | :---: |
| COMP SCI 400 | Programming III |
| COMP SCI 412 | Introduction to Numerical Methods |
| COMP SCI/E C E/ <br> MATH 435 | Introduction to Cryptography |
| $\begin{aligned} & \text { COMP SCI/MATH/ } \\ & \text { STAT } 475 \end{aligned}$ | Introduction to Combinatorics |
| COMP SCI/ <br> MATH 513 | Numerical Linear Algebra |
| COMP SCI/ <br> MATH 514 | Numerical Analysis |
| COMP SCI/I SY E/ MATH/STAT 525 | Linear Programming Methods |
| $\begin{aligned} & \text { COMP SCI/ } \\ & \text { ECE } 533 \end{aligned}$ | Image Processing |
| COMP SCI 540 | Introduction to Artificial Intelligence |
| COMP SCI 545 | Natural Language and Computing |
| COMP SCI/I SY E/ <br> ME 558 | Introduction to Computational Geometry |
| COMP SCI 559 | Computer Graphics |


| Ecology |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| COMP SCI 412 | Introduction to Numerical Methods | 3 |
| ENVIR ST/A A E/ | Decision Methods for Natural | $3-4$ |
| F\&W ECOL 652 | Resource Managers | $3-5$ |
| ZOOLOGY 504 | Modeling Animal Landscapes | 4 |
| ZOOLOGY/BOTANY/ | General Ecology |  |
| F\&W ECOL 460 |  | 3 |
| ZOOLOGY 535 | Ecosystem Analysis | 3 |
| ZOOLOGY/ | Theoretical Ecology |  |
| ENTOM 540 |  |  |

## Ecology, Forestry, Wildlife Ecology

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH/STAT 310 | Introduction to Probability and <br> Mathematical Statistics II | 3 |
| COMP SCI 412 | Introduction to Numerical Methods | 3 |
| Select two of the following: |  |  |
| ZOOLOGY/BOTANY/ | General Ecology | 4 |
| F\&W ECOL 460 | Modeling Animal Landscapes | $3-5$ |
| ZOOLOGY 504 | Theoretical Ecology | 3 |
| ZOOLOGY/ | Forest Biometry | 4 |
| ENTOM 540 | Principles of Silviculture | 3 |


| F\&W ECOL/BOTANY/ | General Ecology | 4 |
| :--- | :--- | :---: |
| ZOOLOGY 460 |  | 3 |
| F\&W ECOL/A A E/ | Natural Resource Economics | $3-4$ |
| ECON 531 |  |  |
| F\&W ECOL/A A E/ | Decision Methods for Natural | 3 |
| ENVIR ST 652 | Resource Managers | 3 |

## Economics

| Code | Title | Credits |
| :---: | :---: | :---: |
| ECON 301 | Intermediate Microeconomic Theory | 3-4 |
| or ECON 311 | Intermediate Microeconomic Theory - Advanced Treatment |  |
| ECON 302 | Intermediate Macroeconomic Theory |  |
| or ECON 312 | Intermediate Macroeconomic Theory - Advanced Treatment |  |
| Select two of the following: |  |  |
| ECON 410 | Introductory Econometrics | 4 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON 503 | Markets with Frictions | 3-4 |
| ECON 521 | Game Theory and Economic Analysis | 3-4 |
| ECON 525 | Economics of Education: Theory and Measurement | 3 |
| ECON 666 | Issues in International Finance | 3-4 |
| MATH 415 | Applied Dynamical Systems, Chaos and Modeling | 3 |
| MATH/I SY E/OTM/ STAT 632 | Introduction to Stochastic Processes | 3 |
| STAT/MATH 310 | Introduction to Probability and Mathematical Statistics II | 3 |

Electrical and Computer Engineering
Code Title Credits
ECE220 Electrodynamics I 3
E C E $230 \quad$ Circuit Analysis ..... 4
E C E/COMP SCI 352 Digital System Fundamentals ..... 3
Select one of the following:MATH 435
E C E/N E/ Introduction to Plasmas ..... 3
PHYSICS 525
E C E/COMP SCI 533 Image Processing ..... 3
Engineering Mechanics and Astronautics
Code Title Credits
EMA201 Statics ..... 3
EMA 202 Dynamics ..... 3
E M A 303 Mechanics of Materials ..... 3
Select one of the following:
EMA521 Aerodynamics 3
EMA542 Advanced Dynamics ..... 3


| M E 363 | Fluid Dynamics | 3 |
| :---: | :---: | :---: |
| M E 364 | Elementary Heat Transfer | 3 |
| Materials Science |  |  |
| Code | Title | Credits |
| M S \& E 330 | Thermodynamics of Materials | 4 |
| M S \& E 331 | Transport Phenomena in Materials | 3 |
| M S \& E 351 | Materials Science-Structure and Property Relations in Solids | 3 |
| Select one of the following: |  |  |
| CBE 255 | Introduction to Chemical Process Modeling |  |
| COMP SCI 300 | Programming II |  |
| COMP SCI 310 | Problem Solving Using Computers |  |
| E C E 230 | Circuit Analysis |  |
| E C E 376 | Electrical and Electronic Circuits |  |
| E C E 303 | Introduction to Real-Time Digital Signal Processing |  |
| PHYSICS 321 | Electric Circuits and Electronics |  |
| STAT/M E 424 | Statistical Experimental Design |  |
| Nuclear Engineering |  |  |
| Code | Title | Credits |
| N E 305 | Fundamentals of Nuclear Engineering | 3 |
| N E 405 | Nuclear Reactor Theory | 3 |
| N E 408 | Ionizing Radiation | 3 |
| Select one of the following: |  |  |
| N E 411 | Nuclear Reactor Engineering |  |
| PHYSICS 321 | Electric Circuits and Electronics |  |
| PHYSICS 322 | Electromagnetic Fields |  |
| E C E 376 | Electrical and Electronic Circuits |  |
| B M E/H ONCOL/ MED PHYS/ PHYSICS 501 | Radiological Physics and Dosimetry |  |
| Physics |  |  |
| Code | Title | Credits |
| PHYSICS 311 | Mechanics | 3 |
| PHYSICS 322 | Electromagnetic Fields | 3 |
| Any two 3-credit physics course above the 400 level (excluding labs) |  |  |
| Select two from the following: |  |  |
| PHYSICS 415 | Thermal Physics | 3 |
| PHYSICS 448 | Atomic and Quantum Physics | 3 |
| PHYSICS 449 | Atomic and Quantum Physics | 3 |
| PHYSICS/E C E/ <br> NE 525 | Introduction to Plasmas | 3 |
| PHYSICS 531 | Introduction to Quantum Mechanics | 3 |
| PHYSICS 535 | Introduction to Particle Physics | 3 |
| PHYSICS 545 | Introduction to Atomic Structure | 3 |
| PHYSICS 551 | Solid State Physics | 3 |

Credits

| Code | Title | Credits |
| :--- | :--- | ---: |
| M E 340 | Introduction to Dynamic Systems | 3 |
| M E 361 | Thermodynamics | 3 |


| Secondary Education |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| MATH/CURRIC 471 | Mathematics for Secondary School Teachers | 3 |
| MATH/HIST SCI 473 | History of Mathematics | 3 |
| Select two from the following: |  |  |
| COMP SCI 300 | Programming II |  |
| MATH 421 | The Theory of Single Variable Calculus |  |
| MATH/COMP SCI STAT 475 | Introduction to Combinatorics |  |
| MATH 561 | Differential Geometry |  |
| MATH 567 | Elementary Number Theory |  |
| PHYSICS 207 | General Physics |  |
| Statistics |  |  |
| Code | Title | Credits |
| STAT 333 | Applied Regression Analysis | 3 |
| STAT/M E 424 | Statistical Experimental Design | 3 |
| Select two from the following: |  |  |
| STAT/MATH 309 | Introduction to Probability and Mathematical Statistics I |  |
| STAT/MATH 310 | Introduction to Probability and Mathematical Statistics II |  |
| STAT 349 | Introduction to Time Series |  |
| STAT 351 | Introductory Nonparametric Statistics |  |
| STAT 411 | An Introduction to Sample Survey Theory and Methods |  |
| STAT 421 | Applied Categorical Data Analysis |  |
| STAT 456 | Applied Multivariate Analysis |  |
| STAT/ COMP SCI 471 | Introduction to Computational Statistics |  |
| STAT/COMP SCI/ MATH 475 | Introduction to Combinatorics |  |
| STAT 479 | Special Topics in Statistics |  |
| STAT 609 | Mathematical Statistics I |  |
| STAT 610 | Introduction to Statistical Inference |  |
| STAT/I SY E/ MATH/OTM 632 | Introduction to Stochastic Processes |  |


| Structural Biology |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| MATH/B M I/ | Mathematical Methods for | 3 |
| BIOCHEM/ <br> BMOLCHEM 606 | Structural Biology |  |
| CHEM 327 | Fundamentals of Analytical Science | 4 |
| or CHEM 329 | Fundamentals of Analytical Science |  |
| CHEM 561 | Physical Chemistry | 3 |
| CHEM 562 | Physical Chemistry | 3 |


| Systems Biology |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 3 |
| BIOCHEM 501 | Introduction to Biochemistry | 3 |
| CHEM 341 | Elementary Organic Chemistry |  |
| or CHEM 343 | Introductory Organic Chemistry |  |

MATH/B M I/ Mathematical Methods for Systems 3
BIOCHEM/ Biology
BMOLCHEM 609
Any one BIOCHEM course numbered 600 and higher

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all MATH and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in MATH, taken on the UW-Madison campus
1 MATH courses numbered 307-699 are considered upper level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Mathematics Major in consultation with the Mathematics Honors advisor (https://www.math.wisc.edu/ undergraduate/advising); this should be done by the start of the junior year.

## HONORS IN THE MATHEMATICS MAJOR REQUIREMENTS

To earn Honors in the Major in Mathematics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all MATH courses, and all courses accepted in the major
- Complete the following courses, with individual grades of B or better.

| Code | Title | Credits |
| :---: | :--- | :--- |
| MATH 521 | Analysis I (Taken for Honors) |  |
| MATH 522 | Analysis II (Taken for Honors) |  |
| MATH 541 | Modern Algebra (Taken for Honors) |  |
| MATH 542 | Modern Algebra (Taken for Honors) |  |

Select at least two more courses from MATH 500 through
MATH/E C E 641, the following will usually be one of the courses: ${ }^{1}$

| MATH 551 | Elementary Topology |
| :--- | :--- |
| Select one of the following Capstone projects: ${ }^{1}$ |  |
| MATH 681 | Senior Honors Thesis <br> \& MATH 682 |
| and Senior Honors Thesis (For a <br> total of 6 credits) |  |

A sequence of two upper-level mathematics courses
deemed acceptable by the Mathematics Honors advisor ${ }^{1}$
1 Chosen in consultation with the Mathematics Honors advisor.
At least one of the two sequences (MATH 521 Analysis I-MATH 522 Analysis II or MATH 541 Modern Algebra-MATH 542 Modern Algebra) must be completed prior to enrollment in the Capstone project.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Work | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. State, explain, and apply the principal results, definitions, and theorems of a wide collection of mathematical areas including at least one area of advanced undergraduate mathematics.
2. Construct and evaluate mathematical proofs and arguments
3. Acquire a diverse set of skills and strategies in mathematical reasoning/problem solving.
4. Use mathematics to model and analyze phenomena in other disciplines.
5. Write, explain, and present mathematics to both experts and non-experts.

## ADVISING AND CAREERS

## ADVISING

Students who are interested in the math major should visit a faculty advisor. During the fall and spring semesters several faculty advisors have regular drop-in office hours. The current list of advisors and the schedule of the office hours can be found at the Math advising page (https://www.math.wisc.edu/undergraduate/advising). During the winter break and the summer semester there is no drop-in advising, students should contact one of the advisors to set up an appointment.

For advice on college algebra, pre-calculus, and calculus, see the placement advising pages (https://www.math.wisc.edu/ undergraduate/placement) of the department.

## TRANSITION COURSES

Students are strongly recommended to include one of the following courses in their major program before moving into MATH 500 and higher.

| Code <br> MATH 341 | Title | Credits |
| :---: | :--- | :--- |
| MATH 375 | Linear Algebra <br> and Linear Algebra |  |
| MATH 421 | The Theory of Single Variable <br> Calculus |  |

## GRADUATE STUDY

Students preparing for graduate work in mathematics should take the following courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 341 | Linear Algebra | 3 |
| or MATH 375 | Topics in Multi-Variable Calculus and Linear |  |
|  | Algebra | 3 |
| MATH 521 | Analysis I | 3 |
| MATH 522 | Analysis II | 3 |
| MATH 541 | Modern Algebra | 3 |
| MATH 542 | Modern Algebra | 3 |
| MATH 551 | Elementary Topology |  |
| or MATH 561 | Differential Geometry |  |

Select at least two other courses at the 500 level or higher
Students who plan to enter a mathematics Ph.D. program should acquire a reading knowledge of at least one foreign language as early as possible. For mathematics study, the most useful languages are French, German, and Russian

## CAREERS

In recent years graduating math majors have obtained employment in a variety of jobs in business, industry, and governmental agencies and also have obtained teaching positions at the secondary school level (such teaching positions normally require teaching certification). Others have continued their education at the graduate level in mathematics and other fields. Departments in a variety of fields which use mathematics, including the social and biological sciences as well as in engineering and the physical sciences, are interested in attracting math majors into their graduate programs. Math Ph.D.'s obtain academic positions at the college and university level and nonacademic positions entailing consulting and research. The math major requirements are flexible enough to allow preparation for various goals.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

Professors Angenent, Arinkin, Assadi, Bolotin, Boston, Caldararu, Craciun, Denissov, Ellenberg, Feldman, Gong, Jin, Lempp, Mari-Beffa, Maxim, Miller, Mitchell, Paul, Roch, Seeger, Seppalainen, Smith, Terwilliger, Thiffeault, Valko, Viaclovsky, Waleffe, Yang.

Associate Professors Anderson, Gurevich, Stechmann, Street, Kent.
Assistant Professors Andrews, Dymarz, Erman, Kim, Marshall, Sam, Spagnolie, Stovall, Tran, B. Wang, L. Wang, M. Matchett Wood, P. Matchett Wood, Li.

## ACADEMIC STAFF

Anzaldo (Precalculus Coordinator), Benguria-Andrews (Calculus Coordinator), Hanhart (Associate Director of Undergraduate Studies), Kwon (Math 13X Coordinator), Malekpour (Director of the Instructional Excellence Program, WISCEL), Rivard (Placement and Enrollment Coordinator)

## MATHEMATICS, CERTIFICATE

The primary purpose of the mathematics certificate is to serve those students who wish to enhance their content knowledge in mathematics but are unable to complete the requirements of a second major.

## HOW TO GET IN

Students must meet with a math advisor before declaring in order to discuss course selection. Math advisor information is provided at the math advising page (http://www.math.wisc.edu/undergraduate/ advising).

## REQUIREMENTS

| Code | Title |
| :--- | ---: |
| Requirements ${ }^{1,2,3}$ | Credits |
| credits MATH 400-699 $^{4}$ | 3 |
| 9 credits from MATH 307-699 | 9 |
| Total Credits | 12 |

## Footnotes

1 Excluding MATH/CURRIC 471.
2 Only one (1) course each from these groups may apply:

- Linear Algebra: MATH 320 Linear Algebra and Differential Equations, MATH 340, MATH 341, MATH 375
- Differential Equations: MATH 319, MATH 320, MATH 376
- Probability: STAT/MATH 309, STAT/MATH 431, MATH 331 An Introduction to Probability and Markov Chain Models, STAT 311 Introduction to Theory and Methods of Mathematical Statistics I

Students with credit in MATH 275 cannot apply MATH 421 to the certificate.
4 Excluding MATH 490 Undergraduate Seminar.

## RESIDENCE \& QUALITY OF WORK

2.000 GPA on all course counting toward the certificate and MATH courses

9 credits in the certificate, in residence

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate is intended to be completed in the context of an undergraduate degree and for those seeking this certificate that is preferred. For students who have substantially completed this certificate at UW-Madison (at least 12 credits) and may need one or two courses to complete the certificate, they may do so immediately after completion of the bachelor's degree by enrolling in the course as a University Special (nondegree) student. The certificate must be completed within a year of completion of the bachelor's degree. Students should keep in mind that University Special students have the last registration priority and that may limit availability of desired courses. Financial aid is not available when enrolled as a University Special student to complete an undergraduate certificate.

## LEARNING OUTCOMES

1. State, explain, and apply the principal results, definitions, and theorems of a wide collection of mathematical areas.
2. Acquire a diverse set of skills and strategies in mathematical reasoning/problem solving.
3. Use mathematics to model and analyze problems in other disciplines.

## ADVISING AND CAREERS

## ADVISING

Students who are interested in the mathematics certificate program should visit a faculty advisor. Doing the fall and spring semesters several faculty advisors have regular drop-in office hours. The current list of advisors and the schedule of the office hours can be found at the math advising page (https://www.math.wisc.edu/undergraduate/advising). During the winter break and the summer semester there is no dropin advising, students should contact one of the advisors to set up an appointment.

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## MEAD WITTER SCHOOL OF MUSIC

## VALUES AND EDUCATIONAL PRIORITIES

At the Mead Witter School of Music

- we teach by example offering participatory, mentor-driven education;
- we provide individualized instruction and flexible curricula that encourage students to find their own musical pathways;
- we foster musical excellence and high academic standards;
- our faculty exhibit the best of their respective fields, are deeply engaged in artistic scholarship and research, and are committed to teaching at all levels;
- we whole-heartedly embrace the Wisconsin Idea;
- our department is a dynamic educational community, part of a large and vibrant research university within a city that values and supports the arts.

The Mead Witter School of Music enriches students' educational experience by hosting guest artists and scholars for master classes, recitals, colloquia, seminars, and festivals. Its performing organizations and ensembles perform more than 350 recitals and concerts every year, making a significant contribution to the cultural life of the university and the wider Madison community. Facilities specifically designed for music study and performance offer excellent resources for students to pursue their interests.

In addition to a thriving undergraduate student body, music students have the advantage of working side-by-side with master's-level and doctoral-level music students. Working collegially in class and studio, making music together on stage and off, and building professional relationships across program boundaries all enable the sharing of expertise, experience, and perspectives and add immeasurably to every student's development.

The music degree programs are demanding and require care in taking courses in the proper sequence. Graduation could be delayed if a course is not taken in the appropriate semester. Refer to the Requirements tab for details on the coursework and sequences of study in specific majors.

Mead Witter School of Music views its goals and objectives as complementary to those of the University of Wisconsin-Madison, which include "to provide an environment in which faculty and students can discover, examine critically, preserve and transmit the knowledge, wisdom and values that will help ensure the survival of the present and future generations with improvement in the quality of life."

The University of Wisconsin-Madison School of Music is accredited by the National Association of Schools of Music (NASM), and has been an institutional member of NASM since 1966

## PEOPLE AND FACILITIES

The greatest asset of Mead Witter School of Music is its people-staff, faculty, and students-who are daily immersed in learning, building,
researching, writing, and making music. Mentoring is the core of our teaching, manifest in one-on-one applied instruction as well as in small-group coaching and classes. Undergraduate students will build professional relationships with many faculty, form friendships with peers across the boundaries of degree programs, and collaborate with staff in addressing the practical matters of academic study. Extensive information on faculty, including biographies, is available here.

The Mosse Humanities Building, built in 1969, houses most of the music classrooms, rehearsal rooms, faculty studios, and 111 practice rooms. Most recitals and concerts take place in one of three performance spaces: Mills Concert Hall, Morphy Recital Hall, and Eastman Organ Recital Hall. The school's extensive collection of instruments, both common and unusual, is available to both faculty and students. Music Hall with its clock tower, built in 1879, is a campus landmark. Renovated in 1985, it is the home of the opera program. The new Hamel Music Center, scheduled to open in 2019, will include a concert hall, a recital hall, and a large ensemble rehearsal space.

Memorial Library is the home of the Mills Music Library, which offers extensive research and circulating collections, attractive study space, and personal staff assistance with research. Music materials on campus number over half a million, ranging from scores and sheet music to archival collections and historic audio recordings. Through Mills Music Library and other UW-Madison libraries, students have access to a wide range of online research databases as well as millions of articles, books, and streaming media. All genres of music are represented, with notably strong collections in Americana and ethnic music. Nationally known special collections include the Tams-Witmark Collection, a treasury of early American musical theater materials, and the Wisconsin Music Archives.

## CHOOSING A MUSIC MAJOR

Mead Witter School of Music offers several degree programs at the undergraduate level. The bachelor of arts and bachelor of science curricula are liberal arts majors in the College of Letters \& Science and are excellent programs for students interested in exploring the wide array of course offerings in the college or in two or more major areas of study. The bachelor of music curriculum is a professional degree in music, with 75 percent of total coursework within the Mead Witter School of Music. Students in this program are looking for depth in performance study along with a large complement of other musical studies at advanced level. Both programs

## GRADES AND ADVISING

Mead Witter School of Music is a department of the UW-Madison College of Letters \& Science. Information on the grading system and academic procedures is available in the College of Letters \& Science section of this catalog and in the opening section of this catalog.

The undergraduate advisor of the School of Music serves as the advisor for every music major. The advisor maintains records and assists students in determining an appropriate course schedule each semester.

## MUSIC COURSES FOR NON-MUSIC MAJORS

A variety of courses in music theory, music history and literature, as well as orchestra, chorus, band, and some ensembles, are open to students from other departments, schools, and colleges. Students should review the specific regulations of their degree program to determine whether music courses can fulfill breadth requirements. The Course Guide (http://
public.my.wisc.edu/portal/render.userLayoutRootNode.uP) indicates music courses that are open to nonmusic majors.

Music performance courses are generally filled by music majors. Fundamentals courses (007-036) are for instrumental music education majors only. Class Piano (101-104) is for music majors only. Basic courses require the ability to read music and to pass a prepared audition; in addition, Basic Guitar requires previous experience with classical guitar. Students outside the School of Music may audition to be on a waiting list for group or individual voice study with a teaching assistant (MUS PERF 143 Introduction to Performance: Voice or MUS PERF 144 Vocal Instruction for Non-Voice Majors). Contact the course instructor for more information about course requirements and admission criteria. The School of Music offers private music lessons (not for university credit and with separate costs) for non-music majors through the Community Music Lessons (http://www.music.wisc.edu/CML) program.

Regulation of music courses available for degree credit varies among the divisions of the university. Students should consult their major department for specific advice.

Courses open to non-music majors that satisfy the university's humanities breadth requirements:

| Code | Title | Credits |
| :---: | :---: | :---: |
| MUSIC 101 | The Musical Experience | 3 |
| MUSIC/ FOLKLORE 103 | Introduction to Music Cultures of the World | 2 |
| MUSIC 104 | Study Abroad: Elementary Music Appreciation/Theory/History | 1-3 |
| MUSIC 105 | Opera | 3 |
| MUSIC 106 | The Symphony | 3 |
| MUSIC 111 | Elements of Music | 3 |
| MUSIC 113 | Music in Performance | 1 |
| MUSIC 151 | Basic Concepts of Music Theory | 3 |
| MUSIC 204 | Study Abroad: Intermediate Music Theory or History | 1-3 |
| MUSIC 205 | The Big Bands | 2 |
| MUSIC 206 | The Legendary Performers | 2 |
| MUSIC 305 | Popular Music in the USA: 1920-1950 | 2 |
| MUSIC/ <br> AFROAMER 308 | Black Music (1920-Present): <br> Rhythm Section and Combos | 2 |
| MUSIC/ <br> AFROAMER 309 | Black Music (1920-Present): <br> Vocalist/Trombone/Misc Instrumental | 2 |
| MUSIC/ <br> AFROAMER 310 | Black Music (1920-Present): The Trumpet | 2 |
| MUSIC/ AFROAMER 311 | Black Music (1920-Present): The Saxophone | 2 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |


| MUSIC/ | Musical Cultures of the World | 3 |
| :--- | :--- | ---: |
| FOLKLORE 402 | Music of S.E. Asia: Tradition, |  |
| MUSIC/ | Innovation, Politics, and Religion | 3 |
| FOLKLORE 404 | Seminar in Afro-American Music <br> MUSIC/ <br> AFROAMER 509 | History and Criticism |

## SPECIAL STUDENTS

Persons who are interested in courses offered by the School of Music but who are not working toward a UW-Madison degree should contact the Division of Continuing Studies, 21 North Park Street, Madison, WI 53715; 608-263-6960. Enrollment is limited in music courses, and priority is given to UW-Madison undergraduate degree candidates.

## DEGREES/MAJORS/CERTIFICATES

## UNDERGRADUATE DEGREE PROGRAMS

Mead Witter School of Music offers four principal degree options for the music major. Each requires a performance audition for admission. Continuation to upper-level study in these programs is contingent upon faculty approval and upon specific GPA minimums in several categories. Refer to the Requirements tab in each program description for details.

Bachelor of Music: Performance, with concentration in Brass, Composition, Guitar, Harp, Jazz Studies, Organ, Percussion, Piano, Strings, Voice, or Woodwinds.

Bachelor of Music: Music Education, with certification in General and Instrumental Music (Early Childhood through Adolescence), or General and Vocal Music (Early Childhood through Adolescence).

Bachelor of Arts or Bachelor of Science, with a music major: options in performance, history, theory, or an individualized music curriculum. The individualized music curriculum can be designed with an emphasis in composition or jazz studies. The history and theory options are under review and may be changed. During this time, the School of Music is not admitting new students to these options.

- Music, B.A. (p. 1102)
- Music, B.S. (p. 1112)
- Music: Education, B.M. (p. 1122)
- Music: Performance, B.M. (p. 1133)


## PEOPLE

Professors Cook (director), Blasius, Calderón, Chisholm, Crook, Dill, Di Sanza, Doing, Fischer, Fulmer, Hetzler, Hyer, Johnson, Karp, Koza, Leckrone, Perry, Rowe, Schaffer, Schwendinger, Stowe, Swack, B. Taylor, C. Taylor, Teeple, Thimmig, Vallon, Vardi; Associate Professors Dobbs, Grabois, Wallmann; Assistant Professors Altino, Lee, Ronis

The faculty of the Mead Witter School of Music is a distinguished group of educators, performing musicians, and active scholars. The backgrounds of performance faculty include rich experiences as professional musicians, researchers, recording artists, and entrepreneurs. Faculty in music education have particular insight into their field as a result of their backgrounds as school educators, performers, and scholars. In areas such as music theory and musicology, the musical community has high regard for the past and current contributions to
the study of musical theory, historical perspectives on music, the role of music in societies around the world, and the unique contributions of American musicians. Teaching is a priority for the faculty, who are readily accessible to students for advice and support. Faculty, staff, and students cooperate in extraordinary ways with joint ventures that reach across disciplines both in research or instruction.

## RESOURCES AND SCHOLARSHIPS

## OFFICE OF STUDENT FINANCIAL AID

Prospective music students should contact the Office of Student Financial Aid (https://financialaid.wisc.edu) (333 East Campus Mall \#9701, Madison, WI 53715-1382; 608-262-3060) to obtain information about grants and loans when returning the application for admission.

## SCHOOL OF MUSIC SCHOLARSHIPS

Some funds are available for scholarships awarded by the School of Music to outstanding applicants. It is always advisable to complete the Free Application for Federal Student Aid (FAFSA) and submit it to the Office of Student Financial Aid. Application materials will serve as support for music scholarship consideration.

## Scholarship applicants must audition in person and must take the Theory Placement Examination on the audition day in order to be considered for an award. After the audition and review of materials, the associate director will notify each applicant about the scholarship decision. Accompanying each award notification will be a Letter of Commitment, to be signed and returned to the School of Music. Criteria used for awarding scholarships are:

1. Quality of the performance audition
2. High school and/or college academic record
3. Letters of recommendation

Most Mead Witter School of Music scholarships are awarded for a fouryear period. The music faculty reviews every scholarship award each semester and expects that each student on scholarship will maintain satisfactory progress toward completing the music major and degree requirements, continue to make significant contributions in performing organizations or accompanying, and maintain a minimum 3.000 grade point average. Please see the Mead Witter School of Music website (http://www.music.wisc.edu) for more information regarding music scholarships.

## MUSIC, B.A.

## VALUES AND EDUCATIONAL PRIORITIES

At the Mead Witter School of Music

- we teach by example offering participatory, mentor-driven education;
- we provide individualized instruction and flexible curricula that encourage students to find their own musical pathways;
- we foster musical excellence and high academic standards;
- our faculty exhibit the best of their respective fields, are deeply engaged in artistic scholarship and research, and are committed to teaching at all levels;
- we whole-heartedly embrace the Wisconsin Idea;
- our department is a dynamic educational community, part of a large and vibrant research university within a city that values and supports the arts.

The Mead Witter School of Music enriches students' educational experience by hosting guest artists and scholars for master classes, recitals, colloquia, seminars, and festivals. Its performing organizations and ensembles perform more than 350 recitals and concerts every year, making a significant contribution to the cultural life of the university and the wider Madison community. Facilities specifically designed for music study and performance offer excellent resources for students to pursue their interests.

In addition to a thriving undergraduate student body, music students have the advantage of working side-by-side with master's-level and doctoral-level music students. Working collegially in class and studio, making music together on stage and off, and building professional relationships across program boundaries all enable the sharing of expertise, experience, and perspectives and add immeasurably to every student's development.

The music degree programs are demanding and require care in taking courses in the proper sequence. Graduation could be delayed if a course is not taken in the appropriate semester. Refer to the Requirements tab for details on the coursework and sequences of study in specific majors.

Mead Witter School of Music views its goals and objectives as complementary to those of the University of Wisconsin-Madison, which include "to provide an environment in which faculty and students can discover, examine critically, preserve and transmit the knowledge, wisdom and values that will help ensure the survival of the present and future generations with improvement in the quality of life."

The University of Wisconsin-Madison School of Music is accredited by the National Association of Schools of Music (NASM), and has been an institutional member of NASM since 1966.

## PEOPLE AND FACILITIES

The greatest asset of Mead Witter School of Music is its people-staff, faculty, and students-who are daily immersed in learning, building, researching, writing, and making music. Mentoring is the core of our teaching, manifest in one-on-one applied instruction as well as in small-group coaching and classes. Undergraduate students will build professional relationships with many faculty, form friendships with peers across the boundaries of degree programs, and collaborate with staff in addressing the practical matters of academic study. Extensive information on faculty, including biographies, is available here.

The Mosse Humanities Building, built in 1969, houses most of the music classrooms, rehearsal rooms, faculty studios, and 111 practice rooms. Most recitals and concerts take place in one of three performance spaces: Mills Concert Hall, Morphy Recital Hall, and Eastman Organ Recital Hall. The school's extensive collection of instruments, both common and unusual, is available to both faculty and students. Music Hall with its clock tower, built in 1879, is a campus landmark. Renovated in 1985, it is the home of the opera program. The new Hamel Music Center, scheduled to open in 2019, will include a concert hall, a recital hall, and a large ensemble rehearsal space.

Memorial Library is the home of the Mills Music Library, which offers extensive research and circulating collections, attractive study space, and personal staff assistance with research. Music materials on campus number over half a million, ranging from scores and sheet music to
archival collections and historic audio recordings. Through Mills Music Library and other UW-Madison libraries, students have access to a wide range of online research databases as well as millions of articles, books, and streaming media. All genres of music are represented, with notably strong collections in Americana and ethnic music. Nationally known special collections include the Tams-Witmark Collection, a treasury of early American musical theater materials, and the Wisconsin Music Archives.

## CHOOSING A MUSIC MAJOR

Mead Witter School of Music offers several degree programs at the undergraduate level. The bachelor of arts and bachelor of science curricula are liberal arts majors in the College of Letters \& Science and are excellent programs for students interested in exploring the wide array of course offerings in the college or in two or more major areas of study. In these programs music courses comprise one-third of a student's work toward the degree. By comparison, the bachelor of music curriculum a professional degree in music, requires 75 percent of total coursework within the Mead Witter School of Music. Students in this program are looking for depth in performance study along with a large complement of other musical studies at advanced level. A number of alumni from both B.A. and B.S. have completed two majors at UW-Madison. Both of these programs may provide a foundation for graduate study and sometimes for a career in music. We encourage conversations with Mead Witter School of Music professors at any point during your first two years as a music major to learn as much as possible about options that are available to you.

## GRADES AND ADVISING

Mead Witter School of Music is a department of the UW-Madison College of Letters \& Science. Information on the grading system and academic procedures is available in the College of Letters \& Science section of this catalog and in the opening section of this catalog.

The undergraduate advisor of the Mead Witter School of Music serves as the advisor for every music major. The advisor maintains records and assists students in determining an appropriate course schedule each semester.

## HOW TO GET IN

## ADMISSIONS PROCEDURES

To major in music at Mead Witter School of Music, a student must:

1. apply and be accepted by the UW-Madison Office of Admissions and Recruitment and
2. apply, audition, and be accepted by the School of Music faculty.

In addition to the UW-Madison application, students must apply to the Mead Witter School of Music. Application material is available on the School of Music website (http://www.music.wisc.edu) and the music application process is handled by the Undergraduate Admissions Office, 3561H Mosse Humanities Building.

The steps for applying to the UW-Madison School of Music are:

- Review the information on the website for Mead Witter School of Music (http://www.music.wisc.edu). Follow instructions carefully. Any questions may be directed to the Undergraduate Admissions Office.
- Download and complete the music application. On the application you will request an audition date.
- Download and provide the recommendation forms to two recommenders. These will be people who can attest to the applicant's musical background and ability.
- If there will be need for financial assistance, consult the Office of Student Financial Aid (https://financialaid.wisc.edu).
- Request that official transcripts be sent to the School of Music Undergraduate Admissions Office from all high schools and colleges attended.
- Prepare the appropriate repertoire and materials for the audition.
- Come to the campus for an audition, which includes a ten- to twentyminute performance audition, music theory and piano placement examinations, and an introduction to School of Music faculty, students, and facilities.


## TRANSFER STUDENTS

Students who have earned more than 24 course credits at another college or university follow the same application and audition procedures described above. Upon acceptance by UW-Madison and the School of Music, credits for music courses taken at another institution are interpreted by the UW-Madison Office of Admissions and Recruitment simply as elective music credits. These course credits, as they appear on the transcript(s), will be reviewed during a conference with the advisor upon enrolling at UW-Madison. Transfer credit for music courses will be reviewed only after all placement and proficiency examinations in theory and piano have been taken at UW-Madison and syllabi for academic music courses have been submitted.

## REENTERING THE SCHOOL OF MUSIC

Students who were previously enrolled in the School of Music and UWMadison who desire to reenter to seek an undergraduate degree should apply for reentry to both the UW-Madison Office of Admissions and Recruitment and the School of Music Undergraduate Admissions Office (http://www.music.wisc.edu). An audition will be required in most cases.

## INTERNATIONAL STUDENTS

Students from foreign countries who seek admission to the university and the School of Music should contact International Student Services in addition to the UW-Madison Office of Admissions and Recruitment and the School of Music Undergraduate Admissions Office.

## SPECIAL STUDENTS

Persons who are interested in courses offered by the School of Music but who are not working toward a UW-Madison degree should contact the Division of Continuing Studies, 21 North Park Street, Madison, WI 53715; 608-263-6960. Enrollment is limited in music courses, and priority is given to UW-Madison undergraduate degree candidates.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic
values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of
one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

## Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

Liberal Arts
108 credits
and Science
Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work
Major Declare and complete at least one (1) major

| Total Credits | 120 credits |
| :--- | :--- |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- <br> Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Four options are available under this program:

- Option in Music Performance
- Option Music History
- Options in Music Theory
- Individualized Music Track
- Music: History (p. 1107)
- Music: Performance (p. 1109)
- Music: Theory (p. 1110)

The Bachelor of Arts or Bachelor of Science: Music curriculum is a liberal arts degree in music, designed for students whose career goals require more flexibility in course selection than that afforded by the bachelor of music degree. This degree also makes it possible to combine a major in music with majors in other fields. All prospective B.A. and B.S. music students must audition on an instrument or voice and be accepted into the School of Music at the music major level of performance study following normal admission procedures.

In the second or third year of study, the faculty of the Mead Witter School of Music assesses each student's readiness to continue in advancedlevel work in the major and to declare the major. To be eligible for the major declaration, students must maintain a minimum 2.000 GPA in the core academic music courses (theory and history) specified for their major option. Admission to and retention in the music history or music theory major option may require a higher GPA; see specific requirements for these programs. Enrollment in courses is limited; therefore, core academic music courses may be repeated only with permission of the area. Only one approved repeat per area will be calculated into the GPA for purposes of determining eligibility to declare a major in music.

Satisfactory academic progress in the degree is measured by the regulations of the College of Letters \& Science. The music advisor maintains current records and advises the student on music course selection each semester. The music advisor can provide information on all degree requirements. However, the L\&S academic deans are the final
authority responsible for interpretation of L\&S policy regarding B.A./B.S. degree requirements outside the major department. The music course requirements listed are subject to change.

## INDIVIDUALIZED MUSIC CURRICULUM

All prospective music students must audition on an instrument or voice and be accepted into the Mead Witter School of Music at the music major level ( 200 level) of performance study according to standard admission procedures. Students are not admitted directly into the Individualized Music Curriculum but must complete at least three semesters of the core curriculum as a preliminary music student (PRM program) before applying for this track. The track is approved only rarely and is intended for those students whose desired area of emphasis in music does not fit into the framework of the performance, history, or theory options. However, the area of emphasis must be one that will utilize music courses currently offered; all courses used for the major must be School of Music courses. The Individualized Music Curriculum is planned and designed by the student in conjunction with a School of Music faculty member willing to act as the curricular advisor; the music advisor reviews the proposed curriculum for compliance with all School of Music and L\&S requirements. The curriculum then must be approved by the appropriate Faculty Area Committee(s) and the Undergraduate Curriculum Committee. The Individualized Music Curriculum can be designed with an emphasis in composition. The core requirements are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Music Courses in Performance Study |  |  |
| Major Instrument or Voice (3 semesters at the 200 level or above) |  | 6 |
| Music Courses in Music Theory |  |  |
| MUSIC 121 <br> \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 (prerequisite course requirements) | 4 |
| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 (prerequisite course requirements) | 4 |
| Music Courses in Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Music Foundation Courses: |  | 6 |
| Select two courses from the following three categories: |  |  |
| -Theory: |  |  |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 |  |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 |  |
| - History |  |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |


| MUSIC 511 | Historical Performance Practices |  |
| :--- | :--- | ---: |
| MUSIC 513 | Survey of Opera |  |
| -Performance Study: |  |  |
| 200-level or above |  | 16 |
| Music Courses: Music Emphasis |  |  |
| As approved by faculty committees |  |  |
| Music Course in Piano |  |  |
| Complete the following course or pass proficiency exam: |  |  |
| MUS PERF 102 | Beginning Class Piano | 2 |
| Total Credits | 44 |  |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on campus
Courses that count toward this requirement are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Music (660) Courses |  |  |
| MUSIC 40 | Wind Ensemble | 1 |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 1 |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| MUSIC 221 | Musica Practica 3 | 3 |
| MUSIC 222 | Musica Practica 4 | 3 |
| MUSIC 256 | University Opera | 1-2 |
| MUSIC 262 | Jazz Ensemble | 1 |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 331 | Jazz Improvisation | 3 |
| MUSIC 332 | Jazz Improvisation | 3 |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |


| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| :---: | :---: | :---: |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 405 | Seminar: Cultural Study of Music | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |
| MUSIC 499 | Directed Study | 1-3 |
| 500 level and above |  |  |
| Music Performance (664) |  |  |
| MUS PERF 342 | Piano Accompanying Lab | 1 |
| MUS PERF 347 | Third Year Composition | 3 |
| MUS PERF 348 | Third Year Composition | 3 |
| 400 level and ab |  |  |

## ADDITIONAL REQUIREMENTS

All music major programs require a minimum piano proficiency at the level of MUS PERF 102 Beginning Class Piano.

Students who complete Theory MUSIC 122 Musica Practica
2, MUSIC 221 Musica Practica 3, or MUSIC 222 Musica Practica 4 without having taken the earlier courses in the theory sequence, or who achieve advanced placement in theory through department examination, may not be required to complete the prerequisite courses in the theory sequence. However, no retroactive course credit will be granted. All students must complete at least 40 credits in Mead Witter School of Music coursework.

## HONORS IN THE MAJOR

The School of Music is reviewing its requirements for Honors in the Major. Current music majors may contact the undergraduate advisor for more information.

To earn Honors in any music major, students must satisfy the requirements below as well as all other requirements for their music degree and major.

- 6 credits of MUSIC 681 Senior Honors Thesis-MUSIC 682 Senior Honors Thesis
- 12 credits of honors coursework in music: 6 of the 12 credits must be at the 300 level or higher and only 6 credits can be taken in any one of the three music areas of theory, history, and performance.

To participate in the Honors in the Major program, students must:

- Notify the School of Music undergraduate advisor of their intention to become a candidate for Honors in the Major. This will usually occur in the sophomore year.
- Present a minimum cumulative GPA of 3.300 in all courses taken at UW-Madison and maintain this average throughout the degree.
- Present a minimum 3.500 GPA in all music coursework and maintain a minimum 3.500 GPA in all music honors coursework.
- Engage a faculty member who will collaborate in planning the 12 credits of honors curriculum coursework; submit this plan to the undergraduate music advisor. The course plan may change as students progress through their work.
- Prior to beginning work on the MUSIC 681-MUSIC 682 Senior Honors Thesis sequence, confirm a faculty advisor for this sequence (who may be the same person as for the 12 credits above) and submit a prospectus outlining in detail the planned work including (a) the topic, (b) plans for research, and (c) a clear substantive written component, although it may also include oral and/or performance components. The faculty advisor must sign the prospectus indicating approval.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Develop advanced levels of proficiency in solo, chamber and ensemble performance sufficient to enter music professions or graduate programs.
2. Understand, apply and synthesize foundational concepts of musical study in theory, history and pedagogy.
3. Demonstrate the ability to learn independently and to integrate knowledge across domains of research and applied studies.
4. Communicate verbally, in writing and through public performance, musical ideas and concepts.
5. Demonstrate ability to work collaboratively and professionally in multiple social and professional settings.

## ADVISING AND CAREERS

Undergraduate students-current music majors only-should consult the music advisor for help enrolling in courses and planning the completion of their degree. Students who are interested in majoring in music should consult the undergraduate audition and admissions coordinator (admissions@music.wisc.edu; 608-263-5986; 5561 Humanities). If you have questions about a scholarship that you are receiving from the School of Music, please contact the associate director for Mead Witter School of Music.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Cook (director), Blasius, Calderón, Chisholm, Crook, Dill, Di Sanza, Doing, Fischer, Fulmer, Hetzler, Hyer, Johnson, Karp, Koza, Leckrone, Perry, Rowe, Schaffer, Schwendinger, Stowe, Swack, B. Taylor, C. Taylor, Teeple, Thimmig, Vallon, Vardi; Associate Professors Dobbs, Grabois, Wallmann; Assistant Professors Altino, Lee, Ronis

The faculty of the Mead Witter School of Music is a distinguished group of educators, performing musicians, and active scholars. The backgrounds of performance faculty include rich experiences as professional musicians, researchers, recording artists, and entrepreneurs. Faculty in music education have particular insight into their field as a result of their backgrounds as school educators, performers, and scholars. In areas such as music theory and musicology, the musical community has high regard for the past and current contributions to the study of musical theory, historical perspectives on music, the role of music in societies around the world, and the unique contributions of American musicians. Teaching is a priority for the faculty, who are readily accessible to students for advice and support. Faculty, staff, and students cooperate in extraordinary ways with joint ventures that reach across disciplines both in research or instruction.

## RESOURCES AND SCHOLARSHIPS

## OFFICE OF STUDENT FINANCIAL AID

Prospective music students should contact the Office of Student Financial Aid (https://financialaid.wisc.edu) (333 East Campus Mall \#9701, Madison, WI 53715-1382; 608-262-3060) to obtain information about grants and loans when returning the application for admission.

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## ACCREDITATION

## aCCREDITATION

National Association of Schools of Music (https://nasm.artsaccredit.org)

Accreditation status: Accredited. Next accreditation review: 2022-2023

## MUSIC: HISTORY

## REQUIREMENTS

## MUSIC: HISTORY

All prospective undergraduate music majors must audition on an instrument or voice and be accepted into the Mead Witter School of Music at the music major level ( 200 level) of performance study according to standard admission procedures. For students desiring to major in music history, subsequent private lessons are not required and may only be available as space permits in individual studios.

Students interested in this major must talk with the MUSIC 211 Survey of the History of Western Music or MUSIC 212 Survey of the History of Western Music professor (whichever course they are enrolled in at the time) and/or the chair of the musicology area. In addition, they must notify the music advisor of their intentions.

Students must prepare the petition for admission to the major during the semester in which they are taking the second music history survey course. They must also be completing or have already completed MUSIC 221 Musica Practica 3/MUSIC 271 Musica Practica: Aural Skills 3 and MUSIC 222 Musica Practica 4/MUSIC 272 Musica Practica: Aural Skills 4. The petition must consist of:

1. a written request to the chair of the musicology area outlining the reasons they wish to declare a major in music history and
2. a selection of papers and other written assignments completed for MUSIC 211, MUSIC 212, and other academic music courses.

All application materials must be submitted to the chair no later than the end of the semester they are completing the MUSIC 211-MUSIC 212 sequence. Applicants must also submit a campus copy of their transcript once final grades have posted.

Musicology faculty will consider the application at the next meeting of the musicology faculty. Applications submitted in May at the completion of MUSIC 212 will be reviewed in September. The Area will decide whether to admit students to the music history major on the basis of grades in MUSIC 211 and MUSIC 212, cumulative grade point average (GPA), samples of written prose, and letters of application. The admission decision is based on multiple factors, and there is no minimum GPA that will guarantee admission to the music history major. However, the musicology faculty does expect that a serious applicant would have attained minimum GPAs of 3.250 in the following areas:

1. MUSIC 211 and MUSIC 212;
2. other academic music courses;
3. the UW-Madison cumulative GPA.

As with admission to all majors within the Mead Witter School of Music, the musicology area faculty has the final authority to accept or deny a petition for admission.

The area will assign each admitted student a faculty advisor for planning advanced work in the major and supervising the senior capstone paper.

Students may not enroll in more than one advanced music history course following completion of MUSIC 211 -MUSIC 212 pending acceptance to the major.

Students wishing to apply to the major after completion of MUSIC 211-MUSIC 212 and/or after completion of more than one advanced musicology course must submit an additional petition explaining why they are applying late. If a late applicant is admitted, the Area may choose to accept all, part, or none of the advanced-level work completed prior to acceptance to the major.

## MUSIC: HISTORY OPTION REQUIREMENTS

To qualify for the music history option, a student must earn a grade of C or better in each music course taken after formal admission to and declaration of the option.

Credits
Music Courses in Music Theory

| MUSIC 121 <br> \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 (prerequisite course requirements) | 4 |
| :---: | :---: | :---: |
| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 (prerequisite course requirements) | 4 |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 (prerequisite course requirements) | 4 |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| Music Courses in Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Music Courses in Advanced-level Music History |  |  |
| Select four of the following: |  |  |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas |  |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World |  |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World |  |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion |  |
| MUSIC 405 | Seminar: Cultural Study of Music |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 500 | Seminar in Global Popular Music |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |
| Music Course for Senior Capstone Paper |  |  |
| MUSIC 499 | Directed Study | 3 |
| Music Elective Courses |  |  |
| Select 3 credits of music electives |  | 3 |
| Music Course in Piano |  |  |
| MUS PERF 102 | Beginning Class Piano (or pass proficiency exam) | 2 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on campus
Courses that count toward this requirement are:
Code
Title
Credits

Music (660) Courses

| MUSIC 40 | Wind Ensemble | 1 |
| :---: | :---: | :---: |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 1 |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| MUSIC 221 | Musica Practica 3 | 3 |
| MUSIC 222 | Musica Practica 4 | 3 |
| MUSIC 256 | University Opera | 1-2 |
| MUSIC 262 | Jazz Ensemble | 1 |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 331 | Jazz Improvisation | 3 |
| MUSIC 332 | Jazz Improvisation | 3 |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |

MUSIC 499 Directed Study 1-3
500 level and above
Music Performance (664)
MUS PERF $342 \quad$ Piano Accompanying Lab 1
MUS PERF 347 Third Year Composition 3
MUS PERF 348 Third Year Composition 3
400 level and above

## MUSIC: PERFORMANCE

## REQUIREMENTS

## MUSIC: PERFORMANCE REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Music Courses in Performance Study |  |  |
| Select major instrument or voice (seven semesters 200 level or above, with three semesters at the 400 level) |  | 14 |
| Music Courses in Music Theory |  |  |
| MUSIC 121 <br> \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 | 4 |
| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 | 4 |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 | 4 |
| Music Courses in Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Select one of the following: |  |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |
| Music Courses in Organizations or Accompanying |  |  |
| Select as appr from the follow semester of pri | to the major performance area must enroll concurrently with each performance study): | 7-9 |


| semester of private performance study): |  |
| :--- | :--- |
| MUSIC 40 | Wind Ensemble |
| MUSIC 41 | Concert Band |
| MUSIC 50 | Concert Choir |
| MUSIC 52 | Women's Chorus |
| MUSIC 53 | Choral Union |
| MUSIC 55 | Masters' Singers |
| MUSIC 56 | Chorale |


| MUSIC 58 | Madrigal Singers |  |
| :---: | :---: | :---: |
| MUSIC 59 | University Chorus |  |
| MUSIC 61 | Chamber Orchestra |  |
| MUSIC 62 | University Symphony Orchestra |  |
| MUSIC 270 | Ensemble-Guitar |  |
| MUS PERF 251 | Keyboard Skills (keyboard majors only) |  |
| MUS PERF 242 | Accompanying (keyboard majors only) |  |
| MUS PERF 342 | Piano Accompanying Lab (keyboard majors only) |  |
| Music Course in Piano |  |  |
| Complete the following course or pass proficiency exam: |  |  |
| MUS PERF 102 | Beginning Class Piano (nonkeyboard majors only) | 2 |
| Total Credits |  | 41-43 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on campus
Courses that count toward this requirement are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Music (660) Courses |  |  |
| MUSIC 40 | Wind Ensemble | 1 |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 1 |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| MUSIC 221 | Musica Practica 3 | 3 |
| MUSIC 222 | Musica Practica 4 | 3 |
| MUSIC 256 | University Opera | 1-2 |
| MUSIC 262 | Jazz Ensemble | 1 |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 331 | Jazz Improvisation | 3 |
| MUSIC 332 | Jazz Improvisation | 3 |


| MUSIC 340 | Pedagogy | 1-2 |
| :---: | :---: | :---: |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 405 | Seminar. Cultural Study of Music | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |
| MUSIC 499 | Directed Study | 1-3 |
| 500 level and above |  |  |
| Music Performance (664) |  |  |
| MUS PERF 342 | Piano Accompanying Lab | 1 |
| MUS PERF 347 | Third Year Composition | 3 |
| MUS PERF 348 | Third Year Composition | 3 |
| 400 level and above |  |  |
| MUSIC: | EORY |  |

## MUSIC: THEORY

All prospective undergraduate music majors must audition on an instrument or voice and be accepted into Mead Witter School of Music at the music major level ( 200 level) of performance study according to standard admission procedures. For students desiring to major in music theory, subsequent private lessons are not required and may only be available as space permits in individual studios. All prospective majors in the School of Music must pass a placement examination before enrolling in MUSIC 121 Musica Practica 1/MUSIC 171 Musica Practica: Aural Skills 1. Contact the undergraduate music office ( 5561 Mosse Humanities; 608-263-5986) for more information.

Students must complete MUSIC 121/MUSIC 171 and MUSIC 122 Musica Practica 2/MUSIC 172 Musica Practica: Aural Skills 2 before their petition to major in music theory can be considered, but should apply no later
than the semester after completing MUSIC 122/MUSIC 172. The petition must consist of:

1. a written request to the chair of the Music Theory Area outlining reasons for wanting to declare a major in music theory;
2. a selection of papers and other written assignments completed for MUSIC 121 and MUSIC 122.

The area will decide whether to admit students to the major on the basis of grades in MUSIC 121/MUSIC 171 and MUSIC 122/MUSIC 172, cumulative grade point average (GPA), samples of written prose, and letters of application. The admission decision is based on multiple factors; no minimum GPA will guarantee admission to the music theory major. However, the Area does expect that a serious applicant would have attained a minimum GPA of 3.250 in the following areas:

1. MUSIC 121/MUSIC 171 and MUSIC 122/MUSIC 172;
2. other music courses;
3. UW-Madison cumulative GPA.

As with admission to all majors within the Mead Witter School of Music, the music theory area faculty have the final authority to accept or deny a petition for admission. All majors will be assigned a faculty advisor within the area. Students accepted to the music theory major will be eligible to formally declare the major after they have completed the second year of the core music curriculum with a high quality of work as described above After formal declaration of the major, students must maintain a grade of $C$ or better in each subsequent music course taken.

Transfer students with sophomore standing or above who would like to petition for admission to the music theory major should submit:

1. a written request to the Area chair outlining reasons for wanting to declare a major in music theory;
2. a detailed description of previous coursework in music theory, including a dossier of course syllabi, assignments, examinations, etc.;
3. an unofficial transcript or other verification of course grades; and
4. samples of written prose, preferably from music courses.

## MUSIC: THEORY OPTION REQUIREMENTS

Transfer students should contact the Area chair to discuss their own particular situations. Criteria for admission to and retention in the major are the same as outlined in the previous paragraph.

| Code |  | Credits |
| :---: | :---: | :---: |
| Music Courses in Music Theory |  |  |
| MUSIC 121 <br> \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 (prerequisite course requirements) | 4 |
| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 <br> and Musica Practica: Aural Skills 2 <br> (prerequisite course requirements) | 4 |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 | 4 |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| Music Courses in Advanced-level Music Theory |  |  |
| Select 6 credit | 400 level or above | 6 |
| Music Courses in Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |


| MUSIC 212 | Survey of the History of Western Music | 3 |
| :---: | :---: | :---: |
| Select two of the following: |  |  |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas |  |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World |  |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World |  |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion |  |
| MUSIC 405 | Seminar: Cultural Study of Music |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 500 | Seminar in Global Popular Music |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |
| Music Course for Senior Capstone Paper |  |  |
| MUSIC 499 | Directed Study | 3 |
| Music Electives Courses |  |  |
| Select 3 credits in music electives |  | 3 |
| Music Course in Piano |  |  |
| Complete the following course or pass proficiency exam: |  |  |
| MUS PERF 102 | Beginning Class Piano | 2 |
| Total Credits |  | 36 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on campus
Courses that count toward this requirement are:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Music (660) Courses |  |  |
| MUSIC 40 | Wind Ensemble | 1 |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 3 |
| MUSIC 211 | Survey of the History of Western | 3 |
| MUSIC 212 | Music | 3 |
| MUSIC 221 | Survey of the History of Western | 3 |


| MUSIC 222 | Musica Practica 4 | 3 |
| :---: | :---: | :---: |
| MUSIC 256 | University Opera | 1-2 |
| MUSIC 262 | Jazz Ensemble | 1 |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 331 | Jazz Improvisation | 3 |
| MUSIC 332 | Jazz Improvisation | 3 |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |
| MUSIC 499 | Directed Study | 1-3 |
| 500 level and abov |  |  |
| Music Performance (664) |  |  |
| MUS PERF 342 | Piano Accompanying Lab | 1 |
| MUS PERF 347 | Third Year Composition | 3 |
| MUS PERF 348 | Third Year Composition | 3 |
| 400 level and abov |  |  |

## MUSIC, B.S.

## VALUES AND EDUCATIONAL PRIORITIES

At the Mead Witter School of Music

- we teach by example offering participatory, mentor-driven education;
- we provide individualized instruction and flexible curricula that encourage students to find their own musical pathways;
- we foster musical excellence and high academic standards;
- our faculty exhibit the best of their respective fields, are deeply engaged in artistic scholarship and research, and are committed to teaching at all levels;
- we whole-heartedly embrace the Wisconsin Idea;
- our department is a dynamic educational community, part of a large and vibrant research university within a city that values and supports the arts.

The Mead Witter School of Music enriches students' educational experience by hosting guest artists and scholars for master classes, recitals, colloquia, seminars, and festivals. Its performing organizations and ensembles perform more than 350 recitals and concerts every year, making a significant contribution to the cultural life of the university and the wider Madison community. Facilities specifically designed for music study and performance offer excellent resources for students to pursue their interests.

In addition to a thriving undergraduate student body, music students have the advantage of working side-by-side with master's-level and doctoral-level music students. Working collegially in class and studio, making music together on stage and off, and building professional relationships across program boundaries all enable the sharing of expertise, experience, and perspectives and add immeasurably to every student's development.

The music degree programs are demanding and require care in taking courses in the proper sequence. Graduation could be delayed if a course is not taken in the appropriate semester. Refer to the Requirements tab for details on the coursework and sequences of study in specific majors.

Mead Witter School of Music views its goals and objectives as complementary to those of the University of Wisconsin-Madison, which include "to provide an environment in which faculty and students can discover, examine critically, preserve and transmit the knowledge, wisdom and values that will help ensure the survival of the present and future generations with improvement in the quality of life."

The University of Wisconsin-Madison School of Music is accredited by the National Association of Schools of Music (NASM), and has been an institutional member of NASM since 1966.

## PEOPLE AND FACILITIES

The greatest asset of Mead Witter School of Music is its people-staff, faculty, and students-who are daily immersed in learning, building, researching, writing, and making music. Mentoring is the core of our teaching, manifest in one-on-one applied instruction as well as in small-group coaching and classes. Undergraduate students will build professional relationships with many faculty, form friendships with peers across the boundaries of degree programs, and collaborate with staff in addressing the practical matters of academic study. Extensive information on faculty, including biographies, is available here.

The Mosse Humanities Building, built in 1969, houses most of the music classrooms, rehearsal rooms, faculty studios, and 111 practice rooms. Most recitals and concerts take place in one of three performance spaces: Mills Concert Hall, Morphy Recital Hall, and Eastman Organ

Recital Hall. The school's extensive collection of instruments, both common and unusual, is available to both faculty and students. Music Hall with its clock tower, built in 1879, is a campus landmark. Renovated in 1985, it is the home of the opera program. The new Hamel Music Center, scheduled to open in 2019, will include a concert hall, a recital hall, and a large ensemble rehearsal space.

Memorial Library is the home of the Mills Music Library, which offers extensive research and circulating collections, attractive study space, and personal staff assistance with research. Music materials on campus number over half a million, ranging from scores and sheet music to archival collections and historic audio recordings. Through Mills Music Library and other UW-Madison libraries, students have access to a wide range of online research databases as well as millions of articles, books, and streaming media. All genres of music are represented, with notably strong collections in Americana and ethnic music. Nationally known special collections include the Tams-Witmark Collection, a treasury of early American musical theater materials, and the Wisconsin Music Archives.

## CHOOSING A MUSIC MAJOR

Mead Witter School of Music offers several degree programs at the undergraduate level. The bachelor of arts and bachelor of science curricula are liberal arts majors in the College of Letters \& Science and are excellent programs for students interested in exploring the wide array of course offerings in the college or in two or more major areas of study. In these programs music courses comprise one-third of a student's work toward the degree. By comparison, the bachelor of music curriculum a professional degree in music, requires 75 percent of total coursework within the Mead Witter School of Music. Students in this program are looking for depth in performance study along with a large complement of other musical studies at advanced level. A number of alumni from both B.A. and B.S. have completed two majors at UW-Madison. Both of these programs may provide a foundation for graduate study and sometimes for a career in music. We encourage conversations with Mead Witter School of Music professors at any point during your first two years as a music major to learn as much as possible about options that are available to you.

## GRADES AND ADVISING

Mead Witter School of Music is a department of the UW-Madison College of Letters \& Science. Information on the grading system and academic procedures is available in the College of Letters \& Science section of this catalog and in the opening section of this catalog.

The undergraduate advisor of the Mead Witter School of Music serves as the advisor for every music major. The advisor maintains records and assists students in determining an appropriate course schedule each semester.

## HOW TO GET IN

## ADMISSIONS PROCEDURES

To major in music at Mead Witter School of Music, a student must:

1. apply and be accepted by the UW-Madison Office of Admissions and Recruitment and
2. apply, audition, and be accepted by the School of Music faculty.

In addition to the UW-Madison application, students must apply to the Mead Witter School of Music. Application material is available on the School of Music website (http://www.music.wisc.edu) and the music application process is handled by the Undergraduate Admissions Office, 3561H Mosse Humanities Building.

The steps for applying to the UW-Madison School of Music are:

- Review the information on the website for Mead Witter School of Music (http://www.music.wisc.edu). Follow instructions carefully. Any questions may be directed to the Undergraduate Admissions Office.
- Download and complete the music application. On the application you will request an audition date.
- Download and provide the recommendation forms to two recommenders. These will be people who can attest to the applicant's musical background and ability.
- If there will be need for financial assistance, consult the Office of Student Financial Aid (https://financialaid.wisc.edu).
- Request that official transcripts be sent to the School of Music Undergraduate Admissions Office from all high schools and colleges attended.
- Prepare the appropriate repertoire and materials for the audition.
- Come to the campus for an audition, which includes a ten- to twentyminute performance audition, music theory and piano placement examinations, and an introduction to School of Music faculty, students, and facilities.


## TRANSFER STUDENTS

Students who have earned more than 24 course credits at another college or university follow the same application and audition procedures described above. Upon acceptance by UW-Madison and the School of Music, credits for music courses taken at another institution are interpreted by the UW-Madison Office of Admissions and Recruitment simply as elective music credits. These course credits, as they appear on the transcript(s), will be reviewed during a conference with the advisor upon enrolling at UW-Madison. Transfer credit for music courses will be reviewed only after all placement and proficiency examinations in theory and piano have been taken at UW-Madison and syllabi for academic music courses have been submitted.

## REENTERING THE SCHOOL OF MUSIC

Students who were previously enrolled in the School of Music and UWMadison who desire to reenter to seek an undergraduate degree should apply for reentry to both the UW-Madison Office of Admissions and Recruitment and the School of Music Undergraduate Admissions Office (http://www.music.wisc.edu). An audition will be required in most cases.

## INTERNATIONAL STUDENTS

Students from foreign countries who seek admission to the university and the School of Music should contact International Student Services in addition to the UW-Madison Office of Admissions and Recruitment and the School of Music Undergraduate Admissions Office.

## SPECIAL STUDENTS

Persons who are interested in courses offered by the School of Music but who are not working toward a UW-Madison degree should contact the Division of Continuing Studies, 21 North Park Street, Madison, WI 53715; 608-263-6960. Enrollment is limited in music courses, and priority is given to UW-Madison undergraduate degree candidates.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics
Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits
and Science
Coursework

Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Four options are available under this program:

- Option in Music Performance
- Option Music History
- Options in Music Theory
- Individualized Music Track
- Music: History (p. 1107)
- Music: Performance (p. 1109)
- Music: Theory (p. 1110)

The Bachelor of Arts or Bachelor of Science: Music curriculum is a liberal arts degree in music, designed for students whose career goals require more flexibility in course selection than that afforded by the bachelor of music degree. This degree also makes it possible to combine a major in music with majors in other fields. All prospective B.A. and B.S. music students must audition on an instrument or voice and be accepted into the School of Music at the music major level of performance study following normal admission procedures.

In the second or third year of study, the faculty of the Mead Witter School of Music assesses each student's readiness to continue in advancedlevel work in the major and to declare the major. To be eligible for the major declaration, students must maintain a minimum 2.000 GPA in the core academic music courses (theory and history) specified for their major option. Admission to and retention in the music history or music theory major option may require a higher GPA; see specific requirements for these programs. Enrollment in courses is limited; therefore, core academic music courses may be repeated only with permission of the
area. Only one approved repeat per area will be calculated into the GPA for purposes of determining eligibility to declare a major in music.

Satisfactory academic progress in the degree is measured by the regulations of the College of Letters \& Science. The music advisor maintains current records and advises the student on music course selection each semester. The music advisor can provide information on all degree requirements. However, the L\&S academic deans are the final authority responsible for interpretation of L\&S policy regarding B.A./B.S. degree requirements outside the major department. The music course requirements listed are subject to change.

## INDIVIDUALIZED MUSIC CURRICULUM

All prospective music students must audition on an instrument or voice and be accepted into the Mead Witter School of Music at the music major level ( 200 level) of performance study according to standard admission procedures. Students are not admitted directly into the Individualized Music Curriculum but must complete at least three semesters of the core curriculum as a preliminary music student (PRM program) before applying for this track. The track is approved only rarely and is intended for those students whose desired area of emphasis in music does not fit into the framework of the performance, history, or theory options. However, the area of emphasis must be one that will utilize music courses currently offered; all courses used for the major must be School of Music courses. The Individualized Music Curriculum is planned and designed by the student in conjunction with a School of Music faculty member willing to act as the curricular advisor; the music advisor reviews the proposed curriculum for compliance with all School of Music and L\&S requirements. The curriculum then must be approved by the appropriate Faculty Area Committee(s) and the Undergraduate Curriculum Committee. The Individualized Music Curriculum can be designed with an emphasis in composition. The core requirements are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Music Courses in Performance Study |  |  |
| Major Instrument or Voice (3 semesters at the 200 level or above) |  | 6 |
| Music Courses in Music Theory |  |  |
| MUSIC 121 <br> \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 (prerequisite course requirements) | 4 |
| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 (prerequisite course requirements) | 4 |
| Music Courses in Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Music Foundation Courses: |  | 6 |
| Select two courses from the following three categories: |  |  |
| -Theory: |  |  |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 |  |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 |  |
| - History: |  |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |


| MUSIC 413 | Survey of Music in the Baroque Era |
| :--- | :--- |
| MUSIC 414 | Survey of Music in the Classic Era |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on campus
Courses that count toward this requirement are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Music (660) Courses |  |  |
| MUSIC 40 | Wind Ensemble | 1 |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 1 |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| MUSIC 221 | Musica Practica 3 | 3 |
| MUSIC 222 | Musica Practica 4 | 3 |
| MUSIC 256 | University Opera | 1-2 |
| MUSIC 262 | Jazz Ensemble | 1 |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 331 | Jazz Improvisation | 3 |


| MUSIC 332 | Jazz Improvisation | 3 |
| :---: | :---: | :---: |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 405 | Seminar: Cultural Study of Music | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |
| MUSIC 499 | Directed Study | 1-3 |
| 500 level and above |  |  |
| Music Performance (664) |  |  |
| MUS PERF 342 | Piano Accompanying Lab | 1 |
| MUS PERF 347 | Third Year Composition | 3 |
| MUS PERF 348 | Third Year Composition | 3 |
| 400 level and above |  |  |

## ADDITIONAL REQUIREMENTS

All music major programs require a minimum piano proficiency at the level of MUS PERF 102 Beginning Class Piano.

Students who complete Theory MUSIC 122 Musica Practica 2, MUSIC 221 Musica Practica 3, or MUSIC 222 Musica Practica 4 without having taken the earlier courses in the theory sequence, or who achieve advanced placement in theory through department examination, may not be required to complete the prerequisite courses in the theory sequence. However, no retroactive course credit will be granted. All students must complete at least 40 credits in Mead Witter School of Music coursework.

## HONORS IN THE MAJOR

The School of Music is reviewing its requirements for Honors in the Major. Current music majors may contact the undergraduate advisor for more information.

To earn Honors in any music major, students must satisfy the requirements below as well as all other requirements for their music degree and major.

- 6 credits of MUSIC 681 Senior Honors Thesis-MUSIC 682 Senior Honors Thesis
- 12 credits of honors coursework in music: 6 of the 12 credits must be at the 300 level or higher and only 6 credits can be taken in any one of the three music areas of theory, history, and performance.

To participate in the Honors in the Major program, students must:

- Notify the School of Music undergraduate advisor of their intention to become a candidate for Honors in the Major. This will usually occur in the sophomore year.
- Present a minimum cumulative GPA of 3.300 in all courses taken at UW-Madison and maintain this average throughout the degree.
- Present a minimum 3.500 GPA in all music coursework and maintain a minimum 3.500 GPA in all music honors coursework.
- Engage a faculty member who will collaborate in planning the 12 credits of honors curriculum coursework; submit this plan to the undergraduate music advisor. The course plan may change as students progress through their work.
- Prior to beginning work on the MUSIC 681 -MUSIC 682 Senior Honors Thesis sequence, confirm a faculty advisor for this sequence (who may be the same person as for the 12 credits above) and submit a prospectus outlining in detail the planned work including (a) the topic, (b) plans for research, and (c) a clear substantive written component, although it may also include oral and/or performance components. The faculty advisor must sign the prospectus indicating approval.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of
Work
Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Develop advanced levels of proficiency in solo, chamber and ensemble performance sufficient to enter music professions or graduate programs.
2. Understand, apply and synthesize foundational concepts of musical study in theory, history and pedagogy.
3. Demonstrate the ability to learn independently and to integrate knowledge across domains of research and applied studies.
4. Communicate verbally, in writing and through public performance, musical ideas and concepts.
5. Demonstrate ability to work collaboratively and professionally in multiple social and professional settings.

## ADVISING AND CAREERS

Undergraduate students-current music majors only-should consult the music advisor for help enrolling in courses and planning the completion of their degree. Students who are interested in majoring in music should consult the undergraduate audition and admissions coordinator (admissions@music.wisc.edu; 608-263-5986; 5561 Humanities). If you have questions about a scholarship that you are receiving from the School of Music, please contact the associate director for Mead Witter School of Music.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Cook (director), Blasius, Calderón, Chisholm, Crook, Dill, Di Sanza, Doing, Fischer, Fulmer, Hetzler, Hyer, Johnson, Karp, Koza, Leckrone, Perry, Rowe, Schaffer, Schwendinger, Stowe, Swack, B. Taylor, C. Taylor, Teeple, Thimmig, Vallon, Vardi; Associate Professors Dobbs, Grabois, Wallmann; Assistant Professors Altino, Lee, Ronis

The faculty of the Mead Witter School of Music is a distinguished group of educators, performing musicians, and active scholars. The backgrounds of performance faculty include rich experiences as professional musicians, researchers, recording artists, and entrepreneurs. Faculty in music education have particular insight into their field as a result of their backgrounds as school educators, performers, and scholars. In areas such as music theory and musicology, the musical community has high regard for the past and current contributions to the study of musical theory, historical perspectives on music, the role of music in societies around the world, and the unique contributions of American musicians. Teaching is a priority for the faculty, who are readily accessible to students for advice and support. Faculty, staff, and
students cooperate in extraordinary ways with joint ventures that reach across disciplines both in research or instruction.

## RESOURCES AND SCHOLARSHIPS

## OFFICE OF STUDENT FINANCIAL AID

Prospective music students should contact the Office of Student Financial Aid (https://financialaid.wisc.edu) (333 East Campus Mall \#9701, Madison, WI 53715-1382; 608-262-3060) to obtain information about grants and loans when returning the application for admission.

## SCHOOL OF MUSIC SCHOLARSHIPS

Some funds are available for scholarships awarded by the School of Music to outstanding applicants. It is always advisable to complete the Free Application for Federal Student Aid (FAFSA) and submit it to the Office of Student Financial Aid. Application materials will serve as support for music scholarship consideration.

## Scholarship applicants must audition in person and must take the Theory

 Placement Examination on the audition day in order to be considered for an award. After the audition and review of materials, the associate director will notify each applicant about the scholarship decision. Accompanying each award notification will be a Letter of Commitment, to be signed and returned to the School of Music. Criteria used for awarding scholarships are:1. Quality of the performance audition
2. High school and/or college academic record
3. Letters of recommendation

Most Mead Witter School of Music scholarships are awarded for a fouryear period. The music faculty reviews every scholarship award each semester and expects that each student on scholarship will maintain satisfactory progress toward completing the music major and degree requirements, continue to make significant contributions in performing organizations or accompanying, and maintain a minimum 3.000 grade point average. Please see the Mead Witter School of Music website (http://www.music.wisc.edu) for more information regarding music scholarships.

## ACCREDITATION

## ACCREDITATION

National Association of Schools of Music (https://nasm.artsaccredit.org)

Accreditation status: Accredited. Next accreditation review: 2022-2023

## MUSIC: HISTORY

## REQUIREMENTS

## MUSIC: HISTORY

All prospective undergraduate music majors must audition on an instrument or voice and be accepted into the Mead Witter School of Music at the music major level (200 level) of performance study according to standard admission procedures. For students desiring to
major in music history, subsequent private lessons are not required and may only be available as space permits in individual studios.

Students interested in this major must talk with the MUSIC 211 Survey of the History of Western Music or MUSIC 212 Survey of the History of Western Music professor (whichever course they are enrolled in at the time) and/or the chair of the musicology area. In addition, they must notify the music advisor of their intentions.

Students must prepare the petition for admission to the major during the semester in which they are taking the second music history survey course. They must also be completing or have already completed MUSIC 221 Musica Practica 3/MUSIC 271 Musica Practica: Aural Skills 3 and MUSIC 222 Musica Practica 4/MUSIC 272 Musica Practica: Aural Skills 4 . The petition must consist of:

1. a written request to the chair of the musicology area outlining the reasons they wish to declare a major in music history and
2. a selection of papers and other written assignments completed for MUSIC 211, MUSIC 212, and other academic music courses.

All application materials must be submitted to the chair no later than the end of the semester they are completing the MUSIC 211 -MUSIC 212 sequence. Applicants must also submit a campus copy of their transcript once final grades have posted.

Musicology faculty will consider the application at the next meeting of the musicology faculty. Applications submitted in May at the completion of MUSIC 212 will be reviewed in September. The Area will decide whether to admit students to the music history major on the basis of grades in MUSIC 211 and MUSIC 212, cumulative grade point average (GPA), samples of written prose, and letters of application. The admission decision is based on multiple factors, and there is no minimum GPA that will guarantee admission to the music history major. However, the musicology faculty does expect that a serious applicant would have attained minimum GPAs of 3.250 in the following areas:

1. MUSIC 211 and MUSIC 212;
2. other academic music courses;
3. the UW-Madison cumulative GPA.

As with admission to all majors within the Mead Witter School of Music, the musicology area faculty has the final authority to accept or deny a petition for admission.

The area will assign each admitted student a faculty advisor for planning advanced work in the major and supervising the senior capstone paper.

Students may not enroll in more than one advanced music history course following completion of MUSIC 211 -MUSIC 212 pending acceptance to the major.

Students wishing to apply to the major after completion of MUSIC 211-MUSIC 212 and/or after completion of more than one advanced musicology course must submit an additional petition explaining why they are applying late. If a late applicant is admitted, the Area may choose to accept all, part, or none of the advanced-level work completed prior to acceptance to the major.

## MUSIC: HISTORY OPTION REQUIREMENTS

To qualify for the music history option, a student must earn a grade of $C$ or better in each music course taken after formal admission to and declaration of the option.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Music Courses in Music Theory |  |  |
| MUSIC 121 <br> \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 (prerequisite course requirements) | 4 |
| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 <br> and Musica Practica: Aural Skills 2 <br> (prerequisite course requirements) | 4 |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 (prerequisite course requirements) | 4 |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| Music Courses in Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Music Courses in Advanced-level Music History |  |  |
| Select four of the following: |  |  |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas |  |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World |  |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World |  |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion |  |
| MUSIC 405 | Seminar. Cultural Study of Music |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 500 | Seminar in Global Popular Music |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |
| Music Course for Senior Capstone Paper |  |  |
| MUSIC 499 | Directed Study | 3 |
| Music Elective Courses |  |  |
| Select 3 credits of music electives |  | 3 |
| Music Course in Piano |  |  |
| MUS PERF 102 | Beginning Class Piano (or pass proficiency exam) | 2 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on campus
Courses that count toward this requirement are:


| MUSIC 55 | Masters' Singers |  |
| :---: | :---: | :---: |
| MUSIC 56 | Chorale |  |
| MUSIC 58 | Madrigal Singers |  |
| MUSIC 59 | University Chorus |  |
| MUSIC 61 | Chamber Orchestra |  |
| MUSIC 62 | University Symphony Orchestra |  |
| MUSIC 270 | Ensemble-Guitar |  |
| MUS PERF 251 | Keyboard Skills (keyboard majors only) |  |
| MUS PERF 242 | Accompanying (keyboard majors only) |  |
| MUS PERF 342 | Piano Accompanying Lab (keyboard majors only) |  |
| Music Course in Piano |  |  |
| Complete the following course or pass proficiency exam: |  |  |
| MUS PERF 102 | Beginning Class Piano (nonkeyboard majors only) | 2 |
| Total Credits |  | 41-43 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on campus Courses that count toward this requirement are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Music (660) Courses |  |  |
| MUSIC 40 | Wind Ensemble | 1 |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 1 |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| MUSIC 221 | Musica Practica 3 | 3 |
| MUSIC 222 | Musica Practica 4 | 3 |
| MUSIC 256 | University Opera | 1-2 |
| MUSIC 262 | Jazz Ensemble | 1 |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |


| MUSIC 331 | Jazz Improvisation | 3 |
| :---: | :---: | :---: |
| MUSIC 332 | Jazz Improvisation | 3 |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 405 | Seminar: Cultural Study of Music | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |
| MUSIC 499 | Directed Study | 1-3 |
| 500 level and above |  |  |
| Music Performance (664) |  |  |
| MUS PERF 342 | Piano Accompanying Lab | 1 |
| MUS PERF 347 | Third Year Composition | 3 |
| MUS PERF 348 | Third Year Composition | 3 |
| 400 level and above |  |  |
| MUSG』 THEORY |  |  |
| REQUREM |  |  |

## MUSIC: THEORY

All prospective undergraduate music majors must audition on an instrument or voice and be accepted into Mead Witter School of Music at the music major level (200 level) of performance study according to standard admission procedures. For students desiring to major in music theory, subsequent private lessons are not required and may only be available as space permits in individual studios. All prospective majors in the School of Music must pass a placement examination before enrolling in MUSIC 121 Musica Practica 1/MUSIC 171 Musica Practica: Aural Skills 1. Contact the undergraduate music office (5561 Mosse Humanities; 608-263-5986) for more information.

Students must complete MUSIC 121/MUSIC 171 and MUSIC 122 Musica Practica 2/MUSIC 172 Musica Practica: Aural Skills 2 before their petition
to major in music theory can be considered, but should apply no later than the semester after completing MUSIC 122/MUSIC 172. The petition must consist of:

1. a written request to the chair of the Music Theory Area outlining reasons for wanting to declare a major in music theory;
2. a selection of papers and other written assignments completed for MUSIC 121 and MUSIC 122.

The area will decide whether to admit students to the major on the basis of grades in MUSIC 121/MUSIC 171 and MUSIC 122/MUSIC 172, cumulative grade point average (GPA), samples of written prose, and letters of application. The admission decision is based on multiple factors; no minimum GPA will guarantee admission to the music theory major. However, the Area does expect that a serious applicant would have attained a minimum GPA of 3.250 in the following areas:

1. MUSIC 121/MUSIC 171 and MUSIC 122/MUSIC 172;
2. other music courses;
3. UW-Madison cumulative GPA.

As with admission to all majors within the Mead Witter School of Music, the music theory area faculty have the final authority to accept or deny a petition for admission. All majors will be assigned a faculty advisor within the area. Students accepted to the music theory major will be eligible to formally declare the major after they have completed the second year of the core music curriculum with a high quality of work as described above. After formal declaration of the major, students must maintain a grade of $C$ or better in each subsequent music course taken.

Transfer students with sophomore standing or above who would like to petition for admission to the music theory major should submit:

1. a written request to the Area chair outlining reasons for wanting to declare a major in music theory;
2. a detailed description of previous coursework in music theory, including a dossier of course syllabi, assignments, examinations, etc.;
3. an unofficial transcript or other verification of course grades; and
4. samples of written prose, preferably from music courses.

## MUSIC: THEORY OPTION REQUIREMENTS

Transfer students should contact the Area chair to discuss their own particular situations. Criteria for admission to and retention in the major are the same as outlined in the previous paragraph.

## Code <br> Title <br> Credits

Music Courses in Music Theory

| MUSIC 121 |  |  |
| :--- | :--- | :---: |
| \& MUSIC 171 | Musica Practica 1 <br> and Musica Practica: Aural Skills 1 <br> (prerequisite course requirements) | 4 |
| MUSIC 122 | Musica Practica 2 <br> \& MUSIC 172 <br> (prerequisite course requirements) | 4 |
| MUSIC 221 | Musica Practica 3 <br> and Musica Practica: Aural Skills 3 |  |
| MUSIC 271 222 Musica Practica 4 <br> \& MUSIC 272 and Musica Practica: Aural Skills 4 |  |  |
| Music Courses in Advanced-level Music Theory | 4 |  |
| Select 6 credits at the 400 level or above | 4 |  |

Music Courses in Music History

| MUSIC 211 | Survey of the History of Western Music | 3 |
| :---: | :---: | :---: |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Select two of the following: |  |  |
| MUSIC/ <br> AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas |  |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World |  |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World |  |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion |  |
| MUSIC 405 | Seminar. Cultural Study of Music |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 500 | Seminar in Global Popular Music |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |
| Music Course for Senior Capstone Paper |  |  |
| MUSIC 499 | Directed Study | 3 |
| Music Electives Courses |  |  |
| Select 3 credits in music electives |  | 3 |
| Music Course in Piano |  |  |
| Complete the following course or pass proficiency exam: |  |  |
| MUS PERF 102 | Beginning Class Piano | 2 |
| Total Credits |  | 36 |

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on campus
Courses that count toward this requirement are:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Music (660) Courses |  |  |
| MUSIC 40 | Wind Ensemble | 1 |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 3 |
| MUSIC 211 | Survey of the History of Western |  |


| MUSIC 212 | Survey of the History of Western Music | 3 |
| :---: | :---: | :---: |
| MUSIC 221 | Musica Practica 3 | 3 |
| MUSIC 222 | Musica Practica 4 | 3 |
| MUSIC 256 | University Opera | 1-2 |
| MUSIC 262 | Jazz Ensemble | 1 |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 331 | Jazz Improvisation | 3 |
| MUSIC 332 | Jazz Improvisation | 3 |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |
| MUSIC 499 | Directed Study | 1-3 |
| 500 level and above |  |  |
| Music Performance (664) |  |  |
| MUS PERF 342 | Piano Accompanying Lab | 1 |
| MUS PERF 347 | Third Year Composition | 3 |
| MUS PERF 348 | Third Year Composition | 3 |
| 400 level and abo |  |  |

## MUSIC: EDUCATION, B.M.

## VALUES AND EDUCATIONAL PRIORITIES

At the Mead Witter School of Music

- we teach by example, offering participatory, mentor-driven education;
- we provide individualized instruction and flexible curricula that encourage students to find their own musical pathways;
- we foster musical excellence and high academic standards;
- our faculty exhibit the best of their respective fields, are deeply engaged in artistic scholarship and research, and are committed to teaching at all levels;
- we whole-heartedly embrace the Wisconsin Idea;
- we have created a dynamic educational community, part of a large and vibrant research university within a city that values and supports the arts.

The Mead Witter School of Music enriches students' educational experience by hosting guest artists and scholars for master classes, recitals, colloquia, seminars, and festivals. Its performing organizations and ensembles perform more than 350 recitals and concerts every year, making a significant contribution to the cultural life of the university and the wider Madison community. Facilities specifically designed for music study and performance offer excellent resources for students to pursue their interests.

In addition to a thriving undergraduate student body, B.M.: Music Education students have the advantage of working side-by-side with students in master's-level and doctoral-level music programs. Working collegially in class and studio, making music together on stage and off, and building professional relationships across program boundaries all enable the sharing of expertise, experience, and perspectives and add immeasurably to every student's development.

The music degree programs are demanding and require care in taking courses in the proper sequence. Graduation can be delayed if a course is not taken in the appropriate semester. Refer to the Requirements tab for details on the coursework and sequences of study in specific majors.

## THE MUSIC EDUCATION MAJOR

The music education major consists of two certification programs; General and Instrumental Music, and General and Choral Music. Students choose one of the programs and will, upon completion, be certified to teach in two areas at the Early-Childhood-through-Adolescence level. Music Education is a program offered jointly by the School of Music and the School of Education. The Bachelor of Music: Education degree is conferred by the College of Letters \& Science; teacher certification is earned through the School of Education.

The music education program was recently revised to:

- Award certification in two areas. Each graduate will receive certification in general music and also in vocal or instrumental music, thus increasing job marketability and better reflecting the current needs of $K-12$ schools. Graduates are certified to teach in elementary and secondary schools.
- Explore the relationships between popular culture and music education. Graduates will be prepared to teach multiple forms
of musical literacy, not just the traditional band, orchestra and choral curriculum.
- Expand the number of musical styles studied in the curriculum. Students also participate in group performances that reflect the diverse array of musical activities in today's schools.
- Offer an introductory music education class to sophomores prior to admission into the program.
- Provide instruction and experiences so that graduates can teach in culturally responsive ways.
- Increase performance collaboration between students in the instrumental and vocal tracks.
- Create a more interdisciplinary program by requiring all music education students to complete a core set of courses.

Although these programs are designed with the goal of preparing teachers to work in $K-12$ schools, the programs also provide a good preparation for individuals seeking careers in continuing education or music education-related fields.

The student's principal performance area should be consistent with the chosen certification program. One or more additional performance areas may be required. Prospective music education majors must audition and be accepted into any additional performance areas at the music major level (200 level) of performance study prior to beginning the methods and practicum sequence. Mead Witter School of Music cannot guarantee admission to additional performance areas, nor can it guarantee that appropriate substitute coursework will be available. During the time a student is enrolled in degree work, all performance study is expected to take place at UW-Madison.

## HOW TO GET IN

## ADMISSION PROCEDURES

To become a candidate for a School of Music degree, a student must first be accepted by the UW-Madison Office of Admissions and Recruitment and by the Mead Witter School of Music. Students interested in music education should consult with the audition and admission coordinator and apply as soon as possible. The music education program is highly sequential and takes a minimum of eight semesters from the semester of matriculation at Mead Witter School of Music.

Application material is available on the Mead Witter School of Music (http://www.music.wisc.edu) website. The music application process is handled by the Undergraduate Admissions Office, 3561H Mosse Humanities. The steps for applying to the School of Music are:

[^40]- Prepare the appropriate repertoire and materials for the audition.
- Come to the campus for an audition, which includes a ten- to twentyminute performance audition, music theory and piano placement examinations, and an introduction to Mead Witter School of Music faculty, students, and facilities.


## TRANSFER STUDENTS

Students who have earned more than 24 course credits at another college or university follow the same application and audition procedures described above. Upon acceptance by UW-Madison and the School of Music, credits for music courses taken at another institution are interpreted by the UW-Madison Office of Admissions and Recruitment simply as elective music credits. These course credits, as they appear on the transcript(s), will be reviewed during a conference with the advisor upon enrolling at UW-Madison. Transfer credit for music courses will be reviewed only after all placement and proficiency examinations in theory and piano have been taken at UW-Madison and syllabi for academic music courses have been submitted.

## REENTERING THE SCHOOL OF MUSIC

Students previously enrolled in the School of Music and UW-Madison who desire to reenter to seek an undergraduate degree should apply for reentry to both the UW-Madison Office of Admissions and Recruitment and the School of Music Undergraduate Admissions Office (http:// www.music.wisc.edu). An audition will be required in most cases.

## INTERNATIONAL STUDENTS

International students seeking admission to the university and the School of Music should contact International Student Services in addition to the UW-Madison Office of Admissions and Recruitment and the School of Music Undergraduate Admissions Office.

## EXPECTATIONS FOR NEW STUDENTS

All new music majors are expected to enroll for the proper major coursework in the first semester at UW-Madison. Students on financial aid must also be enrolled as full-time students. Continuance as a music major is conditional upon achieving good progress and maintaining high standards based upon minimum GPAs in several categories. See the Requirements tab, Degree Progress and Declaring the Music Education Major for specific information.

## APPLYING TO THE MUSIC EDUCATION MAJOR

Before a student can declare a major in Music Education s/he must be admitted by the faculty to the program in order to take upper-level courses. During the second year in the core music curriculum, each student will sign up for an audition/interview with the music education faculty. The audition includes, but is not limited to, performance, sightsinging, and keyboard harmonization components. Minimum admission eligibility GPA requirements are:

- 3.000 in all music courses
- 2.750 cumulative (all courses)
- 2.500 in music theory and history courses

| Code | Title | Credits |
| :--- | :--- | ---: |
| MUSIC 121 | Musica Practica 1 | 4 |
| \& MUSIC 171 | and Musica Practica: Aural Skills 1 |  |
| MUSIC 122 | Musica Practica 2 | 4 |
| \& MUSIC 172 | and Musica Practica: Aural Skills 2 |  |


| MUSIC 221 | Musica Practica 3 <br> and Musica Practica: Aural Skills 3 | 4 |
| :--- | :--- | ---: |
| \& MUSIC 271 | Survey of the History of Western <br> MUSIC 211 | Music |
| MUSIC 212 | Survey of the History of Western <br> Music | 3 |

The number of students admitted to the music education program is contingent upon available space; enrollment limits may be necessary to ensure that students have reasonable and timely access to required Mead Witter School of Music courses.

Students who successfully pass the audition/interview process and are offered admission must complete the following steps to complete their admission into the program:

Submit a teacher certification program application with the School of Education. Include the completed program application form(s), transcripts, and all other related application materials specified on the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page.

Submit a major declaration form to the School of Music. Students admitted into the music education certification program will thereafter enroll jointly with the School of Music (College of Letters and Science) and the School of Education.

Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

## REQUIREMENTS

Teaching music is critical to the life of every musical community. Mead Witter School of Music has developed a progressive curriculum that meets the need for music educators who are resourceful, creative, and well-prepared to engage with the exciting diversity of a global culture. Our alumni who hold teaching positions throughout Wisconsin and beyond have found that the investment of energy and time does not go unrewarded.

Mead Witter School of Music offers Bachelor of Music: Music Education majors with two concentrations that lead to General and Instrumental or General and Choral teaching certification in the State of Wisconsin. For the General and Instrumental concentration a student's program will fall into one of two categories: those whose principal instrument is a band or orchestral instrument will follow a specific course of study, and those with piano or guitar as their principal instrument will follow a different course of study. For the General and Choral concentration there are also two categories, determined by the principal performance medium: those who are principally vocalists will follow one course of study, and those with piano or guitar as their principal instrument will follow another. See Choosing a Music Education Curriculum below for detailed descriptions of specific coursework.

The Mead Witter School of Music, a department in the College of Letters and Science, adheres to all University requirements for general education

4 and breadth. Since the Music Education major is tied closely to the School of Education, the major also meets the School of Education's requirements in liberal studies.

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

Music education students complete the School of Education's liberal studies (i.e., breadth) requirements (p. 1389). A limited number of music, art and dance credits may be applied toward this 40 -credit requirement.

## TYPICAL MUSIC COURSE ENROLLMENTYEAR ONE AND YEAR TWO

All Bachelor of Music students have the same core courses in music theory and music history during the first two years as music majors. The following table outlines the usual course schedule during the freshman and sophomore years. Take note of the following:

## - Some courses are taken by all students

- Every student enrolls in either a performing organization (Band, Orchestra, Choir) or or Accompanying (students whose principal instrument is keyboard). This is required every the student is enrolled for performance study.
- Students whose principal instrument is not keyboard enroll in secondary piano study the first year to satisfy the major requirement.
- Each semester the students typically enroll in 5-6 credits of nonmusic coursework that satisfies Liberal Studies requirements.

Credits

## First Year

Music Theory

| MUSIC 121 <br> \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 (prerequisite course requirement) | 4 |
| :---: | :---: | :---: |
| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 | 4 |
| Performance (applied) study |  | 4 |
| 2 credits each semester |  |  |
| Performing Organization |  | 2 |
| 1 credit each semester |  |  |
| Secondary piano study |  | 4 |
| for non-keyboard majors; 2 credits per semester as needed to meet requirement |  |  |
| Second Year |  |  |
| Music Theory |  |  |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 | 4 |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| Performance (applied) study |  | 4 |
| 2 credits each semester |  |  |
| Performing Organization |  | 2 |
| 1 credit each semester |  |  |
| CHOOSING A MUSIC EDUCATION CURRICULUM |  |  |
| The music education major consists of two main curricula, both leading to certification at both the elementary and secondary levels. Students choose to complete the certification program in either General and Instrumental Music or General and Choral Music. The Bachelor of Music: Education degree requires a minimum of 130 credits. The music education faculty can advise you on which curriculum is most suited to your goals. Information on how to apply to the Music Education program can be found under the How to Get in tab. |  |  |
| REQUIREMENTS: GENERAL AND INSTRUMENTAL CERTIFICATION |  |  |
| PERFORMANCE STUDY: PRINCIPAL INSTRUMENT BAND OR ORCHESTRAL |  |  |
| Code | Title |  |
| Performance Study: Principal Instrument |  |  |
| FIRST YEAR AND SECOND YEARS: 200-level study in the major instrument, 4 semesters, 2 credits each semester |  | 8 |
| MUS PERF 207 | Elementary/Intermediate Flute |  |
| MUS PERF 209 | Elementary/Intermediate Oboe |  |
| MUS PERF 211 | Elementary/Intermediate Clarinet |  |
| MUS PERF 213 | Elementary/Intermediate Saxophone |  |
| MUS PERF 215 | Elementary/Intermediate Bassoon |  |
| MUS PERF 217 | Elementary/Intermediate Horn |  |
| MUS PERF 219 | Elementary/Intermediate Trumpet |  |
| MUS PERF 221 | Elementary/Intermediate Trombone |  |
| MUS PERF 223 | Elementary/Intermediate Euphonium |  |
| MUS PERF 225 | Elementary/Intermediate Tuba |  |

THIRD AND FOURTH YEARS: 400-level study in major
instrument, 3 semesters, 2 credits each semester

| MUS PERF 407 | Advanced Flute |
| :--- | :--- |
| MUS PERF 409 | Advanced Oboe |
| MUS PERF 411 | Advanced Clarinet |
| MUS PERF 413 | Advanced Saxophone |
| MUS PERF 415 | Advanced Bassoon |
| MUS PERF 417 | Advanced Horn |
| MUS PERF 419 | Advanced Trumpet |
| MUS PERF 421 | Advanced Trombone |
| MUS PERF 423 | Advanced Euphonium |
| MUS PERF 425 | Advanced Tuba |
| MUS PERF 427 | Advanced Percussion |
| MUS PERF 431 | Advanced Violin |
| MUS PERF 433 | Advanced Viola |
| MUS PERF 435 | Advanced Cello |
| MUS PERF 437 | Advanced String Bass |
| MUS PERF 439 | Advanced Harp |

## Performing Organizations and Ensembles

Enrollment in a course from List A or List B is required each semester of enrollment in performance study.
LIST A (6 credits required)
MUSIC $40 \quad$ Wind Ensemble
MUSIC $41 \quad$ Concert Band
MUSIC 61 Chamber Orchestra
MUSIC $62 \quad$ University Symphony Orchestra
LIST B (2 credits required)

| MUSIC 262 | Jazz Ensemble |
| :--- | :--- |
| MUSIC 266 | Black Music Ensemble |
| MUSIC 268 | Ensemble-Percussion (lab 2, |
|  | percussion majors only) |

MUSIC 361 Non-Western Music PerformanceStudy Groups

## PERFORMANCE STUDY: PRINCIPAL INSTRUMENT PIANO OR GUITAR

Code
Title
Credits

## Performance Study

FIRST AND SECOND YEARS: 200-level performance study 8
in piano or guitar, 4 semesters, 2 credits each semester MUS PERF 201 Elementary/Intermediate Piano MUS PERF 240 Elementary/Intermediate Guitar
THIRD AND FOURTH YEARS: 400-level performance study
in piano or guitar, 3 semesters, 2 credits each semester
MUS PERF 201 Elementary/Intermediate Piano

MUS PERF 240 Elementary/Intermediate Guitar


MUS PERF 14 Fundamentals: Single Reeds One semester selected from one of the following courses (brass):

| MUS PERF 18 | Fundamentals-High Brass |
| :--- | :--- |
| MUS PERF 24 | Fundamentals-Low Brass |

One semester of the following course:
MUS PERF 27 Fundamentals-Percussion
One semester selected from the following courses
(strings)

| MUS PERF 32 | Fundamentals-High Strings |
| :--- | :--- |
| MUS PERF 36 | Fundamentals-Low Strings |

Remaining 3 credits from the following courses, as
advised:

| MUS PERF 7 | Fundamentals-Flute |
| :--- | :--- |
| MUS PERF 12 | Fundamentals: Double Reeds |
| MUS PERF 14 | Fundamentals: Single Reeds |
| MUS PERF 18 | Fundamentals-High Brass |
| MUS PERF 24 | Fundamentals-Low Brass |
| MUS PERF 27 | Fundamentals-Percussion |
| MUS PERF 32 | Fundamentals-High Strings |
| MUS PERF 36 | Fundamentals-Low Strings |
| Voice Fundamentals |  |

MUS PERF $143 \quad$ Introduction to Performance: Voice
$\quad$ or MUS PERF 14Vocal Instruction for Non-Voice Majors

## PROFESSIONAL EDUCATION REQUIREMENTS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Educational Foundations |  |  |
| Human Development |  | 3 |
| Select one of the following courses: |  |  |
| ED PSYCH 320 | Human Development in Infancy and Childhood |  |
| ED PSYCH 321 | Human Development in Adolescence |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence |  |
| Learning |  | 3 |
| ED PSYCH 301 | How People Learn |  |
| Foundations of the Profession |  | 3 |
| Select one of the following courses: |  |  |
| ED POL 300 | School and Society |  |
| ED POL/ HISTORY 412 | History of American Education |  |
| Literacy, including Reading |  | 3 |
| CURRIC 305 | Integrating the Teaching of Reading with Other Language Arts |  |
| Special Education |  | 3 |
| CURRIC/ <br> RP \& SE 506 | Strategies for Inclusive Schooling |  |

## Music Education Courses

| CURRIC/MUSIC 304 | Composition, Arrangement, and <br> Orchestration for the Music Teacher <br> (offered in fall semesters; prereq <br> MUS PERF 104) | 2 |
| :--- | :--- | ---: |
| CURRIC/MUSIC 420 | Teaching Popular Instrumental <br> Music 1 | 1 |
| CURRIC/MUSIC 421 | Teaching Popular Instrumental <br> Music 2 | 1 |
| Music Education Professional Sequence |  |  |

## REQUIREMENTS: GENERAL AND CHORAL CERTIFICATION

 PERFORMANCE STUDY: PRINCIPAL INSTRUMENT VOICE Code Title Credits
## Peformance Study

FIRST AND SECOND YEARS: 200-level performance study, 8
4 semesters, 2 credits per semester
MUS PERF 205 Elementary/Intermediate Voice
THIRD AND FOURTH YEARS: 400-level performance study, 6
3 semesters, 2 credits each semester
MUS PERF 405 Advanced Voice

## Performing Organizations and Ensembles

Enrollment in a choir or ensemble from List A or List B is required each semester enrolled in performance study.
LIST A ( 6 credits required):

| MUSIC 50 | Concert Choir |  |
| :--- | :--- | :--- |
| MUSIC 56 | Chorale |  |
| MUSIC 58 | Madrigal Singers |  |
| LIST B (2 credits required): |  |  |
| MUSIC 262 | Jazz Ensemble |  |



| PROFESSIONAL EDUCATION REQUIREMENTS |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Educational Foundations |  |  |
| Human Development |  | 3 |
| Select one of the following courses: |  |  |
| ED PSYCH 320 | Human Development in Infancy and Childhood |  |
| ED PSYCH 321 | Human Development in Adolescence |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence |  |
| Learning |  |  |
| ED PSYCH 301 | How People Learn | 3 |
| Foundations of the Pr | rofession | 3 |
| Select one of the following courses: |  |  |
| ED POL 300 | School and Society |  |
| ED POL/ HISTORY 412 | History of American Education |  |
| Literacy, including Reading |  |  |
| CURRIC 305 | Integrating the Teaching of Reading with Other Language Arts | 3 |
| Special Education |  |  |
| CURRIC/ RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| Music Education Courses |  |  |
| CURRIC/MUSIC 304 | Composition, Arrangement, and Orchestration for the Music Teacher (offered in fall semesters; prereq MUS PERF 104) | 2 |
| CURRIC/MUSIC 420 | Teaching Popular Instrumental Music 1 | 1 |
| CURRIC/MUSIC 421 | Teaching Popular Instrumental Music 2 | 1 |
| MUSIC/CURRIC 344 | Teaching Vocal Styles in the Music Classroom (offered spring semester of even-numbered years) | 1 |
| Music Education Professional Sequence |  |  |
| CURRIC/MUSIC 300 <br> \& MUSIC/ <br> CURRIC 303 | Introduction to Music Education and Fieldwork in Music Communities | 3 |
| CURRIC/MUSIC 301 \& MUSIC/ CURRIC 337 | Music Learning and Teaching 1 and Practicum in Teaching Music ${ }^{1}$ | 3 |
| CURRIC/MUSIC 302 <br> \& MUSIC/ <br> CURRIC 337 | Music Learning and Teaching 2 and Practicum in Teaching Music ${ }^{1}$ | 3 |
| Student Teaching |  |  |
| CURRIC/MUSIC 409 | Student Teaching in General and Vocal Music | 12 |
| Multicultural Education and Human Relations |  |  |
| 50 hours field experience fulfilled in conjunction with CURRIC/RP \& SE 506 and MUSIC/CURRIC 337. |  |  |
| Conflict resolution workshop fulfilled in conjunction with MUSIC/CURRIC 300. |  |  |

American Indian Studies and Education (Wis. Act 31): There are a variety of ways to earn certification. Consult with advisor and music education facuity.

1 MUSIC/CURRIC 337 Practicum in Teaching Music should be taken under Fld 1 for this major.

## CONTINUATION REQUIREMENTS

In addition to meeting all course-related standards, students must receive a grade of $B$ or higher in all music education practicum courses, and a grade of $C$ or higher in all applicable music education methods courses (i.e., CURRIC/MUSIC 300 Introduction to Music Education/, CURRIC/ MUSIC 301 Music Learning and Teaching 1/, CURRIC/MUSIC 302 Music Learning and Teaching $2 /$ ) in order to continue in the program.

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses

15 credits in MUSIC and/or MUS PERF, taken on the UW-Madison campus

15 credits of upper-level work in the major completed in residence ${ }^{1}$
${ }^{1}$ Courses that count towards this requirement are:

## Music

| Code | Title | Credits |
| :---: | :---: | :---: |
| MUSIC 40 | Wind Ensemble | 1 |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 56 | Chorale | 1 |
| MUSIC 58 | Madrigal Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 1 |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| MUSIC 221 | Musica Practica 3 | 3 |
| MUSIC 222 | Musica Practica 4 | 3 |
| MUSIC 256 | University Opera | 1-2 |
| MUSIC 262 | Jazz Ensemble | 1 |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 331 | Jazz Improvisation | 3 |


| MUSIC 332 | Jazz Improvisation | 3 |
| :---: | :---: | :---: |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |
| MUSIC 499 | Directed Study | 1-3 |
| MUSIC 500 | Seminar in Global Popular Music | 3 |
| MUSIC 502 | Figured Bass and Basso Continuo | 3 |
| MUSIC/ <br> AFROAMER 509 | Seminar in Afro-American Music History and Criticism | 3 |
| MUSIC 511 | Historical Performance Practices | 3 |
| MUSIC 513 | Survey of Opera | 3 |
| MUSIC/ <br> FOLKLORE 515 | Proseminar in Ethnomusicology | 3 |
| MUSIC 523 | Orchestration I | 3 |
| MUSIC 524 | Orchestration II | 3 |
| MUSIC/ <br> FOLKLORE 535 | American Folk and Vernacular Music | 3 |
| MUSIC/ANTHRO/ FOLKLORE/ THEATRE 539 | The Folklore of Festivals and Celebrations | 3 |
| MUSIC 540 | Advanced Pedagogy | 2 |
| MUSIC 541 | Seminar in Choral Literature | 2 |
| MUSIC 542 | Choral Literature and Performance Practices of Today | 2 |
| MUSIC 543 | Advanced String Pedagogy | 2 |
| MUSIC 544 | Advanced String Pedagogy | 2 |
| MUSIC 545 | Practicum in Advanced String Pedagogy | 2 |
| MUSIC 546 | String Literature | 2 |
| MUSIC 548 | Piano Pedagogy II | 3 |
| MUSIC 550 | Percussion Literature | 2 |
| MUSIC 551 | Class Piano Pedagogy | 3 |


| MUSIC 553 | Advanced Conducting Seminar | 2 |
| :---: | :---: | :---: |
| MUSIC 554 | Advanced Conducting | 2 |
| MUSIC 556 | University Opera | 1-2 |
| MUSIC 557 | Opera Workshop | 2 |
| MUSIC 558 | Madrigal Singers | 1 |
| MUSIC 559 | Graduate Choral Union | 1 |
| MUSIC 560 | Practicum in Advanced Studio Teaching-Piano | 1 |
| MUSIC 561 | Advanced Ensemble-Piano | 1 |
| MUSIC 562 | Jazz Ensemble | 1 |
| MUSIC 565 | Advanced Ensemble-Woodwind | 1 |
| MUSIC 567 | Advanced Ensemble-Brass | 1 |
| MUSIC 568 | Advanced Ensemble-Percussion | 1 |
| MUSIC 569 | Advanced Ensemble-String | 1 |
| MUSIC 570 | University Symphony Orchestra | 1 |
| MUSIC 571 | Chamber Orchestra | 1 |
| MUSIC 572 | Advanced Ensemble-Classical Guitar | 1 |
| MUSIC 573 | Contemporary Chamber Ensemble | 1 |
| MUSIC 574 | Wind Ensemble | 1 |
| MUSIC 576 | Concert Band | 1 |
| MUSIC 577 | Chorale | 1 |
| MUSIC 578 | Concert Choir | 1 |
| MUSIC 579 | Masters Singers | 1 |
| MUSIC 59 | University Chorus | 1 |
| MUSIC 591 | Organ Literature and Design | 2 |
| MUSIC 60 | All-University String Orchestra | 1 |
| MUSIC/LIS 619 | Music Research Methods and Materials | 3 |
| MUSIC 620 | Proseminar in Musicology | 3 |
| MUSIC 621 | Renaissance Polyphony | 3 |
| MUSIC 622 | Baroque Counterpoint | 3 |
| MUSIC 623 | Form and Analysis | 2-3 |
| MUSIC 624 | Form and Analysis II | 2-3 |
| MUSIC 681 | Senior Honors Thesis | 3 |
| MUSIC 682 | Senior Honors Thesis | 3 |
| Music Performance |  |  |
| Code | Title | Credits |
| MUS PERF 342 | Piano Accompanying Lab | 1 |
| MUS PERF 347 | Third Year Composition | 3 |
| MUS PERF 348 | Third Year Composition | 3 |
| MUS PERF 401 | Advanced Piano | 2-4 |
| MUS PERF 402 | Advanced Harpsichord | 2-4 |
| MUS PERF 403 | Advanced Organ | 2-4 |
| MUS PERF 405 | Advanced Voice | 2-4 |
| MUS PERF 407 | Advanced Flute | 2-4 |
| MUS PERF 409 | Advanced Oboe | 2-4 |
| MUS PERF 411 | Advanced Clarinet | 2-4 |
| MUS PERF 413 | Advanced Saxophone | 2-4 |
| MUS PERF 415 | Advanced Bassoon | 2-4 |
| MUS PERF 417 | Advanced Horn | 2-4 |
| MUS PERF 419 | Advanced Trumpet | 2-4 |


| MUS PERF 421 | Advanced Trombone | 2-4 |
| :---: | :---: | :---: |
| MUS PERF 423 | Advanced Euphonium | 2-4 |
| MUS PERF 425 | Advanced Tuba | 2-4 |
| MUS PERF 427 | Advanced Percussion | 2-4 |
| MUS PERF 431 | Advanced Violin | 2-4 |
| MUS PERF 433 | Advanced Viola | 2-4 |
| MUS PERF 435 | Advanced Cello | 2-4 |
| MUS PERF 437 | Advanced String Bass | 2-4 |
| MUS PERF 439 | Advanced Harp | 2-4 |
| MUS PERF 440 | Advanced Guitar | 2-4 |
| MUS PERF 447 | Fourth Year Composition | 3 |
| MUS PERF 448 | Fourth Year Composition | 3 |
| MUS PERF 457 | Jazz Composition and Arranging | 3 |
| MUS PERF 458 | Jazz Composition and Arranging | 3 |
| MUS PERF 499 | Senior Recital | 2 |
| MUS PERF 501 | Masters Level-Piano | 4 |
| MUS PERF 503 | Masters Level-Organ | 4 |
| MUS PERF 505 | Masters Level-Voice | 4 |
| MUS PERF 507 | Masters Level-Flute | 4 |
| MUS PERF 509 | Masters Level-Oboe | 4 |
| MUS PERF 511 | Masters Level-Clarinet | 4 |
| MUS PERF 513 | Masters Level-Saxophone | 4 |
| MUS PERF 515 | Masters Level-Bassoon | 4 |
| MUS PERF 517 | Masters Level-Horn | 4 |
| MUS PERF 519 | Masters Level-Trumpet | 4 |
| MUS PERF 521 | Masters Level-Trombone | 4 |
| MUS PERF 523 | Masters Level-Euphonium | 4 |
| MUS PERF 525 | Masters Level-Tuba | 4 |
| MUS PERF 527 | Masters Level-Percussion | 4 |
| MUS PERF 531 | Masters Level-Violin | 4 |
| MUS PERF 532 | Advanced Conducting | 3-4 |
| MUS PERF 533 | Masters Level-Viola | 4 |
| MUS PERF 535 | Masters Level-Cello | 4 |
| MUS PERF 540 | Masters Level-Guitar | 4 |
| MUS PERF 542 | Advanced Accompanying | 2-3 |
| MUS PERF 547 | Masters Level Composition | 3 |
| MUS PERF 548 | Masters Level Composition | 3 |
| MUS PERF 561 | Organ Improvisation and Liturgy | 2 |
| MUS PERF 562 | Organ Improvisation and Liturgy | 2 |

## HONORS IN THE MAJOR

The School of Music is reviewing its requirements for Honors in the Major. Current music majors may contact the undergraduate advisor for more information.

To earn honors in any music major, students must satisfy the requirements below as well as all other requirements for their music degree and major.

- 6 credits of MUSIC 681 Senior Honors Thesis and MUSIC 682 Senior Honors Thesis
- 12 credits of honors coursework in music: 6 of the 12 credits must be at the 300 level or higher and only 6 credits can be taken in any one of the three music areas of theory, history, and performance.

To participate in the Honors in the Major program, students must:

- Notify the School of Music undergraduate advisor of their intention to become a candidate for Honors in the Major. This will usually occur in the sophomore year.
- Present a minimum cumulative GPA of 3.3 in all courses taken at UW-Madison and maintain this average throughout the degree.
- Present a minimum 3.5 GPA in all music coursework and maintain a minimum 3.5 GPA in all music honors coursework.
- Engage a faculty member who will collaborate in planning the 12 credits of honors curriculum coursework; submit this plan to the undergraduate advisor. The course plan may change as students progress through their work.
- Prior to beginning work on the MUSIC 681/MUSIC 682 Senior Honors Thesis sequence, confirm a faculty advisor for this sequence (who may be the same person as for the 12 credits above) and submit a prospectus outlining in detail the planned work including (a) the topic, (b) plans for research, and (c) a clear substantive written component, although it may also include oral and/or performance components. The faculty advisor must sign the prospectus indicating approval.


## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. For example, all individuals seeking an initial Wisconsin state teacher's license after August 31, 2004, are required to take and pass an approved content examination in the subject area(s) of interest.
These tests, the Praxis II: Subject Assessments/Specialty Area Tests, are offered through the Educational Testing Service (ETS). Teacher education student at UW-Madison must take and pass the exam for their program area(s) and submit scores to Education Academic Services before entering their final, full-time student teaching semester.

All graduating student teachers are also required by the School of Education to meet the UW-Madison teacher education standards. This is done via completion of the teaching portfolio. Student teachers within the music education certification program must also complete the edTPA.

Many of these certification and statutory requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure. (p. 1133)

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| WorkAbroad/Study Away programs. |  |
| Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
| Students whose academic performance drops below |  |
| these minimum thresholds will be placed on academic |  |
| probation. |  |

## LEARNING OUTCOMES

1. Describe and apply foundational music education concepts and information.
2. Plan, deliver and assess music learning experiences within chosen certification area that address as necessary the following standards: UWMTES, edTPA, Wisconsin Music Teaching Standards, and National Music Education Standards.
3. Develop a level of proficiency in describing and applying foundational concepts of music education, e.g. music learning and teaching, which will be reflected in an ability to communicate to multiple diverse constituencies, so as to interpret, investigate, understand, appreciate and work within the complex musical world.
4. Integrate knowledge in music learning and teaching in order to bring novel perspectives to challenging social and technological problems.
5. Develop the ability to think critically and creatively as a music educator to synthesize, analyze and integrate ideas for decision-making and problem-solving in the best interest of all students.
6. Communicate effectively in order to share knowledge, wisdom, values and beliefs regarding music learning and teaching with others across multiple social and professional settings.
7. Understand own learning processes regarding musical education and possess the capacity to intentionally. Seek and evaluate information; recognize and reduce bias in own thinking; and build new knowledge for application in performance and professional lives.
8. Construct a worldview of music education in order to accept responsibility for civic engagement and to appreciate the need to live live so purpose and meaning
9. As music educators, develop and demonstrate a respect for truth, and appreciation for diverse views, and a strong sense of personal and professional ethics.

## ADVISING AND CAREERS

Undergraduate students-current music majors only-should consult the music advisor for help enrolling in courses and planning the completion of their degree. Students who are interested in majoring in music should consult the undergraduate audition and admissions coordinator (admissions@music.wisc.edu; 608-263-5986; 5561 Humanities). If you have questions about a scholarship that you are receiving from the School of Music, please contact the associate director for Mead Witter School of Music.

General information about advising for undergraduates in the Mead Witter School of Music can be found at resources for undergraduate studies (https://www.music.wisc.edu/undergrads).

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Cook (director), Blasius, Calderón, Chisholm, Crook, Dill, Di Sanza, Doing, Fischer, Fulmer, Hetzler, Hyer, Johnson, Karp, Koza, Leckrone, Perry, Rowe, Schaffer, Schwendinger, Stowe, Swack, B. Taylor, C. Taylor, Teeple, Thimmig, Vallon, Vardi; Associate Professors Dobbs, Grabois, Wallmann; Assistant Professors Altino, Lee, Ronis

The faculty of the Mead Witter School of Music is a distinguished group of educators, performing musicians, and active scholars. The backgrounds of performance faculty include rich experiences as professional musicians, researchers, recording artists, and entrepreneurs. Faculty in music education have particular insight into their field as a result of their backgrounds as school educators, performers, and scholars. In areas such as music theory and musicology, the musical community has high regard for the past and current contributions to the study of musical theory, historical perspectives on music, the role of music in societies around the world, and the unique contributions of American musicians. Teaching is a priority for the faculty, who are readily accessible to students for advice and support. Faculty, staff, and
students cooperate in extraordinary ways with joint ventures that reach across disciplines both in research or instruction.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For

UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## ACCREDITATION

## Accreditation

National Association of Schools of Music (https://nasm.artsaccredit.org)

Accreditation status: Accredited. Next accreditation review: 2022-2023.

## MUSIC: PERFORMANCE, B.M.

## VALUES AND EDUCATIONAL PRIORITIES

At the Mead Witter School of Music

- we teach by example offering participatory, mentor-driven education;
- we provide individualized instruction and flexible curricula that encourage students to find their own musical pathways;
- we foster musical excellence and high academic standards;
- our faculty exhibit the best of their respective fields, are deeply engaged in artistic scholarship and research, and are committed to teaching at all levels;
- we whole-heartedly embrace the Wisconsin Idea;
- our department is a dynamic educational community, part of a large and vibrant research university within a city that values and supports the arts.

The Mead Witter School of Music enriches students' educational experience by hosting guest artists and scholars for master classes,
recitals, colloquia, seminars, and festivals. Its performing organizations and ensembles perform more than 350 recitals and concerts every year, making a significant contribution to the cultural life of the university and the wider Madison community. Facilities specifically designed for music study and performance offer excellent resources for students to pursue their interests.

In addition to a thriving undergraduate student body, B.M.: Music Performance students have the advantage of working side-by-side with students in master's-level and doctoral-level music programs. Working collegially in class and studio, making music together on stage and off, and building professional relationships across program boundaries all enable the sharing of expertise, experience, and perspectives and add immeasurably to every student's development.

Majors in this program have professional interests in solo performance, chamber music performance, orchestra or wind ensemble performance, studio teaching (private or in a college or university), church music, conducting, music technology or production, opera or musical theater, or many combinations of these. Some students may consider this program as preparation for graduate study in music, arts administration, and other areas. The faculty has designed the curricula to include a large complement of liberal studies ( 40 credits) along with the course work in music ( 90 credits). These $40 \mathrm{~L} \mathrm{\& S}$ credits must include satisfaction of all university General Education Requirements including Communication Parts A and B, Quantitative Reasoning Parts A and B, Natural Science, Social Science, and Ethnic Studies.

The music degree programs are demanding and require care in taking courses in the proper sequence. Graduation could be delayed if a course is not taken in the appropriate semester. Refer to the Requirements tab for details on the coursework and sequences of study in specific majors.

## PEOPLE AND FACILITIES

The greatest asset of Mead Witter School of Music is its people-staff, faculty, and students-who are daily immersed in learning, building, researching, writing, and making music. Mentoring is the core of our teaching, manifest in one-on-one applied instruction as well as in small-group coaching and classes. Undergraduate students will build professional relationships with many faculty, form friendships with peers across the boundaries of degree programs, and collaborate with staff in addressing the practical matters of academic study. Extensive information on faculty, including biographies, is available here.

The Mosse Humanities Building, built in 1969, houses most of the music classrooms, rehearsal rooms, faculty studios, and 111 practice rooms. Most recitals and concerts take place in one of three performance spaces: Mills Concert Hall, Morphy Recital Hall, and Eastman Organ Recital Hall. The school's extensive collection of instruments, both common and unusual, is available to both faculty and students. Music Hall with its clock tower, built in 1879, is a campus landmark. Renovated in 1985, it is the home of the opera program. The new Hamel Music Center, scheduled to open in 2019, will include a concert hall, a recital hall, and a large ensemble rehearsal space.

Memorial Library is the home of the Mills Music Library, which offers extensive research and circulating collections, attractive study space, and personal staff assistance with research. Music materials on campus number over half a million, ranging from scores and sheet music to archival collections and historic audio recordings. Through Mills Music Library and other UW-Madison libraries, students have access to a wide range of online research databases as well as millions of articles, books, and streaming media. All genres of music are represented, with notably
strong collections in Americana and ethnic music. Nationally known special collections include the Tams-Witmark Collection, a treasury of early American musical theater materials, and the Wisconsin Music Archives.

## HOW TO GET IN

## ADMISSIONS PROCEDURES

To major in music at Mead Witter School of Music, a student must 1) apply and be accepted by the UW-Madison Office of Admissions and Recruitment and 2) apply, audition, and be accepted by the School of Music faculty. In addition to the UW-Madison application, students must apply to the Mead Witter School of Music. Application material is available on the School of Music website (http:// www.music.wisc.edu) and the music application process is handled by the Undergraduate Admissions Office, 3561H Mosse Humanities Building.

The steps for applying to the UW-Madison School of Music are:

- Review the information on the website for Mead Witter School of Music (http://www.music.wisc.edu). Follow instructions carefully. Any questions may be directed to the Undergraduate Admissions Office.
- Download and complete the music application. On the application you will request an audition date.
- Download and provide the recommendation forms to two recommenders. These will be people who can attest to the applicant's musical background and ability.
- If there will be need for financial assistance, consult the Office of Student Financial Aid (https://financialaid.wisc.edu).
- Request that official transcripts be sent to the School of Music Undergraduate Admissions Office from all high schools and colleges attended.
- Prepare the appropriate repertoire and materials for the audition.
- Come to the campus for an audition, which includes a ten- to twentyminute performance audition, music theory and piano placement examinations, and an introduction to School of Music faculty, students, and facilities.


## TRANSFER STUDENTS

Students who have earned more than 24 course credits at another college or university follow the same application and audition procedures described above. Upon acceptance by UW-Madison and by the School of Music, credits for music courses taken at another institution are interpreted by the UW-Madison Office of Admissions and Recruitment simply as elective music credits. These course credits, as they appear on the transcript(s), will be reviewed during a conference with the advisor upon enrolling at UW-Madison. Transfer credit for music courses will be reviewed only after all placement and proficiency examinations in theory and piano have been taken at UW-Madison and syllabi for academic music courses have been submitted.

## REENTERING THE SCHOOL OF MUSIC

Students who were previously enrolled in the School of Music and UWMadison who desire to reenter to seek an undergraduate degree should apply for reentry to both the UW-Madison Office of Admissions and Recruitment and the School of Music Undergraduate Admissions Office (http://www.music.wisc.edu). An audition will be required in most cases.

## INTERNATIONAL STUDENTS

Students from other countries who seek admission to the university and the School of Music should contact International Student Services in addition to the UW-Madison Office of Admissions and Recruitment and the School of Music Undergraduate Admissions Office.

## EXPECTATIONS FOR NEW STUDENTS

All new music majors are expected to enroll for the proper major coursework in the first semester at UW-Madison. Students on financial aid must also be enrolled as full-time students. Continuance as a music major is conditional upon achieving good progress and maintaining high standards based upon minimum GPAs in several categories. See the Requirements tab for specific information.

## TO DECLARE MAJOR

All B.M.-Performance students formally declare their music major and proceed to upper-level study in the second or third year of study Before doing so, students must have satisfactorily completed the core coursework in music theory and music history and must demonstrate their readiness for advanced work in a formal assessment by the performance faculty. To declare the major each student is required to attain the following minimum grade point averages:

- 2.750 cumulative (all UW-Madison courses)
- 3.000 in all music courses
- 2.500 in the following music theory and music history courses:
$\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Credits } \\ \text { MUSIC 121 } & \text { Musica Practica 1 } & 4 \\ \text { \& MUSIC 171 } & \text { and Musica Practica: Aural Skills 1 } & \\ \text { MUSIC 122 } & \begin{array}{l}\text { Musica Practica 2 } \\ \text { \& MUSIC 172 }\end{array} & \text { and Musica Practica: Aural Skills 2 }\end{array}\right]$


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF MUSIC (B.M.): MUSIC PERFORMANCE

Liberal Studies (outside of MUSIC or MUS PERF)
Literature, 6 cr
Humanities, 6 cr
Social Studies, 6 cr
Electives, to bring total credits outside of music to 40

## REQUIREMENTS FOR THE MAJOR

The bachelor of music curriculum is specific for each major performance discipline. To assure satisfactory progress and avoid extending the time to complete the degree, courses must be taken in the proper sequence. The music advisor expects to see all students at least once each semester and is always available to answer students' questions.

## TIMELINE FOR THE BACHELOR OF MUSIC MAJOR

The following table outlines the usual schedule by year for most bachelor of music students. Take note of the following:

- Some core coursework is taken by all students, such as music theory and music history.
- Every student enrolls in either a performing organization (Band, Orchestra, Choir,) or in Accompanying (for keyboard majors) every semester the student is enrolled for performance study.
- Students enroll in performance study (private lessons) in the major instrument or voice each semester and perform a degree recital in the senior year. Composition students enroll in composition courses or private instruction and also organize and perform a senior recital.
- Non-keyboard mtracks enroll in secondary piano study the first year to satisfy the requirement in the major.
- Each semester students typically enroll in 5-6 credits of nonmusic coursework that satisfy other degree requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| Theory |  |  |
| MUSIC 121 | Musica Practica 1 |  |
| \& MUSIC 171 | and Musica Practica: Aural Skills 1 | 4 |
| MUSIC 122 | Musica Practica 2 |  |
| \& MUSIC 172 | and Musica Practica: Aural Skills 2 | 4 |
| Performance (Applied) Study $\S$ | 4 |  |


| 2 credits each semester |  |  |
| :---: | :---: | :---: |
| Performing Organization ${ }^{\text {\# }}$ |  | 2 |
| 1 credit each semester |  |  |
| Secondary piano study |  | 4 |
| (non-keyboard majors), 2 credits per semester as needed to fulfill requirement |  |  |
| Second Year |  |  |
| Theory |  |  |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 | 4 |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| Music History |  |  |
| MUSIC 211 <br> \& MUSIC 212 | Survey of the History of Western Music and Survey of the History of Western Music | 6 |
| Performance (applied) study |  | 8 |
| 4 credits each semester |  |  |
| Performing Organization |  | 2 |
| 1 credit each semester |  |  |
| Third and Fourth Years |  |  |
| Performance (applied) study |  | 12 |
| 4 credits per semester for three semesters; in the recital semester two credits plus Senior Recital |  |  |
| Performing Organization |  | 4 |
| 1 credit each semester |  |  |
| Music History |  | 6 |
| Two courses from the following: * |  |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |

§ The composition track curriculum includes composition class in the second semester of the first year. See the composition requirements for specific information.
\# Piano and organ track courses are different for the first year. Refer to those requirement summaries for specific information.

* Most tracks require two courses, but some include additional coursework in music history. See the requirement summaries for specific information.


## DEGREE PROGRESS

First-year Bachelor of Music students are admitted as music majors at the 200-level on the major instrument or voice. In the second or third year each student's progress is assessed by the faculty of the relevant performance area. If that assessment indicates that the student is ready, the faculty recommends the student for advanced-level (400-level) study.

With this recommendation, and provided the student meets all GPA requirements and completes the first- and second-year courses in music theory and music history, the student may formally declare the music major.

The minimum GPA requirements that must be met before declaring are as follows:

- GPA in Musica Practica and in music history courses: minimum 2.500
- GPA in all music courses: 3.000
- GPA in all UW-Madison coursework (cumulative): 2.750


## Brass Performance

Code Title Credits

## Performance Study

FIRST YEAR: 200-level study in the major instrument, 2 4
semesters, 2 credits each semester

| MUS PERF 217 | Elementary/Intermediate Horn |  |
| :--- | :--- | :--- |
| MUS PERF 219 | Elementary/Intermediate Trumpet |  |
| MUS PERF 221 | Elementary/Intermediate Trombone |  |
| MUS PERF 223 | Elementary/Intermediate |  |
|  | Euphonium |  |
| MUS PERF 225 | Elementary/Intermediate Tuba |  |
| SECOND YEAR: 200-level performance study in the major | 8 |  |
| instrument, 2 semesters, 4 credits each semester |  |  |

instrument, 2 semesters, 4 credits each semester

| MUS PERF 217 | Elementary/Intermediate Horn |  |
| :--- | :--- | :--- |
| MUS PERF 219 | Elementary/Intermediate Trumpet |  |

semester

| MUS PERF 417 | Advanced Horn |
| :--- | :--- |
| MUS PERF 419 | Advanced Trumpet |
| MUS PERF 421 | Advanced Trombone |
| MUS PERF 423 | Advanced Euphonium |
| MUS PERF 425 | Advanced Tuba |
| SENIOR RECITAL SEMESTER: 2 credits performance study | 4 |
| AND 2 credits Senior Recital |  |

$\begin{array}{ll}\text { MUS PERF } 417 & \text { Advanced Horn } \\ \text { \& MUS PERF } 499 & \text { and Senior Recital }\end{array}$
MUS PERF 419 Advanced Trumpet
\& MUS PERF 499 and Senior Recital
MUS PERF 421 Advanced Trombone
\& MUS PERF 499 and Senior Recital
MUS PERF 423 Advanced Euphonium
\& MUS PERF 499 and Senior Recital
MUS PERF 425 Advanced Tuba
\& MUS PERF 499 and Senior Recital

## Music Theory

MUSIC 121
Musica Practica 1
4
\& MUSIC 171
and Musica Practica: Aural Skills 1
(prerequisite course requirements)

| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 (prerequisite course requirements) | 4 |
| :---: | :---: | :---: |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 (prerequisite course requirements) | 4 |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Select two of the following courses: |  | 6 |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |
| Piano |  | 4 |
| Complete the following course or pass proficiency exam. Initial course level determined by audition. |  |  |
| MUS PERF 104 | Intermediate Class Piano |  |
| Organizations |  | 8 |
| One of the following courses is required each semester of enrollment in performance study: |  |  |
| MUSIC 40 | Wind Ensemble |  |
| MUSIC 41 | Concert Band |  |
| MUSIC 61 | Chamber Orchestra |  |
| MUSIC 62 | University Symphony Orchestra |  |
| Ensemble |  | 4 |
| Enroll 4 times in the following: |  |  |
| MUSIC 267 | Ensemble-Brass |  |
| Conducting and Pedagogy |  |  |
| MUSIC 252 | Introduction to Conducting and Pedagogy | 2 |
| Non-Western Music Cultures |  | 2 |
| 2 credits from any of the following courses: |  |  |
| MUSIC/ FOLKLORE 103 | Introduction to Music Cultures of the World |  |
| MUSIC 262 | Jazz Ensemble |  |
| MUSIC 266 | Black Music Ensemble |  |
| MUSIC/ <br> AFROAMER 308 | Black Music (1920-Present): Rhythm Section and Combos |  |
| MUSIC/ <br> AFROAMER 309 | Black Music (1920-Present): Vocalist/Trombone/Misc Instrumental |  |
| MUSIC/ <br> AFROAMER 310 | Black Music (1920-Present): The Trumpet |  |


| MUSIC/ | Black Music (1920-Present): The |
| :--- | :--- |
| AFROAMER 311 | Saxophone |
| MUSIC 331 | Jazz Improvisation |
| MUSIC 332 | Jazz Improvisation |
| MUSIC 361 | Non-Western Music Performance- <br> Study Groups |
| MUSIC/ | Music Cultures of the World: Africa, |
| AFROAMER 400 | Europe, the Americas |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 401 |  |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 402 |  |
| MUSIC/ | Music of S.E. Asia: Tradition, |
| FOLKLORE 404 | Innovation, Politics, and Religion |
| MUSIC 405 | Seminar. Cultural Study of Music |
| MUSIC 500 | Seminar in Global Popular Music |

Music Electives

Any music courses qualify as electives EXCEPT for 660courses intended for non-music majors.
Extra credits from the above requirements may be included among electives.
Total Credits 90

## Composition

Code Title Credits

Composition
MUS PERF 148 First Year Composition 3
MUS PERF 247 Second Year Composition 3
MUS PERF 248 Second Year Composition 3
MUS PERF 347 Third Year Composition 3

MUS PERF 348 Third Year Composition 3
MUS PERF 447 Fourth Year Composition ${ }^{1} 3$
Music Theory
MUSIC 121 Musica Practica $1 \quad 4$
\& MUSIC 171 and Musica Practica: Aural Skills 1
(prerequisite course requirements)
MUSIC 122 Musica Practica 2 4
\& MUSIC 172 and Musica Practica: Aural Skills 2 (prerequisite course requirements)
MUSIC 221 Musica Practica 3
\& MUSIC 271 and Musica Practica: Aural Skills 3
(prerequisite course requirements)
MUSIC $222 \quad$ Musica Practica 4
\& MUSIC $272 \quad$ and Musica Practica: Aural Skills 4

| Counterpoint |  |
| ---: | :--- |
| MUSIC 621 | Renaissance Polyphony |


| MUSIC 622 | Baroque Counterpoint |  |
| :--- | :--- | ---: |
| Music History | Survey of the History of Western <br> MUSIC 211 | 3 |
| MUSIC |  |  | | Survey of the History of Western |
| :--- |
| Music |

Select two of the following courses: 6

| MUSIC 411 | Survey of Music in the Middle Ages |
| :--- | :--- |
| MUSIC 412 | Survey of Music in the Renaissance |



| MUSIC 415 | Survey of Music in the Romantic Era |  | MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MUSIC 416 | Survey of Music in the Twentieth Century |  | MUSIC/ FOLKLORE 402 | Musical Cultures of the World |  |
| MUSIC 419 | Music in the United States |  | MUSIC/ | Music of S.E. Asia: Tradition, |  |
| MUSIC 511 | Historical Performance Practices |  | FOLKLORE 404 | Innovation, Politics, and Religion |  |
| MUSIC 513 | Survey of Opera |  | MUSIC 405 | Seminar: Cultural Study of Music |  |
| Piano |  | 4 | MUSIC 500 | Seminar in Global Popular Music |  |
| Complete the following course or pass proficiency exam: |  |  | Pedagogy |  |  |
| MUS PERF 104 | Intermediate Class Piano |  | MUSIC 340 | Pedagogy | 2 |
| Performing Organizations |  |  | Repertoire |  |  |
| 4 credits from any of the following courses: |  | 4 | MUSIC 346 | Repertoire | 2 |
| MUSIC 40 | Wind Ensemble |  | Music Electives |  | 10 |
| MUSIC 41 | Concert Band |  | Any music courses qualify as electives EXCEPT for 660courses intended for non-music majors. |  |  |
| MUSIC 43 | University Band |  |  |  |  |
| MUSIC 50 | Concert Choir |  | Extra credits from the above requirements may be included among the electives. |  |  |
| MUSIC 52 | Women's Chorus |  |  |  |  |
| MUSIC 53 | Choral Union |  | Total Credits |  | 90 |
| MUSIC 55 | Masters' Singers |  | Harp Performance |  |  |
| MUSIC 56 | Chorale |  |  |  | Credits |
| MUSIC 58 | Madrigal Singers |  | Performance Study |  |  |
| MUSIC 59 | University Chorus |  | FIRST YEAR: 200-level performance study in the major instrument, 2 semesters, 2 credits each semester |  | 4 |
| MUSIC 60 | All-University String Orchestra |  |  |  |  |
| MUSIC 61 | Chamber Orchestra |  | MUS PERF 239 Elementary/Intermediate Harp |  |  |
| MUSIC 62 | University Symphony Orchestra |  | SECOND YEAR: 200-level performance study in the major instrument, 2 semesters, 4 credits each semester |  | 8 |
| Guitar Ensemble |  | 8 |  |  |  |
| Required every semester of enrollment in performance study: |  |  | MUS PERF 239 Elementary/Intermediate Harp |  |  |
|  |  |  | THIRD AND FOURTH YEARS: 400-level performance study in the major instrument, 3 semesters, 4 credits each semester |  | 12 |
| MUSIC 270 | Ensemble-Guitar |  |  |  |  |
| Conducting and Pedagogy |  |  |  |  |  |
| MUSIC 252 | Introduction to Conducting and | 2 | MUS PERF 439 Advanced Harp (three semesters) SENIOR RECITAL SEMESTER: 2 credits performance study AND 2 credits Senior Recital |  |  |
|  | Pedagogy |  |  |  | 4 |
| Non-Western Music Cultures |  | 2 |  |  |  |
| 2 credits from any of the following courses |  |  | MUS PERF 439 Advanced Harp \& MUS PERF 499 and Senior Recital |  |  |
| MUSIC/ <br> FOLKLORE 103 | Introduction to Music Cultures of the World |  | Music Theory |  |  |
| MUSIC 262 | Jazz Ensemble |  | \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 (prerequisite course requirements) | 4 |
| MUSIC 266 | Black Music Ensemble |  |  |  |  |
| MUSIC/ AFROAMER 308 | Black Music (1920-Present): <br> Rhythm Section and Combos |  | MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 (prerequisite course requirements) | 4 |
| MUSIC/ | Black Music (1920-Present): |  |  |  |  |
| AFROAMER 309 | Vocalist/Trombone/Misc Instrumental |  | MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 (prerequisite course requirements) | 4 |
| MUSIC/ AFROAMER 310 | Black Music (1920-Present): The Trumpet |  |  |  |  |
|  |  |  | MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| MUSIC/ <br> AFROAMER 311 | Black Music (1920-Present): The Saxophone |  |  |  |  |
|  |  |  | Music History |  |  |
| MUSIC 331 | Jazz Improvisation |  | MUSIC 211 | Survey of the History of Western | 3 |
| MUSIC 332 | Jazz Improvisation |  |  | Music |  |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups |  | MUSIC 212 | Survey of the History of Western Music | 3 |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas |  | Select two of the following courses: |  | 6 |
|  |  |  | MUSIC 411 | Survey of Music in the Middle Ages |  |
|  |  |  | MUSIC 412 | Survey of Music in the Renaissance |  |


| MUSIC 413 | Survey of Music in the Baroque Era |
| :---: | :--- |
| MUSIC 414 | Survey of Music in the Classic Era |
| MUSIC 415 | Survey of Music in the Romantic <br> Era |
| MUSIC 416 | Survey of Music in the Twentieth <br> Century |
| MUSIC 419 | Music in the United States |
| MUSIC 511 | Historical Performance Practices |
| MUSIC 513 | Survey of Opera |
| Piano |  |

Complete the following course or pass proficiency exam.
Initial course level determined by audition.
MUS PERF $104 \quad$ Intermediate Class Piano
Performing Organizations
One of the following courses is required each semester of
enrollment in performance study:

| MUSIC 61 | Chamber Orchestra |
| :--- | :--- |
| MUSIC 62 | University Symphony Orchestra (to |
| be assigned) |  |

String Ensemble 4
Enroll 4 times in the following:

| MUSIC 269 | Ensemble-String |
| :---: | :--- |
| Ensemble Electives | 4 |

4 credits from any of the following courses:

| MUSIC 40 | Wind Ensemble |
| :--- | :--- |
| MUSIC 41 | Concert Band |
| MUSIC 43 | University Band |
| MUSIC 50 | Concert Choir |
| MUSIC 52 | Women's Chorus |
| MUSIC 53 | Choral Union |
| MUSIC 55 | Masters' Singers |
| MUSIC 56 | Chorale |
| MUSIC 58 | Madrigal Singers |
| MUSIC 59 | University Chorus |
| MUSIC 61 | Chamber Orchestra |
| MUSIC 62 | University Symphony Orchestra |
| MUSIC 257 | Opera Workshop |
| MUSIC 262 | Jazz Ensemble |
| MUSIC 265 | Ensemble-Woodwind |
| MUSIC 266 | Black Music Ensemble |
| MUSIC 267 | Ensemble-Brass |
| MUSIC 268 | Ensemble-Percussion |
| MUSIC 269 | Ensemble-String |
| MUSIC 270 | Ensemble-Guitar |
| MUSIC 273 | Contemporary Chamber Ensemble |
| MUSIC 361 | Non-Western Music Performance- <br> MUSIC 461 |

## Conducting and Pedagogy

| MUSIC 252 | Introduction to Conducting and <br> Pedagogy |
| :--- | :--- |

Non-Western Music Cultures2

2 credits from any of the following courses:

| MUSIC/ FOLKLORE 103 | Introduction to Music Cultures of the World |  |
| :---: | :---: | :---: |
| MUSIC 262 | Jazz Ensemble |  |
| MUSIC 266 | Black Music Ensemble |  |
| MUSIC/ AFROAMER 308 | Black Music (1920-Present): <br> Rhythm Section and Combos |  |
| MUSIC/ <br> AFROAMER 309 | Black Music (1920-Present): <br> Vocalist/Trombone/Misc Instrumental |  |
| MUSIC/ <br> AFROAMER 310 | Black Music (1920-Present): The Trumpet |  |
| MUSIC/ <br> AFROAMER 311 | Black Music (1920-Present): The Saxophone |  |
| MUSIC 331 | Jazz Improvisation |  |
| MUSIC 332 | Jazz Improvisation |  |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups |  |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas |  |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World |  |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World |  |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion |  |
| MUSIC 405 | Seminar: Cultural Study of Music |  |
| MUSIC 500 | Seminar in Global Popular Music |  |
| Pedagogy |  |  |
| MUSIC 340 | Pedagogy | 2 |
| Repertoire |  |  |
| MUSIC 346 | Repertoire | 2 |
| Music Electives |  | 6 |

Any music courses qualify as electives EXCEPT for 660courses intended for non-music majors.

Extra credits from the above requirements may be included in electives.

Total Credits

## Jazz Studies

Code Title Credits

## Performance Study ${ }^{1}$

FIRST YEAR: 200-level performance study in the major 4
instrument, 2 semesters, 2 credits each semester
SECOND YEAR: 200-level performance study in the major 8
instrument, 2 semesters, 4 credits each semester
THIRD AND FOURTH YEARS: 400-level performance study 12
in the major instrument, 3 semesters, 4 credits each semester
SENIOR RECITAL SEMESTER: 2 credits performance study
AND 2 credits Senior Recital
MUS PERF 499 Senior Recital
Music Theory
MUSIC 121 Musica Practica $1 \quad 4$
\& MUSIC 171 and Musica Practica: Aural Skills 1
(prerequisite course requirements)

| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 | 4 | Any music courses qua courses intended for | ualify as electives EXCEPT for 660-non-music majors. ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (prerequisite course requirements) |  | Extra credits from the | above requirements may be |  |
| MUSIC 221 | Musica Practica 3 | 4 | included among electi |  |  |
| \& MUSIC 271 | and Musica Practica: Aural Skills 3 (prerequisite course requirements) |  | Total Credits |  | 88 |
| MUSIC 229 | Jazz Theory \& Composition | 3 | Performance in | ction in jazz studies is instrume |  |
| MUS PERF 457 | Jazz Composition and Arranging | 3 | taught by an ins | uctor with jazz expertise. Students |  |
| Music History |  |  | approval from th | Director of Jazz Studies to substitu |  |
| MUSIC 211 | Survey of the History of Western Music | 3 | semesters of clas on another instrum instructor. | sical instruction or instruction with a ment, provided studio space is availab | structor the |
| MUSIC 212 | Survey of the History of Western Music | 3 | 2 Suggested elect 400-level Jazz St | ve courses: MUSIC 110; MUSIC 222 <br> les through Analysis; Music (Arts En | 272; |
| Select two of the foll | wing courses: | 6 | MUS PERF 104; M | MUS PERF 200; MUS PERF 458 |  |
| MUSIC/ <br> AFROAMER 308 | Black Music (1920-Present): Rhythm Section and Combos |  | Organ Performance |  |  |
| MUSIC/ | Black Music (1920-Present): |  | Code | Title | Credits |
| AFROAMER 309 | Vocalist/Trombone/Misc |  | Perfornance Study |  |  |
|  | Instrumental |  | FIRST YEAR: 200-leve | l performance study, 2 semesters, 2 | 4 |
| MUSIC/ | Black Music (1920-Present): The |  | credits each semester |  |  |
| AFROAMER 310 | Trumpet |  | MUS PERF 203 | Elementary/Intermediate Organ |  |
| MUSIC/ <br> AFROAMER 311 | Black Music (1920-Present): The Saxophone |  | SECOND YEAR: 200-le <br> 4 credits each semest | evel performance study, 2 semesters, ter | 8 |
| MUSIC 416 | Survey of Music in the Twentieth |  | MUS PERF 203 | Elementary/Intermediate Organ |  |
|  | Century |  | THIRD AND FOURTH | ARS: 400-level performance study, 3 | 12 |
| MUSIC 419 | Music in the United States |  | semesters, 4 credits | semester |  |
| Piano |  | 4 | MUS PERF 403 | Advanced Organ |  |
| Complete the followi Initial course level de | ing course or pass proficiency exam. termined by audition. |  | SENIOR RECITAL SEM AND 2 credits Senior | MESTER: 2 credits performance study Recital | 4 |
| MUS PERF 103 <br> \& MUS PERF 108 | Elementary Class Piano and Jazz Class Piano |  | MUS PERF 403 <br> \& MUS PERF 499 | Advanced Organ and Senior Recital |  |
| Performing Organiza | tions and Ensembles |  | Music Theory |  |  |
| 2 credits from any of | the following courses: | 2 | MUSIC 121 | Musica Practica 1 | 4 |
| MUSIC 40 | Wind Ensemble |  | \& MUSIC 171 | and Musica Practica: Aural Skills 1 |  |
| MUSIC 41 | Concert Band |  |  | (prerequisite course requirements) |  |
| MUSIC 50 | Concert Choir |  | MUSIC 122 | Musica Practica 2 | 4 |
| MUSIC 52 | Women's Chorus |  | \& MUSIC 172 | and Musica Practica: Aural Skills 2 |  |
| MUSIC 55 | Masters' Singers |  |  | (prerequisite course requirements) |  |
| MUSIC 56 | Chorale |  | MUSIC 221 | Musica Practica 3 | 4 |
| MUSIC 58 | Madrigal Singers |  |  |  |  |
| MUSIC 59 | University Chorus |  | MUSIC 222 | Musica Practica 4 | 4 |
| MUSIC 61 | Chamber Orchestra |  | \& MUSIC 272 | and Musica Practica: Aural Skills 4 |  |
| MUSIC 62 | University Symphony Orchestra |  | Advanced-level Music | Theory (400 level or above) | 3 |
| Enrollment is require following: | d every semester in one of the | 8 | MUSIC 622 (Baroque recommended. | Counterpoint) is strongly |  |
| MUSIC 262 | Jazz Ensemble |  | Music History |  |  |
| MUSIC 266 | Black Music Ensemble |  | MUSIC 211 | Survey of the History of Western | 3 |
| Conducting and Ped | gogy |  |  | Music |  |
| MUSIC 252 | Introduction to Conducting and Pedagogy | 2 | MUSIC 212 | Survey of the History of Western Music | 3 |
| Jazz Improvisation |  | 6 | Select two of the follo | wing courses: | 6 |
| 2 semesters are requ | ired. |  | MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 331 | Jazz Improvisation |  | MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 332 | Jazz Improvisation |  | MUSIC 413 | Survey of Music in the Baroque Era |  |
| Music Electives |  | 8 | MUSIC 414 | Survey of Music in the Classic Era |  |


| MUSIC 415 | Survey of Music in the Romantic <br> Era |
| :---: | :--- |
| MUSIC 416 | Survey of Music in the Twentieth <br> Century |
| MUSIC 419 | Music in the United States |
| MUSIC 511 | Historical Performance Practices |
| MUSIC 513 | Survey of Opera |
| Keyboard Skills | Keyboard Skills |
| MUS PERF 251 | Accompanying |
| MUS PERF 242 | 2rganizations/Accompanying |

6 credits from any the following courses:

| MUSIC 50 | Concert Choir |
| :--- | :--- |
| MUSIC 52 | Women's Chorus |
| MUSIC 53 | Choral Union |
| MUSIC 55 | Masters' Singers |
| MUSIC 56 | Chorale |
| MUSIC 58 | Madrigal Singers |
| MUS PERF 342 | Piano Accompanying Lab |


| Conducting and Pedagogy | Introduction to Conducting and <br> MUSIC 252 <br> Pedagogy |
| :--- | :--- |
| Non-Western Music Cultures |  |


| MUSIC/ <br> FOLKLORE 103 | Introduction to Music Cultures of the World |
| :---: | :---: |
| MUSIC 262 | Jazz Ensemble |
| MUSIC 266 | Black Music Ensemble |
| MUSIC/ AFROAMER 308 | Black Music (1920-Present): <br> Rhythm Section and Combos |
| MUSIC/ <br> AFROAMER 309 | Black Music (1920-Present): Vocalist/Trombone/Misc Instrumental |
| MUSIC/ AFROAMER 310 | Black Music (1920-Present): The Trumpet |
| MUSIC/ <br> AFROAMER 311 | Black Music (1920-Present): The Saxophone |
| MUSIC 331 | Jazz Improvisation |
| MUSIC 332 | Jazz Improvisation |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas |
| MUSIC/ FOLKLORE 401 | Musical Cultures of the World |
| MUSIC/ FOLKLORE 402 | Musical Cultures of the World |
| MUSIC/ FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion |
| MUSIC 405 | Seminar. Cultural Study of Music |
| MUSIC 500 | Seminar in Global Popular Music |

## Music Electives

Any music courses qualify as electives EXCEPT for 660courses intended for non-music majors.

21

Extra credits from the above requirements may be
included among the electives.
Total Credits

## Percussion Performance

Code Title Credits
Performance Study
FIRST YEAR: 200-level performance study, 2 semesters, 2
credits each semester
MUS PERF 227 Elementary/Intermediate Percussion

SECOND YEAR: 200-level performance study, 2 semesters, 8
4 credits each semester
MUS PERF 227 Elementary/Intermediate Percussion
THIRD AND FOURTH YEARS: 400-level performance study, 12
3 semesters, 4 credits each semester
MUS PERF 427 Advanced Percussion
SENIOR RECITAL SEMESTER: 2 credits performance study 4
AND 2 credits Senior Recital
MUS PERF 427 Advanced Percussion
\& MUS PERF 499 and Senior Recital
Music Theory
MUSIC 121 Musica Practica $1 \quad 4$
\& MUSIC 171 and Musica Practica: Aural Skills 1 (prerequisite course requirements)
MUSIC 122 Musica Practica 2 4

| \& MUSIC 172 | and Musica Practica: Aural Skills 2 <br> (prerequisite course requirements) |  |
| :--- | :--- | :--- |
| MUSIC 221 | Musica Practica 3 |  |


| \& MUSIC 271 | and Musica Practica: Aural Skills 3 <br> (prerequisite course requirements) |  |
| :--- | :--- | :--- |
| MUSIC 222 | Musica Practica 4 | 4 |

\& MUSIC 272 and Musica Practica: Aural Skills 4

| Music History |  |
| :--- | :--- |
| MUSIC 211 | Survey of the History of Western |


| MUSIC 211 | Survey of the History of Western <br> Music | 3 |
| :--- | :--- | :--- |
| MUSIC 212 | Survey of the History of Western <br> Music | 3 |

Select two of the following courses: 6

| MUSIC 411 | Survey of Music in the Middle Ages |
| :--- | :--- |
| MUSIC 412 | Survey of Music in the Renaissance |
| MUSIC 413 | Survey of Music in the Baroque Era |
| MUSIC 414 | Survey of Music in the Classic Era |
| MUSIC 415 | Survey of Music in the Romantic <br> Era |
| MUSIC 416 | Survey of Music in the Twentieth <br> Century |
| MUSIC 419 | Music in the United States |
| MUSIC 511 | Historical Performance Practices |

Piano 4

Complete the following course or pass proficiency exam.

Initial course level determined by audition.

MUS PERF 104 Intermediate Class Piano
Organizations

One of the following courses is required each semester of enrollment in performance study:

| MUSIC 40 | Wind Ensemble |
| :--- | :--- |
| MUSIC 41 | Concert Band |
| MUSIC 61 | Chamber Orchestra |
| MUSIC 62 | University Symphony Orchestra |

Percussion Ensemble
Enroll four times in the following:
MUSIC $268 \quad$ Ensemble-Percussion

| Conducting and Pedagogy |  |
| :--- | :--- |
| MUSIC 252 | Introduction to Conducting and |
|  | Pedagogy |

Non-Western Music Cultures
2 credits from any of the following courses:

| MUSIC/ | Introduction to Music Cultures of |
| :--- | :--- |
| FOLKLORE 103 | the World |
| MUSIC 262 | Jazz Ensemble |
| MUSIC 266 | Black Music Ensemble |
| MUSIC 268 | Ensemble-Percussion (world <br> percussion section only) |
| MUSIC/ | Black Music (1920-Present): |
| AFROAMER 308 | Rhythm Section and Combos |
| MUSIC/ | Black Music (1920-Present): |
| AFROAMER 309 | Vocalist/Trombone/Misc |
| Instrumental |  |

Any music courses qualify as electives EXCEPT for 660-
courses intended for non-music majors.
Extra credits from the above requirements may be included among electives.
Total Credits

## Piano Performance <br> Code Title Credits

## Performance Study

FIRST YEAR: 200-level performance study, 2 semesters, 2

MUS PERF 201 Elementary/Intermediate Piano SECOND YEAR: 200-level performance study, 2 semesters, 8 4 credits each semester

MUS PERF 201 Elementary/Intermediate Piano THIRD YEAR: 400-level performance study, 3 semesters, 4 12 credits each semester

MUS PERF 401 Advanced Piano
SENIOR RECITAL SEMESTER: 2 credits 400-level 4
performance study and 2 credits senior recital
MUS PERF 401 Advanced Piano
\& MUS PERF 499 and Senior Recital

## Music Theory

MUSIC 121 Musica Practica $1 \quad 4$
\& MUSIC 171 and Musica Practica: Aural Skills 1 (prerequisite course requirements)

| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 (prerequisite course requirements) | 4 |
| :---: | :---: | :---: |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 (prerequisite course requirements) | 4 |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Select two of the following courses: |  | 6 |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |

Keyboard Skills and Accompanying 10
FIRST YEAR:

| MUS PERF 251 | Keyboard Skills |
| :---: | :--- |
| MUS PERF 242 | Accompanying |
| SECOND, THIRD, AND FOURTH YEARS: |  |
| MUS PERF 342 | Piano Accompanying Lab ( 6 <br> semesters) |

## Conducting and Pedagogy

| MUSIC 252 | Introduction to Conducting and <br> Pedagogy |
| :--- | :--- |

Non-Western Music Cultures 2
2 credits from any io the following courses:

| MUSIC/ | Introduction to Music Cultures of |
| :--- | :--- |
| FOLKLORE 103 | the World |
| MUSIC 262 | Jazz Ensemble |


| MUSIC 266 | Black Music Ensemble |
| :--- | :--- |
| MUSIC 268 | Ensemble-Percussion |
| MUSIC/ | Black Music (1920-Present): |
| AFROAMER 308 | Rhythm Section and Combos |
| MUSIC/ | Black Music (1920-Present): |
| AFROAMER 309 | Vocalist/Trombone/Misc <br> Instrumental |
| MUSIC/ | Black Music (1920-Present): The |
| AFROAMER 310 | Trumpet |
| MUSIC/ | Black Music (1920-Present): The |
| AFROAMER 311 | Saxophone |
| MUSIC 331 | Jazz Improvisation |
| MUSIC 332 | Jazz Improvisation |
| MUSIC 361 | Non-Western Music Performance- |
| MUSIC/ | Study Groups |
| AFROAMER 400 | Music Cultures of the World: Africa, |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 401 |  |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 402 |  |
| MUSIC/ | Music of S.E. Asia: Tradition, |
| FOLKLORE 404 | Innovation, Politics, and Religion |
| MUSIC 405 | Seminar: Cultural Study of Music |
| MUSIC 500 | Seminar in Global Popular Music |
| Pedagogy |  |
| MUSIC 340 | Pedagogy (offered fall semester in |
| Repertoire | even-numbered years) |
| 2 semesters of the following: |  |
| MUSIC 346 | Repertoire |
| Music Electives |  |

Any music courses qualify as electives EXCEPT for 660-
courses intended for non-music majors.
Extra credits from the above requirements may be included in the electives.

Total Credits

| String Performance <br> Code |  |  |
| :--- | :---: | :---: |
| Performance |  |  |
| FIRST YEAR: 200-level performance study in the major <br> instrument, 2 semesters, 2 credits each semester  |  |  |
| MUS PERF 231 |  | Elementary/Intermediate Violin |
| MUS PERF 233 |  |  | | Elementary/Intermediate Viola |
| :--- | :--- |

SECOND YEAR: 200-level performance study on major

| MUS PERF 231 | Elementary/Intermediate Violin |
| :--- | :--- |
| MUS PERF 233 | Elementary/Intermediate Viola |
| MUS PERF 235 | Elementary/Intermediate Cello |
| MUS PERF 237 | Elementary/Intermediate String <br>  |

THIRD AND FOURTH YEARS: 400-level performance
study on major instrument, 3 semesters, 4 credits each
semester

| MUS PERF 431 | Advanced Violin |
| :--- | :--- | :--- |
| MUS PERF 433 | Advanced Viola |
| MUS PERF 435 | Advanced Cello |
| MUS PERF 437 | Advanced String Bass |
| SENIOR RECITAL SEMESTER: 2 credits perfor |  |
| study, 2 credits Senior Recital |  |
| MUS PERF 431 | Advanced Violin |
| \& MUS PERF 499 | and Senior Recital |
| MUS PERF 433 | Advanced Viola |
| \& MUS PERF 499 | and Senior Recital |
| MUS PERF 435 | Advanced Cello |
| \& MUS PERF 499 | and Senior Recital |
| MUS PERF 437 | Advanced String Bass |
| \& MUS PERF 499 | and Senior Recital |

## Music Theory

$\left.\begin{array}{llc}\text { MUSIC 121 } \\ \text { \& MUSIC 171 }\end{array} \quad \begin{array}{ll}\text { Musica Practica 1 } \\ \text { and Musica Practica: Aural Skills 1 } \\ \text { (prerequisite course requirements) }\end{array}\right] 4$
Select two of the following courses: 6

| MUSIC 411 | Survey of Music in the Middle Ages |
| :--- | :--- |
| MUSIC 412 | Survey of Music in the Renaissance |
| MUSIC 413 | Survey of Music in the Baroque Era |
| MUSIC 414 | Survey of Music in the Classic Era |
| MUSIC 415 | Survey of Music in the Romantic <br> Era |
| MUSIC 416 | Survey of Music in the Twentieth <br> Century |
| MUSIC 419 MUSIC 511 | Music in the United States |
| MUSIC 513 | Surverical Performance Practices of Opera |

Piano
4
Complete the following course or pass proficiency exam.
Initial course level determined by audition.
MUS PERF 104 Intermediate Class Piano
Performing Organizations
One of the following courses is required each semester of enrollment in performance study:

| MUSIC 61 | Chamber Orchestra |
| :--- | :--- |
| MUSIC 62 | University Symphony Orchestra |


| String Ensemble |  | 4 |
| :---: | :---: | :---: |
| Enroll four times in the following: |  |  |
| MUSIC 269 | Ensemble-String |  |
| Ensemble Electives |  | 4 |
| 4 credits from any of the following courses: |  |  |
| MUSIC 40 | Wind Ensemble |  |
| MUSIC 41 | Concert Band |  |
| MUSIC 43 | University Band |  |
| MUSIC 50 | Concert Choir |  |
| MUSIC 52 | Women's Chorus |  |
| MUSIC 53 | Choral Union |  |
| MUSIC 55 | Masters' Singers |  |
| MUSIC 56 | Chorale |  |
| MUSIC 58 | Madrigal Singers |  |
| MUSIC 59 | University Chorus |  |
| MUSIC 61 | Chamber Orchestra |  |
| MUSIC 62 | University Symphony Orchestra |  |
| MUSIC 257 | Opera Workshop |  |
| MUSIC 262 | Jazz Ensemble |  |
| MUSIC 265 | Ensemble-Woodwind |  |
| MUSIC 266 | Black Music Ensemble |  |
| MUSIC 267 | Ensemble-Brass |  |
| MUSIC 268 | Ensemble-Percussion |  |
| MUSIC 269 | Ensemble-String |  |
| MUSIC 270 | Ensemble-Guitar |  |
| MUSIC 273 | Contemporary Chamber Ensemble |  |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups |  |
| MUSIC 461 | Collegium Musicum |  |
| MUSIC 252 | Introduction to Conducting and Pedagogy | 2 |
| Non-Western Music Cultures |  | 2 |
| 2 credits from any of the following courses: |  |  |
| MUSIC/ <br> FOLKLORE 103 | Introduction to Music Cultures of the World |  |
| MUSIC 262 | Jazz Ensemble |  |
| MUSIC 266 | Black Music Ensemble |  |
| MUSIC 268 | Ensemble-Percussion |  |
| MUSIC/ AFROAMER 308 | Black Music (1920-Present): <br> Rhythm Section and Combos |  |
| MUSIC/ AFROAMER 309 | Black Music (1920-Present): Vocalist/Trombone/Misc Instrumental |  |
| MUSIC/ AFROAMER 310 | Black Music (1920-Present): The Trumpet |  |
| MUSIC/ AFROAMER 311 | Black Music (1920-Present): The Saxophone |  |
| MUSIC 331 | Jazz Improvisation |  |
| MUSIC 332 | Jazz Improvisation |  |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups |  |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas |  |

4

4
4 credits from any of the following courses:

2 credits from any of the following courses:

| MUSIC/ | Musical Cultures of the World |
| :--- | :--- |
| FOLKLORE 401 |  |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 402 | Music of S.E. Asia: Tradition, |
| MUSIC/ | Innovation, Politics, and Religion |
| FOLKLORE 404 | Seminar: Cultural Study of Music |
| MUSIC 405 | Seminar in Global Popular Music |
| MUSIC 500 | Pedagogy |
| Pedagogy |  |
| MUSIC 340 | Repertoire |

Any music courses qualify as electives EXCEPT for 660courses intended for non-music majors.
Extra credits from the above requirements may be included in electives.

Total Credits

## Voice Performance

Code Title Credits

## Performance

FIRST YEAR: 200-level performance study, 2 semesters, 2 4
credits each semester
MUS PERF 205 Elementary/Intermediate Voice
SECOND YEAR: 200-level performance study, 2 semesters, 8
4 credits each semester
MUS PERF 405 Advanced Voice
THIRD AND FOURTH YEARS: 400-level performance study, 12
3 semesters, 4 credits each semester
MUS PERF 405 Advanced Voice
SENIOR RECITAL SEMESTER: 2 credits performance study 4
AND 2 credits Senior Recital
MUS PERF 405 Advanced Voice
\& MUS PERF 499 and Senior Recital
Music Theory
MUSIC 121 Musica Practica $1 \quad 4$

\& MUSIC $171 \quad$| and Musica Practica: Aural Skills 1 |
| :--- |
| (prerequisite course requirements) |

MUSIC 122 Musica Practica 2 4

| \& MUSIC 172 | and Musica Practica: Aural Skills 2 <br> (prerequisite course requirements) |
| :--- | :--- |

MUSIC $221 \quad$ Musica Practica 3 4

| \& MUSIC 271 | and Musica Practica: Aural Skills 3 <br> (prerequisite course requirements) |  |
| :--- | :--- | :--- |
| MUSIC 222 | Musica Practica 4 | 4 |

\& MUSIC 272 and Musica Practica: Aural Skills 4

Music History

| MUSIC 211 | Survey of the History of Western <br> Music | 3 |
| :--- | :--- | :--- |
| MUSIC 212 | Survey of the History of Western <br> Music | 3 |
| Select two of the following courses: | 6 |  |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |


| MUSIC 413 | Survey of Music in the Baroque Era |
| :--- | :--- |
| MUSIC 414 | Survey of Music in the Classic Era |
| MUSIC 415 | Survey of Music in the Romantic <br> Era |
| MUSIC 416 | Survey of Music in the Twentieth <br> Century |
| MUSIC 419 | Music in the United States |
| MUSIC 511 | Historical Performance Practices |
| MUSIC 513 | Survey of Opera |

Piano
Four semesters are required. Initial course level determined by audition.

## Performing Organizations, Opera

4 credits from any of the following courses:

| MUSIC 50 | Concert Choir |
| :--- | :--- |
| MUSIC 56 | Chorale |
| MUSIC 58 | Madrigal Singers |
| Plus 4 credits from any of the following courses: |  |
| MUSIC 50 | Concert Choir |
| MUSIC 56 | Chorale |
| MUSIC 58 | Madrigal Singers |
| MUSIC 256 | University Opera |
| MUSIC 257 | Opera Workshop |
| Conducting and Pedagogy |  |
| MUSIC 252 | Introduction to Conducting and <br> Pedagogy (enroll in spring of odd- <br> numbered year to avoid conflict <br> with MUSIC 468) |

Non-Western Music Cultures
2 credits from any of the following courses:

| MUSIC/ | Introduction to Music Cultures of |
| :--- | :--- |
| FOLKLORE 103 | the World |
| MUSIC 262 | Jazz Ensemble |
| MUSIC 266 | Black Music Ensemble |
| MUSIC/ | Black Music (1920-Present): |
| AFROAMER 308 | Rhythm Section and Combos |
| MUSIC/ | Black Music (1920-Present): |
| AFROAMER 309 | Vocalist/Trombone/Misc |
| MUSIC/ | Instrumental |
| AFROAMER 310 | Trumpet Music (1920-Present): The |
| MUSIC/ | Black Music (1920-Present): The |
| AFROAMER 311 | Saxophone |
| MUSIC 331 | Jazz Improvisation |
| MUSIC 332 | Jazz Improvisation |
| MUSIC 361 | Non-Western Music Performance- <br> Study Groups |
| MUSIC/ | Music Cultures of the World: Africa, |
| AFROAMER 400 | Europe, the Americas |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 401 |  |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 402 |  |
| MUSIC/ | Music of S.E. Asia: Tradition, |
| FOLKLORE 404 | Innovation, Politics, and Religion |


| MUSIC 405 | Seminar. Cultural Study of Music |
| :---: | :--- | ---: |
| MUSIC 500 | Seminar in Global Popular Music | 4

Music Electives ..... 8

Any music courses qualify as electives EXCEPT for 660courses intended for non-music majors.
Extra credits from the above requirements may be included in electives.

Total Credits

## Woodwind Performance <br> Code Title Credits

## Performance

FIRST YEAR: 200-level performance study in the major 4 instrument, 2 semesters, 2 credits each semester

| MUS PERF 207 | Elementary/Intermediate Flute |
| :--- | :--- |
| MUS PERF 209 | Elementary/Intermediate Oboe |
| MUS PERF 211 | Elementary/Intermediate Clarinet |
| \& MUS PERF 499 | and Senior Recital |

instrument, 2 semesters, 4 credits each semester

| MUS PERF 207 | Elementary/Intermediate Flute |
| :--- | :--- |
| MUS PERF 209 | Elementary/Intermediate Oboe |
| MUS PERF 211 | Elementary/Intermediate Clarinet |
| MUS PERF 213 | Elementary/Intermediate <br> Saxophone |
| MUS PERF 215 | Elementary/Intermediate Bassoon |
| THIRD AND FOURTH YEARS: 400-level performance study <br> in the major instrument, 3 semesters, 4 credits each <br> semester |  |

MUS PERF 407 Advanced Flute
MUS PERF 409 Advanced Oboe
MUS PERF 411 Advanced Clarinet
MUS PERF 413 Advanced Saxophone
MUS PERF 415 Advanced Bassoon
SENIOR RECITAL SEMESTER: 2 credits performance study 4
AND 2 credits Senior Recital
MUS PERF 407 Advanced Flute
\& MUS PERF 499 and Senior Recital

## MUS PERF 409 Advanced Oboe

\& MUS PERF 499 and Senior Recital
MUS PERF 411 Advanced Clarinet
\& MUS PERF 499 and Senior Recital

| MUS PERF 413 <br> \& MUS PERF 499 | Advanced Saxophone and Senior Recital |  |
| :---: | :---: | :---: |
| MUS PERF 415 <br> \& MUS PERF 499 | Advanced Bassoon and Senior Recital |  |
| Music Theory |  |  |
| MUSIC 121 <br> \& MUSIC 171 | Musica Practica 1 and Musica Practica: Aural Skills 1 (prerequisite course requirements) | 4 |
| MUSIC 122 <br> \& MUSIC 172 | Musica Practica 2 and Musica Practica: Aural Skills 2 (prerequisite course requirements) | 4 |
| MUSIC 221 <br> \& MUSIC 271 | Musica Practica 3 and Musica Practica: Aural Skills 3 (prerequisite course requirements) | 4 |
| MUSIC 222 <br> \& MUSIC 272 | Musica Practica 4 and Musica Practica: Aural Skills 4 | 4 |
| Music History |  |  |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| MUSIC 212 | Survey of the History of Western Music | 3 |
| Select two of the following courses: |  | 6 |
| MUSIC 411 | Survey of Music in the Middle Ages |  |
| MUSIC 412 | Survey of Music in the Renaissance |  |
| MUSIC 413 | Survey of Music in the Baroque Era |  |
| MUSIC 414 | Survey of Music in the Classic Era |  |
| MUSIC 415 | Survey of Music in the Romantic Era |  |
| MUSIC 416 | Survey of Music in the Twentieth Century |  |
| MUSIC 419 | Music in the United States |  |
| MUSIC 511 | Historical Performance Practices |  |
| MUSIC 513 | Survey of Opera |  |
| Piano |  | 4 |

Piano 4
Complete the following course or pass proficiency exam. Initial course level determined by audition.

MUS PERF 104 Intermediate Class Piano
Organizations
One of the following courses is required each semester of enrollment in performance study:

| MUSIC 40 | Wind Ensemble |
| :--- | :--- |
| MUSIC 41 | Concert Band |
| MUSIC 61 | Chamber Orchestra |
| MUSIC 62 | University Symphony Orchestra |

Woodwind Ensemble 4
Enroll four times in the following:
$\begin{array}{ll}\text { MUSIC } 265 \text { Ensemble-Woodwind } & \\ \text { Conducting and Pedagogy }\end{array}$
MUSIC 252 Introduction to Conducting and
Pedagogy
Non-Western Music Cultures
2
2 credits from any of the following courses:

| MUSIC/ | Introduction to Music Cultures of |
| :--- | :--- |
| FOLKLORE 103 | the World |
| MUSIC 262 | Jazz Ensemble |


| MUSIC 266 | Black Music Ensemble |
| :--- | :--- |
| MUSIC 268 | Ensemble-Percussion |
| MUSIC/ | Black Music (1920-Present): |
| AFROAMER 308 | Rhythm Section and Combos |
| MUSIC/ | Black Music (1920-Present): |
| AFROAMER 309 | Vocalist/Trombone/Misc |
| Instrumental |  |
| MUSIC/ | Black Music (1920-Present): The |
| AFROAMER 310 | Trumpet |
| MUSIC/ | Black Music (1920-Present): The |
| AFROAMER 311 | Saxophone |
| MUSIC 331 | Jazz Improvisation |
| MUSIC 332 | Jazz Improvisation |
| MUSIC 361 | Non-Western Music Performance- <br> MUSIC/ |
| AFROAMER Groups |  |
| MUSIC/ 400 | Europe, the Americas |
| FOLKLORE 401 | Musical Cultures of the World |
| MUSIC/ | Musical Cultures of the World |
| FOLKLORE 402 |  |
| MUSIC/ | Music of S.E. Asia: Tradition, |
| FOLKLORE 404 | Innovation, Politics, and Religion |

Music Electives
Any music courses qualify as electives EXCEPT for 660courses intended for non-music majors.
Extra credits from the above requirements may be included in electives.
Total Credits
90

## RESIDENCE \& QUALITY OF WORK

2.000 GPA in all MUSIC, MUS PERF and major courses
2.000 GPA in 15 upper-level credits for the major, taken in residence ${ }^{1}$

15 credits in MUSIC and/or MUSIC PERF, taken on campus
${ }^{1}$ These courses count as upper-level:

| Code | Title | Credits |
| :--- | :--- | ---: |
| MUSIC |  |  |
| MUSIC 40 | Wind Ensemble | 1 |
| MUSIC 41 | Concert Band | 1 |
| MUSIC 50 | Concert Choir | 1 |
| MUSIC 52 | Women's Chorus | 1 |
| MUSIC 53 | Choral Union | 1 |
| MUSIC 55 | Masters' Singers | 1 |
| MUSIC 56 | Chorale | 1 |
| MUSIC 58 | Madrigal Singers | 1 |
| MUSIC 61 | Chamber Orchestra | 1 |
| MUSIC 62 | University Symphony Orchestra | 1 |
| MUSIC 211 | Survey of the History of Western | 3 |
| MUSIC 212 | Music | 3 |
| MUSIC 222 | Survey of the History of Western | 3 |
| MUSIC 256 | Music | $1-2$ |


| MUSIC 262 | Jazz Ensemble | 1 |
| :---: | :---: | :---: |
| MUSIC 265 | Ensemble-Woodwind | 1 |
| MUSIC 266 | Black Music Ensemble | 1 |
| MUSIC 267 | Ensemble-Brass | 1 |
| MUSIC 268 | Ensemble-Percussion | 1 |
| MUSIC 269 | Ensemble-String | 1 |
| MUSIC 270 | Ensemble-Guitar | 1 |
| MUSIC 271 | Musica Practica: Aural Skills 3 | 1 |
| MUSIC 272 | Musica Practica: Aural Skills 4 | 1 |
| MUSIC 273 | Contemporary Chamber Ensemble | 1 |
| MUSIC 319 | Topics in Music and Ethnicity in the United States | 3 |
| MUSIC 331 | Jazz Improvisation | 3 |
| MUSIC 332 | Jazz Improvisation | 3 |
| MUSIC 340 | Pedagogy | 1-2 |
| MUSIC 345 | Practicum in String Pedagogy | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| MUSIC/ AFROAMER 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| MUSIC/ <br> FOLKLORE 401 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 402 | Musical Cultures of the World | 3 |
| MUSIC/ <br> FOLKLORE 404 | Music of S.E. Asia: Tradition, Innovation, Politics, and Religion | 3 |
| MUSIC 411 | Survey of Music in the Middle Ages | 3 |
| MUSIC 412 | Survey of Music in the Renaissance | 3 |
| MUSIC 413 | Survey of Music in the Baroque Era | 3 |
| MUSIC 414 | Survey of Music in the Classic Era | 3 |
| MUSIC 415 | Survey of Music in the Romantic Era | 3 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 419 | Music in the United States | 3 |
| MUSIC 461 | Collegium Musicum | 1 |
| MUSIC 467 | Language Diction for Singing I | 2 |
| MUSIC 468 | Language Diction for Singing II | 2 |
| MUSIC 497 | Special Topics in Music | 1-3 |
| MUSIC 499 | Directed Study | 1-3 |
| MUSIC 500 and above |  |  |
| MUS PERF |  |  |
| MUS PERF 342 | Piano Accompanying Lab | 1 |
| MUS PERF 347 | Third Year Composition | 3 |
| MUS PERF 348 | Third Year Composition | 3 |

MUS PERF 500 and above

## HONORS IN THE MAJOR

The School of Music is reviewing its requirements for Honors in the Major. Current music majors may contact the undergraduate advisor for more information.

To earn Honors in any music major, students must satisfy the requirements below as well as all other requirements for their music degree and major:

- 6 credits of MUSIC 681 Senior Honors Thesis-MUSIC 682 Senior Honors Thesis
- 12 credits of honors coursework in music: 6 of the 12 credits must be at the 300 level or higher and only 6 credits can be taken in any one of the three music areas of theory, history, and performance.

To participate in the Honors in the Major program, students must:

- Notify the School of Music undergraduate advisor of their intention to become a candidate for Honors in the Major. This will usually occur in the sophomore year.
- Present a minimum cumulative GPA of 3.300 in all courses taken at UW-Madison and maintain this average throughout the degree.
- Present a minimum 3.500 GPA in all music coursework and maintain a minimum 3.500 GPA in all music honors coursework.
- Engage a faculty member who will collaborate in planning the 12 credits of honors curriculum coursework; submit this plan to the undergraduate advisor. The course plan may change as students progress through their work.
- Prior to beginning work on the MUSIC 681-MUSIC 682 Senior Honors Thesis sequence, confirm a faculty advisor for this sequence (who may be the same person as for the 12 credits above) and submit a prospectus outlining in detail the planned work including (a) the topic, (b) plans for research, and (c) a clear substantive written component, although it may also include oral and/or performance components.
The faculty advisor must sign the prospectus indicating approval.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Develop advanced levels of proficiency in solo, chamber and ensemble performance sufficient to enter music professions or graduate programs.
2. Understand, synthesize and apply foundational concepts of musical study in theory, history and pedagogy.
3. Demonstrate the ability to learn independently and to integrate knowledge across domains of research and applied studies.
4. Communicate verbally, in writing and through public performance, musical ideas and concepts.
5. Demonstrate ability to work collaboratively and professionally in multiple settings.

## ADVISING AND CAREERS

Undergraduate students-current music majors only-should consult the music advisor for help enrolling in courses and planning the completion of their degree. Students who are interested in majoring in music should consult the undergraduate audition and admissions coordinator (admissions@music.wisc.edu; 608-263-5986; 5561 Humanities). If you have questions about a scholarship that you are receiving from the School of Music, please contact the associate director for Mead Witter School of Music.

General information about advising for undergraduates in the Mead Witter School of Music can be found at resources for undergraduate studies (https://www.music.wisc.edu/undergrads).

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Cook (director), Blasius, Calderón, Chisholm, Crook, Dill, Di Sanza, Doing, Fischer, Fulmer, Hetzler, Hyer, Johnson, Karp, Koza, Leckrone, Perry, Rowe, Schaffer, Schwendinger, Stowe, Swack, B. Taylor, C. Taylor, Teeple, Thimmig, Vallon, Vardi; Associate Professors Dobbs, Grabois, Wallmann; Assistant Professors Altino, Lee, Ronis

The faculty of the Mead Witter School of Music is a distinguished group of educators, performing musicians, and active scholars. The backgrounds of performance faculty include rich experiences as professional musicians, researchers, recording artists, and entrepreneurs.
Faculty in music education have particular insight into their field as a result of their backgrounds as school educators, performers, and
scholars. In areas such as music theory and musicology, the musical community has high regard for the past and current contributions to the study of musical theory, historical perspectives on music, the role of music in societies around the world, and the unique contributions of American musicians. Teaching is a priority for the faculty, who are readily accessible to students for advice and support. Faculty, staff, and students cooperate in extraordinary ways with joint ventures that reach across disciplines both in research or instruction.

## ACCREDITATION

## ACCREDITATION

National Association of Schools of Music (https://nasm.artsaccredit.org)

Accreditation status: Accredited. Next accreditation review: 2022-2023.

## MOSSE/WEINSTEIN CENTER FOR JEWISH STUDIES

Founded in 1991, the Mosse/Weinstein Center for Jewish Studies brings together a variety of disciplines to study and interpret Jewish and ancient Israelite history, religion, literature, politics, society, and culture. The center offers a broad selection of courses at all levels, which are cross-listed with other departments, including classics, curriculum and instruction, English, gender and women's studies, German, history, music, philosophy, political science, religious studies, Slavic languages, and sociology.

The Jewish studies major offers students an in-depth study of 3,500 years of Jewish civilization. The program is interdisciplinary in nature and aims to provide students with a broadly based, rigorous liberal arts education in Jewish studies. While learning about Jewish history, religion, language, and culture, students also develop skills in critical thinking, reading, writing, and research-skills that are valuable to a range of career paths. Students with a particular interest in Modern Hebrew and Israel are encouraged to follow a specialized track in Modern Hebrew language, literature, and Israeli culture.

The Jewish studies major requires a minimum of 31 credits and proficiency in the Hebrew language to enable students to deal with Hebrew texts in the classroom and for research purposes. The credits are divided among several clusters that focus on Hebrew texts; literature, philosophy, and the arts; and history and social science. In addition, students must complete a two-course capstone sequence. Together, these courses support the acquisition of an integrated and coherent body of knowledge.

A certificate in Jewish studies is also available. Its aim is to acquaint students with a number of significant aspects of Jewish civilization and to introduce them to tools required for its study; it requires a minimum of 21 credits in seven courses.

The major has an education track that includes coursework in the School of Education. It requires a total of 34 credits -25 in Jewish studies and 9 in education (curriculum and instruction, and educational policy studies). This track provides a series of courses that define the role that education has played in Jewish civilization; Jewish ideas concerning the nature and aims of education; and philosophical, curricular, and pedagogical issues
relating to education in Jewish studies in a pluralistic, democratic society. This track does not lead to teacher certification.

## DEGREES/MAJORS/CERTIFICATES

- Jewish Studies, B.A. (p. 1150)
- Jewish Studies, B.S. (p. 1156)
- Jewish Studies, Certificate (p. 1161)


## PEOPLE

Professors: Bernard-Donals, Brenner, Ermakoff, Goldberg, Guyer, Hutton, Louden, Michels, Nadler, Rosenberg, Rosenblum, Rosenmeyer, Schweber, Swack, Vardi

Associate Professors: Dobbs, Shelef, Strauss

Assistant Professors: Bitzan, Brisman, Hollander, Mandell, Yudkoff, Zilbergers

Lecturers: Blakely, Paretskaya, Sone, Yuchtman

Jewish Studies Faculty Information (http://jewishstudies.wisc.edu/ faculty)

## JEWISH STUDIES, B.A.

Founded in 1991, the Mosse/Weinstein Center for Jewish Studies brings together a variety of disciplines to study and interpret Jewish and ancient Israelite history, religion, literature, politics, society, and culture. The center offers a broad selection of courses at all levels, which are cross-listed with other departments, including classics, curriculum and instruction, English, gender and women's studies, German, history, music, philosophy, political science, religious studies, Slavic languages, and sociology.

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## HOW TO GET IN

Prospective majors in Jewish studies should make an appointment with the undergraduate advisor (undergrad-adviser@cjs.wisc.edu) to discuss requirements and courses.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF ARTS DEGREE REQUIREMENTS
Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b(Q R B)$ coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign |
| :--- |
| Language |
|  |
|  |
|  |

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of | 60 intermediate or advanced credits |
| Intermediate/ |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Completion of the major requires a minimum of 31 credits in Jewish studies, distributed as follows:

| Code Title | Credits |  |
| :--- | :--- | :--- |
| Introduction to Judaism |  |  |
| JEWISH/ Introduction to Judaism |  |  |
| RELIG ST 211 |  |  |

JEWISH 231 Elementary Topics in Jewish History (Jewish Law, Business and Ethics)
Hebrew Texts
Select two of the following in Hebrew texts:

| HEBR-MOD/ | Introduction to Hebrew Literature |
| :--- | :--- |
| JEWISH 301 |  |
| HEBR-MOD/ | Introduction to Hebrew Literature |
| JEWISH 302 |  |
| HEBR-MOD/ | Topics in Modern Hebrew / Israeli |
| JEWISH 401 | Literature and Culture I |
| HEBR-MOD/ | Topics in Modern Hebrew / Israeli |
| JEWISH 402 | Literature and Culture II |
| HEBR-BIB/ | Biblical Texts, Poetry |
| JEWISH 513 |  |
| HEBR-BIB/ | Biblical Texts, Poetry |
| JEWISH 514 |  |

Literature, Philosophy, and the Arts
Select three courses in Jewish literature, philosophy, and the arts (see below)
History and Social Science
Select three courses in Jewish history or social science (see below)

## Capstone

The capstone sequence is intended for students nearing
the end of their coursework and consists of two courses, which are taken concurrently:

| JEWISH 675 | Research Colloquium for Majors |
| :--- | :--- |
| \& JEWISH 677 | and Independent Research for <br>  <br>  <br> Majors |

## LITERATURE, PHILOSOPHY, AND THE ARTS

Three courses in Jewish literature, philosophy, and the arts, at least one of which must deal with the Jewish experience in Diaspora written in a language other than Hebrew-e.g., English, French, German, Russian, Yiddish. (Courses taken to satisfy the requirement in Hebrew texts cannot be used to satisfy this requirement.) Courses fulfilling the Diaspora requirement are indicated with a footnote. Depending on the semester, select topics courses may also fulfill the Diaspora requirement.

| Code | Title | Credits |
| :---: | :---: | :---: |
| JEWISH/CLASSICS/ <br> LITTRANS/ <br> RELIG ST 227 | Introduction to Biblical Literature (in English) | 4 |
| JEWISH 230 | Elementary Topics in Jewish Literature | 3-4 |
| JEWISH 232 | Elementary Topics in Jewish Philosophy and the Arts | 3-4 |
| JEWISH 236 | Bascom Course ${ }^{2}$ | 3 |
| JEWISH/CLASSICS/ <br> LITTRANS/ <br> RELIG ST 237 | Biblical Poetry in Translation | 3 |
| JEWISH/GERMAN/ <br> LITTRANS 269 | Yiddish Literature and Culture in Europe ${ }^{1}$ | 3 |
| JEWISH/ <br> RELIG ST 278 | Food in Rabbinic Judaism ${ }^{1}$ | 3-4 |


| JEWISH/GERMAN/ <br> LITTRANS 279 | Yiddish Literature and Culture in America ${ }^{1}$ | 3 |
| :---: | :---: | :---: |
| JEWISH/HEBR- <br> MOD 301 <br> \& JEWISH/HEBR- <br> MOD 302 | Introduction to Hebrew Literature and Introduction to Hebrew Literature | 6 |
| JEWISH/ <br> LITTRANS 318 | Modern Jewish Literature ${ }^{1}$ | 3-4 |
| JEWISH/LITTRANS/ RELIG ST 328 | Classical Rabbinic Literature in Translation | 3-4 |
| JEWISH/CLASSICS/ <br> HEBR-BIB/ <br> LITTRANS/ <br> RELIG ST 332 | Prophets of the Bible | 4 |
| JEWISH/CLASSICS/ RELIG ST 346 | Jewish Literature of the GrecoRoman Period | 3 |
| JEWISH 356 | Jerusalem, Holy City of Conflict and Desire | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 368 | The Bible in the Middle Ages | 3 |
| JEWISH/HEBR- <br> MOD 401 <br> \& JEWISH/HEBR- <br> MOD 402 | Topics in Modern Hebrew / Israeli Literature and Culture I and Topics in Modern Hebrew / Israeli Literature and Culture II | 6 |
| JEWISH 430 | Intermediate Topics in Jewish Literature | 3-4 |
| JEWISH 432 | Intermediate Topics in Jewish Philosophy and the Arts | 3-4 |
| JEWISH/PHILOS/ RELIG ST 435 | Jewish Philosophy from Antiquity to the Seventeenth Century ${ }^{1}$ | 3 |
| JEWISH/ <br> RELIG ST 448 | Classical Rabbinic Texts | 3 |
| JEWISH 450 | Undegraduate Seminar in Judaism and the Arts ${ }^{1}$ | 3 |
| JEWISH/ <br> GERMAN 510 | German-Jewish Culture Since the 18th Century ${ }^{1}$ | 3 |
| JEWISH/HEBR- <br> BIB 513 <br> \& JEWISH/HEBR- <br> BIB 514 | Biblical Texts, Poetry and Biblical Texts, Poetry | 6 |
| JEWISH 533 <br> \& JEWISH 534 | Readings in Contemporary Hebrew Literature and Readings in Contemporary Hebrew Literature | 6 |
| JEWISH/ENGL 539 | Jewish Literatures in Diaspora | 3 |
| JEWISH/ENGL 593 | Literature of Jewish Identity in America ${ }^{1}$ | 3 |
| JEWISH 630 | Advanced Topics in Jewish Literature | 3-4 |
| JEWISH 632 | Advanced Topics in Jewish Philosophy and the Arts | 3-4 |
| Course fulfills the <br> Bascom Courses focus on one part | Diaspora requirement. <br> are small (20 students or fewer) and icular topic that would generate subst |  |

depth papers throughout the semester. Recent topics include: Jewish Composers: Early Modern to Modern; Modern American Jewish Fiction; and Writing (and) the Holocaust.

## HISTORY AND SOCIAL SCIENCE

Three courses in Jewish history or social science, at least one of which must deal with the experience of Jews in America. Students are strongly encouraged to take at least one course offered by the History department. Courses fulfilling the American requirement are indicated with a footnote. Depending on the semester, select topics courses may also fulfill the American requirement.

| Code | Title | Credits |
| :---: | :---: | :---: |
| JEWISH/ HISTORY 219 | The American Jewish Experience: From Shtetl to Suburb ${ }^{1}$ | 4 |
| JEWISH/ HISTORY 220 | Introduction to Modern Jewish History | 4 |
| JEWISH 231 | Elementary Topics in Jewish History | 3-4 |
| JEWISH 233 | Elementary Topics in Jewish Studies: Social Sciences | 3-4 |
| JEWISH/ <br> CLASSICS 241 | Introduction to Biblical Archaeology | 4 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/ RELIG ST 278 | Food in Rabbinic Judaism | 3-4 |
| JEWISH/ HISTORY 373 | Modern Political History of the Jews: 1655-1919 | 4 |
| JEWISH/ HISTORY 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| JEWISH/ RELIG ST 377 | Jewish Cultural History (in English) | 4 |
| JEWISH/ HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s ${ }^{1}$ | 3-4 |
| JEWISH 431 | Intermediate Topics in Jewish History | 3-4 |
| JEWISH 433 | Intermediate Topics in Jewish Studies: Social Sciences | 3-4 |
| JEWISH/ CLASSICS 451 | Biblical Archaeology | 3 |
| JEWISH/ CLASSICS 452 | Biblical Archaeology | 2 |
| JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education | 3 |
| JEWISH/ HISTORY 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| JEWISH/HISTORY/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | 3 |
| JEWISH 633 | Advanced Topics in Jewish Studies: Social Sciences | 3-4 |
| JEWISH/ <br> POLI SCI 665 | Israeli Politics and Society | 3-4 |

1 Course fulfills the American requirement.

## LANGUAGE REQUIREMENT

The major includes a language requirement of Hebrew proficiency equal to four semesters of Modern Hebrew. These first four semesters of Hebrew do not count toward the 31 credits for the major. The Center for Jewish Studies, 4223 Mosse Humanities Building, administers placement examinations. The following courses satisfy the language requirement: ${ }^{1}$

| Code | Title | Credits |
| :--- | :--- | ---: |
| HEBR-MOD 101 | First Semester Hebrew | 4 |
| HEBR-MOD 102 | Second Semester Hebrew | 4 |
| HEBR-MOD 201 | Third Semester Hebrew | 4 |
| HEBR-MOD 202 | Fourth Semester Hebrew | 4 |

${ }^{1}$ The language requirement can also be fulfilled by placing out of HEBR-MOD 202 Fourth Semester Hebrew. In this case, based on which course they place into, students will take two of the following Hebrew text requirements: HEBR-MOD/JEWISH 301 Introduction to Hebrew Literature, HEBR-MOD/JEWISH 302 Introduction to Hebrew Literature, HEBR-MOD/JEWISH 401 Topics in Modern Hebrew / Israeli Literature and Culture I, HEBR-MOD/JEWISH 402 Topics in Modern Hebrew / Israeli Literature and Culture II.

## TRANSCRIPTED OPTION WITHIN THE MAJOR

- Jewish Studies: Jewish Studies and Education (p. 1155)


## MAJOR IN JEWISH STUDIES: CONCENTRATION IN MODERN HEBREW LANGUAGE, LITERATURE, AND ISRAELI CULTURE

Students majoring in Jewish studies may choose to focus their Jewish studies coursework on Modern Hebrew literature and the culture, history, and politics of Israel. This concentration follows the general requirements of the Jewish studies major, with the following modifications:

- The diaspora requirement in the Literature, Philosophy, and the Arts category is eliminated.
- The American requirement for the History and Social Science category is eliminated.
- Students in this concentration take HEBR-MOD/JEWISH 401 and HEBR-MOD/JEWISH 402 (repeatable for credit). These courses can be used to fulfill either the Hebrew Texts requirement or the Literature, Philosophy, and the Arts requirement.
- In the event that a student uses HEBR-MOD/JEWISH 401-HEBRMOD/JEWISH 402 to fulfill the Hebrew Texts requirement, the student must repeat HEBR-MOD/JEWISH 402. The second time the student takes HEBR-MOD/JEWISH 402, it will count toward the Literature, Philosophy, and the Arts requirement.
- In the six courses taken across the "Literature, Philosophy, and the Arts" and "History and Social Science" clusters, four courses must deal in some way with Israel. Pre-approved for this concentration are:

| Code | Title | Credits |
| :--- | :--- | ---: |
| HISTORY/ | The Crusades: Christianity and | $3-4$ |
| MEDIEVAL/ | Islam |  |
| RELIG ST 309 |  | 4 |
| JEWISH/ | Introduction to Modern Jewish | 4 |
| HISTORY 220 | History |  |


| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 227 | Introduction to Biblical Literature (in English) | 4 |
| :---: | :---: | :---: |
| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 237 | Biblical Poetry in Translation | 3 |
| JEWISH/ <br> CLASSICS 241 | Introduction to Biblical Archaeology | 4 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/ <br> RELIG ST 278 | Food in Rabbinic Judaism | 3-4 |
| JEWISH/ <br> LITTRANS 318 | Modern Jewish Literature | 3-4 |
| JEWISH/LITTRANS/ RELIG ST 328 | Classical Rabbinic Literature in Translation | 3-4 |
| JEWISH/CLASSICS/ HEBR-BIB/ <br> LITTRANS/ RELIG ST 332 | Prophets of the Bible | 4 |
| JEWISH 356 | Jerusalem, Holy City of Conflict and Desire | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/ HISTORY 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| JEWISH/HEBRMOD 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| JEWISH/HEBRMOD 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| JEWISH/ <br> POLI SCI 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |

## NOTE ON DIRECTED STUDY

With prior consent of the undergraduate advisor in Jewish studies and the relevant instructor, students may use one Directed Study course (JEWISH 699 Directed Study) to satisfy a requirement for the major.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all JEWISH courses and courses accepted in the major
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in JEWISH, taken on campus
1 JEWISH courses, 300 and higher, that are designated as Intermediate or Advanced, count as upper level in the major

## HONORS IN THE MAJOR

Students may declare Honors in the Jewish Studies Major in consultation with the Jewish Studies undergraduate advisor.

## HONORS IN THE JEWISH STUDIES MAJOR: REQUIREMENTS

To earn Honors in the Major in Jewish Studies, or the separate track in Education and Jewish Studies and Modern Hebrew Language, Literature and Culture, students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all JEWISH courses, and all courses accepted in the major
- Complete at least two courses, taken for Honors, in the major, with grades of $B$ or better in each
- Complete a two-semester Senior Honors Thesis, a piece of original research composition, in JEWISH 681 Senior Honors Thesis and JEWISH 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of 30 } \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes }\end{array}
$$ <br>

UW-Madison courses offered in distance or online\end{array}\right\}\)| Quality offormats and credits earned in UW-Madison Study |
| :--- |
| Abroad/Study Away programs. | | Undergraduate students must maintain the minimum |
| :--- |
| grade point average specified by the school, college, or |
| academic program to remain in good academic standing. |
| Students whose academic performance drops below |
| these minimum thresholds will be placed on academic |

## LEARNING OUTCOMES

1. Proficiency demonstrated in reading, understanding and conversing in Hebrew, Yiddish, Ladino or another approved Jewish language.
2. Honed critical abilities in close reading, interpretation, and written analysis of ancient and modern Jewish texts.
3. Expanded knowledge of Jewish history, culture, philosophy, arts, religious practice, and politics in both the past and present.
4. Development, pursuit and presentation of original research on Jewish studies culminating in a senior capstone project.
5. Disposition of increased appreciation for diverse world views, value systems and interactions between Jews and non-Jews, minorities and majorities, in Wisconsin, the US, and across the globe.

## ADVISING AND CAREERS

Like other liberal arts majors, a degree in Jewish studies can prepare one for a variety of career paths. Graduates in Jewish studies have followed a variety of different career paths, including law, medicine, education,
finance, social work, and the nonprofit sector. Jewish studies students are also well prepared to apply for graduate studies in fields such as law, education, business, and social work, as well as prime candidates for rabbinical or cantorial school, theological studies, and advanced levels of Jewish studies.

The Mosse/Weinstein Center for Jewish Studies encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors: Bernard-Donals, Brenner, Ermakoff, Goldberg, Guyer, Hutton, Louden, Michels, Nadler, Rosenberg, Rosenblum, Rosenmeyer, Schweber, Swack, Vardi

Associate Professors: Dobbs, Shelef, Strauss
Assistant Professors: Bitzan, Brisman, Hollander, Mandell, Yudkoff, Zilbergers

Lecturers: Blakely, Paretskaya, Sone, Yuchtman
Jewish Studies Faculty Information (http://jewishstudies.wisc.edu/ faculty)

## JEWISH STUDIES: JEWISH STUDIES AND EDUCATION

## REQUIREMENTS

A total of $\mathbf{3 4}$ credits. Students electing the Jewish studies and education option are responsible for satisfying the Language Requirement from Jewish Studies major.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Jewish Studies Requirements, 18 credits to include: |  |  |
| Introduction to Judaism | $m$ (select 1 course): | 4 |
| JEWISH/ <br> RELIG ST 211 | Introduction to Judaism |  |
| JEWISH 231 | Elementary Topics in Jewish History (Jewish Law, Business, and Ethics) |  |
| Jewish Literature (select 1 course): |  | 3 |
| JEWISH/ <br> CLASSICS/ <br> LITTRANS/ <br> RELIG ST 227 | Introduction to Biblical Literature (in English) |  |
| JEWISH/ <br> CLASSICS/ <br> LITTRANS/ <br> RELIG ST 237 | Biblical Poetry in Translation |  |
| JEWISH/ GERMAN/ LITTRANS 279 | Yiddish Literature and Culture in America |  |
| JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature |  |
| JEWISH/HEBRMOD 302 | Introduction to Hebrew Literature |  |
| JEWISH/ LITTRANS/ RELIG ST 328 | Classical Rabbinic Literature in Translation |  |
| JEWISH/ <br> CLASSICS/HEBR- <br> BIB/LITTRANS/ <br> RELIG ST 332 | Prophets of the Bible |  |
| JEWISH/ <br> CLASSICS/ <br> RELIG ST 346 | Jewish Literature of the GrecoRoman Period |  |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation |  |
| JEWISH/HEBRMOD 401 | Topics in Modern Hebrew / Israeli Literature and Culture I |  |
| JEWISH/HEBRMOD 402 | Topics in Modern Hebrew / Israeli Literature and Culture II |  |
| JEWISH/ GERMAN 510 | German-Jewish Culture Since the 18th Century |  |
| JEWISH/HEBRBIB 513 | Biblical Texts, Poetry |  |
| JEWISH/HEBRBIB 514 | Biblical Texts, Poetry |  |


| JEWISH/ <br> ENGL 539 | Jewish Literatures in Diaspora |  |
| :---: | :---: | :---: |
| JEWISH 533 | Readings in Contemporary Hebrew Literature |  |
| JEWISH 534 | Readings in Contemporary Hebrew Literature |  |
| JEWISH/ <br> ENGL 593 | Literature of Jewish Identity in America |  |
| Jewish History (select 2 courses): |  | 6 |
| JEWISH 202 | Topics in Jewish Studies |  |
| JEWISH/ HISTORY 219 | The American Jewish Experience: From Shtetl to Suburb |  |
| JEWISH/ <br> HISTORY 220 | Introduction to Modern Jewish History |  |
| JEWISH/ HISTORY 373 | Modern Political History of the Jews: 1655-1919 |  |
| JEWISH/ HISTORY 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 |  |
| JEWISH/ <br> RELIG ST 377 | Jewish Cultural History (in English) |  |
| JEWISH/ <br> HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s |  |
| JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education |  |
| JEWISH/ <br> HISTORY 518 | Anti-Semitism in European Culture, 1700-1945 |  |
| JEWISH/ HISTORY/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 |  |
| Hebrew Texts (select 2 courses): |  | 6 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature |  |
| HEBR-MOD/ <br> JEWISH 302 | Introduction to Hebrew Literature |  |
| HEBR-MOD/ <br> JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I |  |
| HEBR-MOD/ <br> JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II |  |
| HEBR-BIB/ <br> JEWISH 513 | Biblical Texts, Poetry |  |
| HEBR-BIB/ <br> JEWISH 514 | Biblical Texts, Poetry |  |
| Education Requirements, 15 credits to include: |  |  |
| Select one of the following in developing a philosophical stance: |  | 3 |
| ED POL/ <br> PHILOS 545 | Philosophical Conceptions of Teaching and Learning |  |
| ED POL/ <br> PHILOS 550 | Philosophy of Moral Education |  |
| Select one of the following in education in Jewish studies in a democratic, pluralistic society: |  | 3 |
| ED POL 460 | Immigration, Education, and Equity |  |
| CURRIC/ED POL/ RELIG ST 516 | Religion and Public Education |  |

Select one of the following in pedagogical/curricular issues pertinent to education in Jewish studies:

| CURRIC 359 | Teaching of History and the Other <br> Social Studies |
| :--- | :--- |
| CURRIC 431 | Young Adult Literature for Schools |
| CURRIC/JEWISH | Holocaust: History, Memory and <br> 515 |

Education and Jewish Studies Requirements, to include:
JEWISH 675 Research Colloquium for Majors
\& JEWISH 677 and Independent Research for
Majors (capstone sequence)

## JEWISH STUDIES, B.S.

Founded in 1991, the Mosse/Weinstein Center for Jewish Studies brings together a variety of disciplines to study and interpret Jewish and ancient Israelite history, religion, literature, politics, society, and culture. The center offers a broad selection of courses at all levels, which are cross-listed with other departments, including classics, curriculum and instruction, English, gender and women's studies, German, history, music, philosophy, political science, religious studies, Slavic languages, and sociology.

The Jewish studies major offers students an in-depth study of 3,500 years of Jewish civilization. The program is interdisciplinary in nature and aims to provide students with a broadly based, rigorous liberal arts education in Jewish studies. While learning about Jewish history, religion, language, and culture, students also develop skills in critical thinking, reading, writing, and research-skills that are valuable to a range of career paths. Students with a particular interest in Modern Hebrew and Israel are encouraged to follow a specialized track in Modern Hebrew language, literature, and Israeli culture.

The Jewish studies major requires a minimum of 31 credits and proficiency in the Hebrew language to enable students to deal with Hebrew texts in the classroom and for research purposes. The credits are divided among several clusters that focus on Hebrew texts; literature, philosophy, and the arts; and history and social science. In addition, students must complete a two-course capstone sequence. Together, these courses support the acquisition of an integrated and coherent body of knowledge.

A certificate in Jewish studies is also available. Its aim is to acquaint students with a number of significant aspects of Jewish civilization and to introduce them to tools required for its study; it requires a minimum of 21 credits in seven courses.

The major has an education track that includes coursework in the School of Education. It requires a total of 34 credits-25 in Jewish studies and 9 in education (curriculum and instruction, and educational policy studies). This track provides a series of courses that define the role that education has played in Jewish civilization; Jewish ideas concerning the nature and aims of education; and philosophical, curricular, and pedagogical issues relating to education in Jewish studies in a pluralistic, democratic society. This track does not lead to teacher certification.

## HOW TO GET IN

Prospective majors in Jewish studies should make an appointment with the undergraduate advisor (undergrad-adviser@cjs.wisc.edu) to discuss requirements and courses.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign
Language

Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.

L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major |  |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Completion of the major requires a minimum of 31 credits in Jewish studies, distributed as follows:

| Code | Title | Credits |
| :--- | :--- | :--- |
| Introduction to Judaism |  |  |
| JEWISH/ |  | Introduction to Judaism |
| RELIG ST 211 |  |  |
| JEWISH 231 | Elementary Topics in Jewish <br> History (Jewish Law, Business and <br>  <br>  |  |

Hebrew Texts
Select two of the following in Hebrew texts:

| HEBR-MOD/ | Introduction to Hebrew Literature |
| :--- | :--- |
| JEWISH 301 |  |
| HEBR-MOD/ | Introduction to Hebrew Literature |
| JEWISH 302 |  |
| HEBR-MOD/ | Topics in Modern Hebrew / Israeli |
| JEWISH 401 | Literature and Culture I |


| HEBR-MOD/ | Topics in Modern Hebrew / Israeli |
| :--- | :--- |
| JEWISH 402 | Literature and Culture II |
| HEBR-BIB/ | Biblical Texts, Poetry |
| JEWISH 513 |  |
| HEBR-BIB/ | Biblical Texts, Poetry |
| JEWISH 514 |  |

## Literature, Philosophy, and the Arts

Select three courses in Jewish literature, philosophy, and the arts (see below)
History and Social Science
Select three courses in Jewish history or social science
(see below)

## Capstone

The capstone sequence is intended for students nearing the end of their coursework and consists of two courses, which are taken concurrently:

```
JEWISH 675 Research Colloquium for Majors
& JEWISH 677 and Independent Research for
    Majors
```


## LITERATURE, PHILOSOPHY, AND THE ARTS

Three courses in Jewish literature, philosophy, and the arts, at least one of which must deal with the Jewish experience in Diaspora written in a language other than Hebrew-e.g., English, French, German, Russian, Yiddish. (Courses taken to satisfy the requirement in Hebrew texts cannot be used to satisfy this requirement.) Courses fulfilling the Diaspora requirement are indicated with a footnote. Depending on the semester, select topics courses may also fulfill the Diaspora requirement.

| Code | Title | Credits |
| :---: | :---: | :---: |
| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 227 | Introduction to Biblical Literature (in English) | 4 |
| JEWISH 230 | Elementary Topics in Jewish Literature | 3-4 |
| JEWISH 232 | Elementary Topics in Jewish Philosophy and the Arts | 3-4 |
| JEWISH 236 | Bascom Course ${ }^{2}$ | 3 |
| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 237 | Biblical Poetry in Translation | 3 |
| JEWISH/GERMAN/ LITTRANS 269 | Yiddish Literature and Culture in Europe ${ }^{1}$ | 3 |
| JEWISH/ <br> RELIG ST 278 | Food in Rabbinic Judaism ${ }^{1}$ | 3-4 |
| JEWISH/GERMAN/ LITTRANS 279 | Yiddish Literature and Culture in America ${ }^{1}$ | 3 |
| JEWISH/HEBR- <br> MOD 301 <br> \& JEWISH/HEBR- <br> MOD 302 | Introduction to Hebrew Literature and Introduction to Hebrew Literature | 6 |
| JEWISH/ <br> LITTRANS 318 | Modern Jewish Literature ${ }^{1}$ | 3-4 |
| JEWISH/LITTRANS/ RELIG ST 328 | Classical Rabbinic Literature in Translation | 3-4 |


| JEWISH/CLASSICS/ <br> HEBR-BIB/ <br> LITTRANS/ <br> RELIG ST 332 | Prophets of the Bible | 4 |
| :---: | :---: | :---: |
| JEWISH/CLASSICS/ RELIG ST 346 | Jewish Literature of the Greco- <br> Roman Period | 3 |
| JEWISH 356 | Jerusalem, Holy City of Conflict and Desire | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/HISTORY/ MEDIEVAL/ RELIG ST 368 | The Bible in the Middle Ages | 3 |
| JEWISH/HEBR- <br> MOD 401 <br> \& JEWISH/HEBR- <br> MOD 402 | Topics in Modern Hebrew / Israeli Literature and Culture I and Topics in Modern Hebrew / Israeli Literature and Culture II | 6 |
| JEWISH 430 | Intermediate Topics in Jewish Literature | 3-4 |
| JEWISH 432 | Intermediate Topics in Jewish Philosophy and the Arts | 3-4 |
| JEWISH/PHILOS/ RELIG ST 435 | Jewish Philosophy from Antiquity to the Seventeenth Century ${ }^{1}$ | 3 |
| JEWISH/ RELIG ST 448 | Classical Rabbinic Texts | 3 |
| JEWISH 450 | Undegraduate Seminar in Judaism and the Arts ${ }^{1}$ | 3 |
| JEWISH/ GERMAN 510 | German-Jewish Culture Since the 18th Century ${ }^{1}$ | 3 |
| JEWISH/HEBR- <br> BIB 513 <br> \& JEWISH/HEBR- <br> BIB 514 | Biblical Texts, Poetry and Biblical Texts, Poetry | 6 |
| JEWISH 533 <br> \& JEWISH 534 | Readings in Contemporary Hebrew Literature and Readings in Contemporary Hebrew Literature | 6 |
| JEWISH/ENGL 539 | Jewish Literatures in Diaspora | 3 |
| JEWISH/ENGL 593 | Literature of Jewish Identity in America ${ }^{1}$ | 3 |
| JEWISH 630 | Advanced Topics in Jewish Literature | 3-4 |
| JEWISH 632 | Advanced Topics in Jewish Philosophy and the Arts | 3-4 |

Course fulfills the Diaspora requirement.
2 Bascom Courses are small (20 students or fewer) and generally focus on one particular topic that would generate substantial indepth papers throughout the semester. Recent topics include: Jewish Composers: Early Modern to Modern; Modern American Jewish Fiction; and Writing (and) the Holocaust.

## HISTORY AND SOCIAL SCIENCE

Three courses in Jewish history or social science, at least one of which must deal with the experience of Jews in America. Students are strongly encouraged to take at least one course offered by the History department. Courses fulfilling the American requirement are indicated
with a footnote. Depending on the semester, select topics courses may also fulfill the American requirement.

| Code | Title | Credits |
| :---: | :---: | :---: |
| JEWISH/ <br> HISTORY 219 | The American Jewish Experience: From Shtetl to Suburb ${ }^{1}$ | 4 |
| JEWISH/ <br> HISTORY 220 | Introduction to Modern Jewish History | 4 |
| JEWISH 231 | Elementary Topics in Jewish History | 3-4 |
| JEWISH 233 | Elementary Topics in Jewish Studies: Social Sciences | 3-4 |
| JEWISH/ <br> CLASSICS 241 | Introduction to Biblical Archaeology | 4 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/ RELIG ST 278 | Food in Rabbinic Judaism | 3-4 |
| JEWISH/ HISTORY 373 | Modern Political History of the Jews: 1655-1919 | 4 |
| JEWISH/ <br> HISTORY 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| JEWISH/ <br> RELIG ST 377 | Jewish Cultural History (in English) | 4 |
| JEWISH/ <br> HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s ${ }^{1}$ | 3-4 |
| JEWISH 431 | Intermediate Topics in Jewish History | 3-4 |
| JEWISH 433 | Intermediate Topics in Jewish Studies: Social Sciences | 3-4 |
| JEWISH/ <br> CLASSICS 451 | Biblical Archaeology | 3 |
| JEWISH/ <br> CLASSICS 452 | Biblical Archaeology | 2 |
| JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education | 3 |
| JEWISH/ HISTORY 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| JEWISH/HISTORY/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | 3 |
| JEWISH 633 | Advanced Topics in Jewish Studies: Social Sciences | 3-4 |
| JEWISH/ <br> POLI SCI 665 | Israeli Politics and Society | 3-4 |

## LANGUAGE REQUIREMENT

The major includes a language requirement of Hebrew proficiency equal to four semesters of Modern Hebrew. These first four semesters of Hebrew do not count toward the 31 credits for the major. The Center for Jewish Studies, 4223 Mosse Humanities Building, administers placement examinations. The following courses satisfy the language requirement: ${ }^{1}$

| Code | Title | Credits |
| :--- | :--- | ---: |
| HEBR-MOD 101 | First Semester Hebrew | 4 |
| HEBR-MOD 102 | Second Semester Hebrew | 4 |
| HEBR-MOD 201 | Third Semester Hebrew | 4 |
| HEBR-MOD 202 | Fourth Semester Hebrew | 4 |

## TRANSCRIPTED OPTION WITHIN THE MAJOR

- Jewish Studies: Jewish Studies and Education (p. 1155)


## MAJOR IN JEWISH STUDIES: CONCENTRATION IN MODERN HEBREW LANGUAGE, LITERATURE, AND ISRAELI CULTURE

Students majoring in Jewish studies may choose to focus their Jewish studies coursework on Modern Hebrew literature and the culture, history, and politics of Israel. This concentration follows the general requirements of the Jewish studies major, with the following modifications:

- The diaspora requirement in the Literature, Philosophy, and the Arts category is eliminated.
- The American requirement for the History and Social Science category is eliminated.
- Students in this concentration take HEBR-MOD/JEWISH 401 and HEBR-MOD/JEWISH 402 (repeatable for credit). These courses can be used to fulfill either the Hebrew Texts requirement or the Literature, Philosophy, and the Arts requirement.
- In the event that a student use HEBR-MOD/JEWISH 401-HEBRMOD/JEWISH 402 to fulfill the Hebrew Texts requirement, the student must repeat HEBR-MOD/JEWISH 402. The second time the student takes HEBR-MOD/JEWISH 402, it will count toward the Literature, Philosophy, and the Arts requirement.
- In the six courses taken across the "Literature, Philosophy, and the Arts" and "History and Social Science" clusters, four courses must deal in some way with Israel. Pre-approved for this concentration are:

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| JEWISH/ <br> HISTORY 220 | Introduction to Modern Jewish History | 4 |
| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 227 | Introduction to Biblical Literature (in English) | 4 |
| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 237 | Biblical Poetry in Translation | 3 |
| JEWISH/ <br> CLASSICS 241 | Introduction to Biblical Archaeology | 4 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |


| JEWISH/ RELIG ST 278 | Food in Rabbinic Judaism | 3-4 |
| :---: | :---: | :---: |
| JEWISH/ <br> LITTRANS 318 | Modern Jewish Literature | 3-4 |
| JEWISH/LITTRANS/ RELIG ST 328 | Classical Rabbinic Literature in Translation | 3-4 |
| JEWISH/CLASSICS/ HEBR-BIB/ <br> LITTRANS/ RELIG ST 332 | Prophets of the Bible | 4 |
| JEWISH 356 | Jerusalem, Holy City of Conflict and Desire | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/ HISTORY 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| JEWISH/HEBR- <br> MOD 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| JEWISH/HEBRMOD 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| JEWISH/ <br> POLI SCI 665 | Israeli Politics and Society | 3-4 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |

## NOTE ON DIRECTED STUDY

With prior consent of the undergraduate advisor in Jewish studies and the relevant instructor, students may use one Directed Study course (JEWISH 699 Directed Study) to satisfy a requirement for the major.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all JEWISH courses and courses accepted in the major
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{1}$

15 credits in JEWISH, taken on campus
1 JEWISH courses, 300 and higher, that are designated as Intermediate or Advanced, count as upper level in the major

## HONORS IN THE MAJOR

Students may declare Honors in the Jewish Studies Major in consultation with the Jewish Studies undergraduate advisor.

## HONORS IN THE JEWISH STUDIES MAJOR: REQUIREMENTS

To earn Honors in the Major in Jewish Studies, or the separate track in Education and Jewish Studies and Modern Hebrew Language, Literature and Culture, students must satisfy both the requirements for the major and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.500 GPA for all JEWISH courses, and all courses accepted in the major
- Complete at least two courses, taken for Honors, in the major, with grades of $B$ or better in each

Complete a two-semester Senior Honors Thesis, a piece of original research composition, in JEWISH 681 Senior Honors Thesis and JEWISH 682 Senior Honors Thesis, for a total of 6 credits.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Proficiency demonstrated in reading, understanding and conversing in Hebrew, Yiddish, Ladino or another approved Jewish language.
2. Honed critical abilities in close reading, interpretation, and written analysis of ancient and modern Jewish texts.
3. Expanded knowledge of Jewish history, culture, philosophy, arts, religious practice, and politics in both the past and present.
4. Development, pursuit and presentation of original research on Jewish studies culminating in a senior capstone project.
5. Disposition of increased appreciation for diverse world views, value systems and interactions between Jews and non-Jews, minorities and majorities, in Wisconsin, the US, and across the globe.

## ADVISING AND CAREERS

Like other liberal arts majors, a degree in Jewish studies can prepare one for a variety of career paths. Graduates in Jewish studies have followed a variety of different career paths, including law, medicine, education, finance, social work, and the nonprofit sector. Jewish studies students are also well prepared to apply for graduate studies in fields such as law, education, business, and social work, as well as prime candidates for rabbinical or cantorial school, theological studies, and advanced levels of Jewish studies.

The Mosse/Weinstein Center for Jewish Studies encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors: Bernard-Donals, Brenner, Ermakoff, Goldberg, Guyer, Hutton, Louden, Michels, Nadler, Rosenberg, Rosenblum, Rosenmeyer, Schweber, Swack, Vardi

Associate Professors: Dobbs, Shelef, Strauss
Assistant Professors: Bitzan, Brisman, Hollander, Mandell, Yudkoff, Zilbergers

Lecturers: Blakely, Paretskaya, Sone, Yuchtman
Jewish Studies Faculty Information (http://jewishstudies.wisc.edu/ faculty)

## JEWISH STUDIES: JEWISH STUDIES AND EDUCATION

## REQUIREMENTS

A total of 34 credits. Students electing the Jewish studies and education option are responsible for satisfying the Language Requirement from Jewish Studies major.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Jewish Studies Requirements, 18 credits to include: |  |  |
| Introduction to Judaism (select 1 course): |  | 4 |
| JEWISH/ <br> RELIG ST 211 | Introduction to Judaism |  |
| JEWISH 231 | Elementary Topics in Jewish History (Jewish Law, Business, and Ethics) |  |
| Jewish Literature (select 1 course): |  | 3 |


| JEWISH/ <br> CLASSICS/ <br> LITTRANS/ <br> RELIG ST 227 | Introduction to Biblical Literature (in English) |  |
| :---: | :---: | :---: |
| JEWISH/ CLASSICS/ LITTRANS/ RELIG ST 237 | Biblical Poetry in Translation |  |
| JEWISH/ GERMAN/ LITTRANS 279 | Yiddish Literature and Culture in America |  |
| JEWISH/HEBR- <br> MOD 301 | Introduction to Hebrew Literature |  |
| JEWISH/HEBRMOD 302 | Introduction to Hebrew Literature |  |
| JEWISH/ LITTRANS/ RELIG ST 328 | Classical Rabbinic Literature in Translation |  |
| JEWISH/ CLASSICS/HEBRBIB/LITTRANS/ RELIG ST 332 | Prophets of the Bible |  |
| JEWISH/ CLASSICS/ RELIG ST 346 | Jewish Literature of the GrecoRoman Period |  |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation |  |
| JEWISH/HEBR- <br> MOD 401 | Topics in Modern Hebrew / Israeli Literature and Culture I |  |
| JEWISH/HEBR- <br> MOD 402 | Topics in Modern Hebrew / Israeli Literature and Culture II |  |
| JEWISH/ GERMAN 510 | German-Jewish Culture Since the 18th Century |  |
| JEWISH/HEBRBIB 513 | Biblical Texts, Poetry |  |
| JEWISH/HEBRBIB 514 | Biblical Texts, Poetry |  |
| JEWISH/ <br> ENGL 539 | Jewish Literatures in Diaspora |  |
| JEWISH 533 | Readings in Contemporary Hebrew Literature |  |
| JEWISH 534 | Readings in Contemporary Hebrew Literature |  |
| JEWISH/ <br> ENGL 593 | Literature of Jewish Identity in America |  |
| Jewish History (select | 2 courses): | 6 |
| JEWISH 202 | Topics in Jewish Studies |  |
| JEWISH/ HISTORY 219 | The American Jewish Experience: From Shtetl to Suburb |  |
| JEWISH/ <br> HISTORY 220 | Introduction to Modern Jewish History |  |
| JEWISH/ <br> HISTORY 373 | Modern Political History of the Jews: 1655-1919 |  |
| JEWISH/ <br> HISTORY 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 |  |


| JEWISH/ <br> RELIG ST 377 | Jewish Cultural History (in English) |  |
| :---: | :---: | :---: |
| JEWISH/ <br> HISTORY 416 | Eastern European Jews in the United States, 1880s-1930s |  |
| JEWISH/CURRIC/ HISTORY 515 | Holocaust: History, Memory and Education |  |
| JEWISH/ <br> HISTORY 518 | Anti-Semitism in European Culture, 1700-1945 |  |
| JEWISH/ HISTORY/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 |  |
| Hebrew Texts (select 2 courses): |  | 6 |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature |  |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature |  |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I |  |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II |  |
| HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry |  |
| HEBR-BIB/ <br> JEWISH 514 | Biblical Texts, Poetry |  |
| Education Requirements, 15 credits to include: |  |  |
| Select one of the following in developing a philosophical stance: |  | 3 |
| ED POL/ <br> PHILOS 545 | Philosophical Conceptions of Teaching and Learning |  |
| ED POL/ <br> PHILOS 550 | Philosophy of Moral Education |  |
| Select one of the following in education in Jewish studies in a democratic, pluralistic society: |  | 3 |
| ED POL 460 | Immigration, Education, and Equity |  |
| CURRIC/ED POL/ RELIG ST 516 | Religion and Public Education |  |
| Select one of the following in pedagogical/curricular issues pertinent to education in Jewish studies: |  | 3 |
| CURRIC 359 | Teaching of History and the Other Social Studies |  |
| CURRIC 431 | Young Adult Literature for Schools |  |
| CURRIC/JEWISH 515 | Holocaust: History, Memory and Education |  |
| Education and Jewish | Studies Requirements, to include: | 4 |
| JEWISH 675 <br> \& JEWISH 677 | Research Colloquium for Majors and Independent Research for Majors (capstone sequence) |  |

## JEWISH STUDIES, CERTIFICATE

Founded in 1991, the Mosse/Weinstein Center for Jewish Studies brings together a variety of disciplines to study and interpret Jewish and ancient Israelite history, religion, literature, politics, society, and culture. The center offers a broad selection of courses at all levels, which are cross-listed with other departments, including classics, curriculum and instruction, English, gender and women's studies, German, history, music,
philosophy, political science, religious studies, Slavic languages, and sociology.

The Jewish studies major offers students an in-depth study of 3,500 years of Jewish civilization. The program is interdisciplinary in nature and aims to provide students with a broadly based, rigorous liberal arts education in Jewish studies. While learning about Jewish history, religion, language, and culture, students also develop skills in critical thinking, reading, writing, and research-skills that are valuable to a range of career paths. Students with a particular interest in Modern Hebrew and Israel are encouraged to follow a specialized track in Modern Hebrew language, literature, and Israeli culture.

The Jewish studies major requires a minimum of 31 credits and proficiency in the Hebrew language to enable students to deal with Hebrew texts in the classroom and for research purposes. The credits are divided among several clusters that focus on Hebrew texts; literature, philosophy, and the arts; and history and social science. In addition, students must complete a two-course capstone sequence. Together, these courses support the acquisition of an integrated and coherent body of knowledge.

A certificate in Jewish studies is also available. Its aim is to acquaint students with a number of significant aspects of Jewish civilization and to introduce them to tools required for its study; it requires a minimum of 21 credits in seven courses.

The major has an education track that includes coursework in the School of Education. It requires a total of 34 credits-25 in Jewish studies and 9 in education (curriculum and instruction, and educational policy studies). This track provides a series of courses that define the role that education has played in Jewish civilization; Jewish ideas concerning the nature and aims of education; and philosophical, curricular, and pedagogical issues relating to education in Jewish studies in a pluralistic, democratic society This track does not lead to teacher certification.

## HOW TO GET IN

Students interested in a certificate in Jewish studies should make an appointment with the undergraduate advisor (undergradadviser@cjs.wisc.edu) to discuss requirements and courses.

## REQUIREMENTS

The certificate in Jewish studies aims to acquaint students with a number of significant aspects of Jewish civilization and to introduce them to some of the tools required for its study. In addition to a twosemester language requirement, students must complete coursework in literature, philosophy, and the arts; history and social sciences; and the pre-modern area. The certificate complements a major in any subject in the College of Letters \& Science. It also strengthens the applications of those students who intend to pursue careers or graduate study in a field related to Jewish studies.

## REQUIREMENTS

Certificate students must take $\mathbf{2 1}$ credits in seven courses, distributed as follows:

## SELECT TWO SEMESTERS OF HEBREW LANGUAGE LANGUAGE REQUIREMENT

Students must select two courses from either Biblical Hebrew, Modern Hebrew or Hebrew Texts. Students with a prior knowledge of the language are required to take one year of instruction at the appropriate level. Students whose prior knowledge is equivalent to four semesters or more of Hebrew language instruction are required to take two courses in Hebrew texts. The Center for Jewish Studies, 4223 Mosse Humanities Building, administers placement examinations.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Biblical Hebrew (Select 2 courses): |  |  |
| HEBR-BIB 103 <br> or HEBR- <br> BIB 303 | Elementary Biblical Hebrew, I Elementary Biblical Hebrew, I |  |
| HEBR-BIB 104 <br> or HEBR- <br> BIB 304 | Elementary Biblical Hebrew, II Elementary Biblical Hebrew, II |  |
| Modern Hebrew (Select 2 courses): |  |  |
| HEBR-MOD 101 | First Semester Hebrew |  |
| HEBR-MOD 201 | Third Semester Hebrew |  |
| HEBR-MOD 102 | Second Semester Hebrew |  |
| HEBR-MOD 202 | Fourth Semester Hebrew |  |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature |  |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature |  |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I |  |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II |  |
| Hebrew Texts (Select 2 courses): |  |  |
| HEBR-MOD/ JEWISH 301 | Introduction to Hebrew Literature |  |
| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature |  |
| HEBR-BIB 323 | Intermediate Biblical Hebrew, I |  |
| HEBR-BIB 324 | Intermediate Biblical Hebrew, II |  |
| HEBR-MOD/ JEWISH 401 | Topics in Modern Hebrew / Israeli Literature and Culture I |  |
| HEBR-MOD/ JEWISH 402 | Topics in Modern Hebrew / Israeli Literature and Culture II |  |
| HEBR-BIB/ JEWISH 513 | Biblical Texts, Poetry |  |
| HEBR-BIB/ JEWISH 514 | Biblical Texts, Poetry |  |

## SELECT ONE COURSE IN EACH OF THE FOLLOWING THREE CLUSTERS: <br> CLUSTER ONE: LITERATURE, PHILOSOPHY AND THE ARTS

Title
Introduction to Judaism

Credits
4

| JEWISH/CLASSICS/ <br> LITTRANS/ <br> RELIG ST 227 | Introduction to Biblical Literature (in English) | 4 |
| :---: | :---: | :---: |
| JEWISH 230 | Elementary Topics in Jewish Literature | 3-4 |
| JEWISH 232 | Elementary Topics in Jewish Philosophy and the Arts | 3-4 |
| JEWISH 236 | Bascom Course | 3 |
| JEWISH/CLASSICS/ <br> LITTRANS/ <br> RELIG ST 237 | Biblical Poetry in Translation | 3 |
| JEWISH/ GERMAN 267 | Yiddish Song and the Jewish Experience | 3-4 |
| JEWISH/GERMAN/ <br> LITTRANS 269 | Yiddish Literature and Culture in Europe | 3 |
| JEWISH/ <br> RELIG ST 278 | Food in Rabbinic Judaism | 3-4 |
| JEWISH/GERMAN/ <br> LITTRANS 279 | Yiddish Literature and Culture in America | 3 |
| JEWISH 299 | Directed Study | 1-3 |
| JEWISH/HEBRMOD 301 | Introduction to Hebrew Literature | 3 |
| JEWISH/HEBRMOD 302 | Introduction to Hebrew Literature | 3 |
| JEWISH/ <br> LITTRANS 318 | Modern Jewish Literature | 3-4 |
| JEWISH/LITTRANS/ RELIG ST 328 | Classical Rabbinic Literature in Translation | 3-4 |
| JEWISH/CLASSICS/ <br> HEBR-BIB/ <br> LITTRANS/ <br> RELIG ST 332 | Prophets of the Bible | 4 |
| JEWISH/CLASSICS/ RELIG ST 335 | King David in History and Tradition | 3 |
| JEWISH 343 | Israeli Fiction in Translation | 3-4 |
| JEWISH/CLASSICS/ RELIG ST 346 | Jewish Literature of the GrecoRoman Period | 3 |
| JEWISH 356 | Jerusalem, Holy City of Conflict and Desire | 3 |
| JEWISH/ <br> LITTRANS 367 | Israeli Fiction in Translation | 3-4 |
| JEWISH/HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 368 | The Bible in the Middle Ages | 3 |
| JEWISH/HEBRMOD 401 | Topics in Modern Hebrew / Israeli Literature and Culture I | 3 |
| JEWISH/HEBRMOD 402 | Topics in Modern Hebrew / Israeli Literature and Culture II | 3 |
| JEWISH 430 | Intermediate Topics in Jewish Literature | 3-4 |
| JEWISH 432 | Intermediate Topics in Jewish Philosophy and the Arts | 3-4 |
| JEWISH/PHILOS/ RELIG ST 435 | Jewish Philosophy from Antiquity to the Seventeenth Century | 3 |
| JEWISH/ <br> PHILOS 442 | Moral Philosophy and the Holocaust | 3 |


| JEWISH/ | Classical Rabbinic Texts | 3 |
| :--- | :--- | ---: |
| RELIG ST 448 | Undegraduate Seminar in Judaism <br> and the Arts | 3 |
| JEWISH 450 | Topics in Jewish Studies | 3 |
| JEWISH 490 | German-Jewish Culture Since the <br> JEWISH/ | 3 |
| GERMAN 510 | 18th Century | $1-3$ |

## CLUSTER TWO: HISTORY AND SOCIAL SCIENCE

| Code | Title | Credits |
| :--- | :--- | ---: |
| JEWISH/ | Introduction to Judaism | 4 |
| RELIG ST 211 |  | $3-4$ |
| JEWISH/ | Jews and American Pop. Culture |  |
| HISTORY 213 | The American Jewish Experience: | 4 |
| JEWISH/ | From Shtetl to Suburb |  |
| HISTORY 219 | Introduction to Modern Jewish <br> JEWISH/ <br> HISTORY 220 | History |
| JEWISH 231 | History | 4 |
| JEWISH 233 | Elementary Topics in Jewish <br> Studies: Social Sciences | $3-4$ |
| JEWISH/ | Introduction to Biblical Archaeology | $3-4$ |

CLASSICS 241

| JEWISH/SOC 258 | The Jews, States, and Citizenship: A <br> Sociological Perspective | 3 |
| :--- | :--- | ---: |
| JEWISH/ | Food in Rabbinic Judaism | $3-4$ |


| RELIG ST 278 |  | $1-3$ |
| :--- | :--- | ---: |
| JEWISH 299 | Directed Study | 4 |


| JEWISH/ | Modern Political History of the | 4 |
| :--- | :--- | :--- |
| HISTORY 373 | Jews: 1655-1919 | 4 |
| JEWISH/ | Modern Political History of the | 4 |


| HISTORY 374 | Jews: Era of Mass Movements, <br> $1870-1970$ | 4 |
| :--- | :--- | :--- |
| JEWISH/ | Jewish Cultural History (in English) |  |


| RELIG ST 377 |  |
| :--- | :--- | :--- |
| JEWISH/ Eastern European Jews in the | $3-4$ |


| HISTORY 416 | United States, 1880 s-1930s |  |
| :--- | :--- | :--- |
| JEWISH 431 | Intermediate Topics in Jewish |  |


| JEWISH/ | Biblical Archaeology | 3 |
| :--- | :--- | :--- |
| CLASSICS 451 |  |  |
| JEWISH/ | Biblical Archaeology | 2 |


| CLASSICS 452 |  |  |
| :--- | :--- | :--- |
| JEWISH 490 | Topics in Jewish Studies | 3 |

JEWISH/CURRIC/ Holocaust: History, Memory and 3

| HISTORY 515 | Education |  |
| :--- | :--- | :--- |
| JEWISH/ | Anti-Semitism in European Culture, | 3 |


| HISTORY 518 | 1700-1945 |  |
| :--- | :--- | :--- |
| JEWISH/HISTORY/ | Intellectual and Religious History of |  |


| RELIG ST 529 | European Jewry, 1648-1939 |  |
| :--- | :--- | :--- |
| JEWISH 625 | The Holocaust: Facts, Trials, | 3 |

JEWISH 631 Advanced Topics in Jewish History 3-4
\(\left.\begin{array}{llc}JEWISH 633 \& Advanced Topics in Jewish Studies: \& 3-4 <br>

Social Sciences\end{array}\right]\)| JEWISH/ | Israeli Politics and Society |
| :--- | :--- |
| POLI SCI 665 |  |
| JEWISH 699 | Directed Study |

## CLUSTER THREE: PRE-MODERN JEWISH HISTORY,

 CULTURE, OR LITERATURE| Code | Title | Credits |
| :---: | :---: | :---: |
| JEWISH/ RELIG ST 211 | Introduction to Judaism | 4 |
| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 227 | Introduction to Biblical Literature (in English) | 4 |
| JEWISH/CLASSICS/ <br> LITTRANS/ RELIG ST 237 | Biblical Poetry in Translation | 3 |
| JEWISH/ <br> CLASSICS 241 | Introduction to Biblical Archaeology | 4 |
| JEWISH/ RELIG ST 278 | Food in Rabbinic Judaism | 3-4 |
| JEWISH/LITTRANS/ RELIG ST 328 | Classical Rabbinic Literature in Translation | 3-4 |
| JEWISH/CLASSICS/ HEBR-BIB/ <br> LITTRANS/ RELIG ST 332 | Prophets of the Bible | 4 |
| JEWISH/CLASSICS/ RELIG ST 335 | King David in History and Tradition | 3 |
| JEWISH/CLASSICS/ RELIG ST 346 | Jewish Literature of the GrecoRoman Period | 3 |
| JEWISH 356 | Jerusalem, Holy City of Conflict and Desire | 3 |
| JEWISH/HISTORY/ MEDIEVAL/ RELIG ST 368 | The Bible in the Middle Ages | 3 |
| JEWISH/PHILOS/ RELIG ST 435 | Jewish Philosophy from Antiquity to the Seventeenth Century | 3 |
| JEWISH/ <br> RELIG ST 448 | Classical Rabbinic Texts | 3 |
| JEWISH/ <br> CLASSICS 451 | Biblical Archaeology | 3 |
| JEWISH/ <br> CLASSICS 452 | Biblical Archaeology | 2 |

## SELECT TWO ADDITIONAL JEWISH STUDIES OR MODERN HEBREW COURSES ABOVE TO MEET THE MINIMUM COURSE AND CREDIT REQUIREMENTS FOR THE CERTIFICATE

Notes: Jewish studies courses taken abroad may also satisfy the certificate requirements. Students who have taken such courses should consult with the certificate advisor. A directed study course (JEWISH 699 Directed Study) used to satisfy a cluster requirement must be approved in advance by the undergraduate advisor.

## RESIDENCE AND QUALITY OF WORK

A cumulative 2.000 GPA in all JEWISH courses and courses counting for the certificate

11 credits, counting toward the certificate, taken in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. At least two semesters of reading, understanding and conversing in Hebrew or another approved Jewish language.
2. Honed critical abilities in close reading, interpretation, and written analysis of ancient and modern Jewish texts.
3. Expanded knowledge of Jewish history, culture, philosophy, arts, religious practice, and politics in both the past and present.
4. Disposition of increased appreciation for diverse world views, value systems and interactions between Jews and non-Jews, minorities and majorities, in Wisconsin, the US, and across the globe.

## ADVISING AND CAREERS

Jewish studies can prepare one for a variety of career paths. Graduates in Jewish studies have followed a variety of different career paths, including law, medicine, education, finance, social work, and the nonprofit sector. Jewish studies students are also well prepared to apply for graduate studies in fields such as law, education, business, and social work, as well as prime candidates for rabbinical or cantorial school, theological studies, and advanced levels of Jewish studies.

The Mosse/Weinstein Center for Jewish Studies encourages students to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

[^41]- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Professors: Bernard-Donals, Brenner, Ermakoff, Goldberg, Guyer, Hutton, Louden, Michels, Nadler, Rosenberg, Rosenblum, Rosenmeyer, Schweber, Swack, Vardi

Associate Professors: Dobbs, Shelef, Strauss
Assistant Professors: Bitzan, Brisman, Hollander, Mandell, Yudkoff, Zilbergers

Lecturers: Blakely, Paretskaya, Sone, Yuchtman
Jewish Studies Faculty Information (http://jewishstudies.wisc.edu/ faculty)

## PHILOSOPHY

Philosophy involves reflection upon and understanding of all phases of human activity. Philosophy especially directs itself to the nature of knowledge and the most basic concepts of human understanding and value: morality, society, art and aesthetic experience, as well as science, politics, and religion. Philosophy is thus closely involved with other disciplines because, as human activities and quests for knowledge, they and their findings provide the material for philosophical inquiry. The courses offered by the department are designed to help students develop their own capacities to reflect intelligently on questions of fundamental and lasting significance. The philosophy major is intended to meet the needs of four types of students:

- those who wish to use philosophy as the organizing core of a liberal education;
- those who desire to study philosophy in preparation for graduate work in some other field, such as law, government, or theology;
- those who plan to major jointly in philosophy and one of the social and natural sciences or humanities; and
- those who have a professional interest in philosophy and intend to do graduate work in the subject.


## DEGREES/MAJORS/CERTIFICATES

- Philosophy, B.A. (p. 1165)
- Philosophy, B.S. (p. 1168)


## PEOPLE

Professors Bengson, Brighouse, Fletcher, Gibson, Gottlieb, Hausman, Kelleher, Mackay, Masrour, Messina, Nadler, Paul, Schectman, ShaferLandau, Shapiro, Sidelle, Sober, Southgate, Steinberg, Streiffer, Titlebaum, Vranas

## PHILOSOPHY, B.A.

Philosophy involves reflection upon and understanding of all phases of human activity. Philosophy especially directs itself to the nature of knowledge and the most basic concepts of human understanding and value: morality, society, art and aesthetic experience, as well as science, politics, and religion. Philosophy is thus closely involved with other disciplines because, as human activities and quests for knowledge, they and their findings provide the material for philosophical inquiry. The courses offered by the department are designed to help students develop their own capacities to reflect intelligently on questions of fundamental and lasting significance. The philosophy major is intended to meet the needs of four types of students:

- those who wish to use philosophy as the organizing core of a liberal education;
- those who desire to study philosophy in preparation for graduate work in some other field, such as law, government, or theology;
- those who plan to major jointly in philosophy and one of the social and natural sciences or humanities; and
- those who have a professional interest in philosophy and intend to do graduate work in the subject.


## HOW TO GET IN

Students should inform the philosophy office of their intention to major and be assigned an advisor within the department. More information can be found at major declaration (http://philosophy.wisc.edu/ undergraduate/major_declaration.php).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language
\&S Breadth

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |

Minimum
GPAs
2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

27 CREDITS AND 8 COURSES IN PHILOS

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS 211 | Elementary Logic (or equivalent; <br> should be taken as early as <br> possible) | $3-4$ |
| or PHILOS 511 | Symbolic Logic |  |
| PHILOS 430 | History of Ancient Philosophy | $3-4$ |
| PHILOS 432 | History of Modern Philosophy | $3-4$ |
| 5 PHILOS courses of <br> above |  | 15 |

above ${ }^{1}$

| PHILOS 433 | 19th Century Philosophers |
| :---: | :---: |
| PHILOS/JEWISH/ RELIG ST 435 | Jewish Philosophy from Antiquity to the Seventeenth Century |
| PHILOS 440 | Existentialism |
| PHILOS/ <br> ENVIR ST 441 | Environmental Ethics |
| PHILOS 454 | Classical Philosophers |
| PHILOS 464 | Classical Philosophers |
| PHILOS 481 | Junior Honors Seminar |
| PHILOS 482 | Junior Honors Seminar |
| PHILOS/ <br> RELIG ST 501 | Philosophy of Religion |
| PHILOS/ RELIG ST 502 | Special Topics in Philosophy of Religion |
| PHILOS 503 | Theory of Knowledge |
| PHILOS 504 | Special Topics in the Theory of Knowledge |
| PHILOS 506 | Study Abroad in Philosophy |
| PHILOS 511 | Symbolic Logic |
| PHILOS 512 | Methods of Logic |
| PHILOS/ <br> MED HIST 515 | Public Health Ethics |
| PHILOS 516 | Language and Meaning |
| PHILOS 520 | Philosophy of the Natural Sciences |
| PHILOS 521 | Philosophy of the Social Sciences |


| PHILOS 522 | Special Topic |  |
| :---: | :---: | :---: |
| PHILOS/ <br> ENVIR ST 523 | Philosophical Problems of the Biological Sciences |  |
| $\begin{aligned} & \text { PHILOS/ } \\ & \text { ECON } 524 \end{aligned}$ | Philosophy and Economics |  |
| PHILOS 526 | Philosophy and Literature |  |
| PHILOS 530 | Freedom Fate and Choice |  |
| PHILOS 541 | Modern Ethical Theories |  |
| PHILOS 543 | Special Topics in Ethics |  |
| PHILOS 549 | Great Moral Philosophers |  |
| PHILOS/ <br> ED POL 550 | Philosophy of Moral Education |  |
| PHILOS 551 | Philosophy of Mind |  |
| PHILOS 553 | Aesthetics |  |
| PHILOS 554 | Philosophy of the Artificial Sciences |  |
| PHILOS 555 | Political Philosophy |  |
| PHILOS 556 | Topics in Feminism and Philosophy |  |
| PHILOS 557 | Issues in Social Philosophy |  |
| PHILOS 559 | Philosophy of Law |  |
| PHILOS 560 | Metaphysics |  |
| PHILOS 562 | Special Topics in Metaphysics |  |
| PHILOS/ <br> AGRONOMY/ <br> C\&E SOC/ <br> MED HIST 565 | The Ethics of Modern Biotechnology |  |
| PHILOS/ <br> MATH 571 | Mathematical Logic |  |
| PHILOS 581 | Senior Honors Seminar |  |
| PHILOS 582 | Senior Honors Seminar |  |
| Additional credits-if necessary-to achieve 27 for the major ${ }^{2}$ |  | 3 |
| Total Credits |  | 27-30 |

1 Recommended to be taken in the sophomore or junior year
2 Excluding the following courses: PHILOS/JEWISH 442, PHILOS/ MED HIST 505, PHILOS/ED POL 545, PHILOS/MED HIST 558, PHILOS/MATH 571, PHILOS 599, PHILOS 681, PHILOS 682, PHILOS 691, PHILOS 692, and PHILOS 699. Students who wish to enroll for Senior Thesis or Senior Honors Thesis should consult their major advisor prior to doing so.

## DISTRIBUTION

At least 1 course from each category:

## Category A

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS/ | Philosophy of Religion | $3-4$ |
| RELIG ST 501 | Theory of Knowledge | 3 |
| PHILOS 503 | Special Topics in the Theory of <br> Knowledge (Topics that count: <br> "BhiLOS 504 <br>  <br>  <br> Ideals") | 3 |
| PHILOS 516 | Language and Meaning | 3 |
| PHILOS 520 | Philosophy of the Natural Sciences | 3 |
| PHILOS 530 | Freedom Fate and Choice | 3 |
| PHILOS 551 | Philosophy of Mind | 3 |


| PHILOS 560 | Metaphysics | 3 |
| :--- | :--- | :--- |
| PHILOS 562 | Special Topics in Metaphysics <br> (Topic that counts: <br> "Consciousness") | 3 |
|  |  |  |


| Category B <br> Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS 241 | Introductory Ethics | $3-4$ |
| PHILOS 253 | Philosophy of the Arts | $3-4$ |
| PHILOS 454 | Classical Philosophers (Topic that | 3 |
|  | counts: "Aristotle's Ethics") |  |
| PHILOS 541 | Modern Ethical Theories | 3 |
| PHILOS 549 | Great Moral Philosophers | 3 |
| PHILOS 553 | Aesthetics | 3 |
| PHILOS 555 | Political Philosophy | 3 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all PHILOS courses and courses that count for the major 2.000 GPA on 15 upper-level credits in the major, taken in residence ${ }^{3}$ 15 credits in PHILOS, taken on campus

3 PHILOS courses of at least 3 credits and numbered
400 and higher are upper level, except for. PHILOS/
JEWISH 442, PHILOS/MED HIST 505, PHILOS/
ED POL 545, PHILOS/MED HIST 558, PHILOS/
MATH 571, PHILOS 599, , PHILOS 681, PHILOS 682, PHILOS 691, PHILOS 692, and PHILOS 699.

## HONORS IN THE MAJOR

Students may declare Honors in the Philosophy Major in consultation with the Philosophy undergraduate advisor.

## HONORS IN THE PHILOSOPHY MAJOR: REQUIREMENTS

To earn Honors in the Major in Philosophy, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Minimum 3.300 overall university GPA
- Minimum a 3.500 GPA for all PHILOS courses
- 1 additional course from either Category A or Category B with a grade of B or better
- Two-semester Senior Honors Thesis in PHILOS 681 (1-3 credits) and PHILOS 682 (3 credits) with a grade of AB or better. ${ }^{4}$

4 Students will not be permitted to write a Senior Honors Thesis unless they have taken at least one advanced course on the topic on which they will be writing. Credits earned by writing a Senior Honors Thesis will not count toward the 27 minimum credits required for the major.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br>  <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
|  | Abroad/Study Away programs. |

## LEARNING OUTCOMES

1. Ability to think critically about arguments.
2. Ability to interpret complex texts accurately and analyze them logically.
3. Ability to communicate precisely and concisely in both writing and speech.
4. Familiarity with the history of Western philosophy and the major debates withing that tradition.
5. Ability to be engaged citizens who think carefully and well about their responsibilities to others.
6. Ability to exchange reasons about controversial matters respectfully and with the aim of uncovering the truth
7. Interpretative charity and intellectual honesty, which includes appropriate attribution to others of their ideas, and recognition and frankness about the limitations of one's own ideas.

## ADVISING AND CAREERS

## ADVISING

The Department of Philosophy encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with the SuccessWorks at the College of Letters \& Science. Philosophy majors develop important and widely marketable skills, like the ability to think critically, communicate clearly, and solve complex problems. This means that getting a degree in philosophy provides excellent preparation for a variety of careers.

Studying philosophy can also help you get into graduate school. Philosophy majors excel on standardized tests like the GRE, GMAT, and LSAT. They rank first among all majors on the verbal and the analytical section of the GRE. Philosophy majors also tend to do better than just about any other major on the LSAT. With a mean score of just over 157, they are second only to physics majors. When it comes to the GMAT, philosophy majors rank in the top five of all majors, and they consistently have higher scores than business majors (including management, finance, accounting, and marketing majors).

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and
liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Bengson, Brighouse, Fletcher, Gibson, Gottlieb, Hausman, Kelleher, Mackay, Masrour, Messina, Nadler, Paul, Schectman, ShaferLandau, Shapiro, Sidelle, Sober, Southgate, Steinberg, Streiffer, Titlebaum, Vranas

## RESOURCES AND SCHOLARSHIPS

## UNDERGRADUATE SCHOLARSHIPS

The Department of Philosophy has received generous support in order to fund two scholarships each academic year.

The Charles Manthey Winter Philosophy Scholarship is given to a major in philosophy who will graduate within the next four terms of the award and who has at least a 3.5 grade point average over the past two terms, and who can demonstrate financial need.

The Colonel Jerome Ellis Goodrich, USMC (retired), Scholarship is awarded to an undergraduate major in philosophy with academic merit and financial need, and who is a U.S. citizen.

Applications for these scholarships are typically due in early April and winners are honored at our annual Awards Banquet in May.

We also have an annual paper prize called the Temkin Undergraduate Essay Prize in Value Theory. This prize recognizes an outstanding essay in value theory, where this is construed quite broadly to include topics in political philosophy, philosophy of law, metaethics, applied ethics, etc. Essays are typically submitted in early April and the winner is also honored at our Awards Banquet.

If you have any questions about these scholarships or essay prize, you may send an email to frontoffice@philosophy.wisc.edu.

## PHILOSOPHY, B.S.

Philosophy involves reflection upon and understanding of all phases of human activity. Philosophy especially directs itself to the nature of knowledge and the most basic concepts of human understanding and
value: morality, society, art and aesthetic experience, as well as science, politics, and religion. Philosophy is thus closely involved with other disciplines because, as human activities and quests for knowledge, they and their findings provide the material for philosophical inquiry. The courses offered by the department are designed to help students develop their own capacities to reflect intelligently on questions of fundamental and lasting significance. The philosophy major is intended to meet the needs of four types of students:

- those who wish to use philosophy as the organizing core of a liberal education;
- those who desire to study philosophy in preparation for graduate work in some other field, such as law, government, or theology;
- those who plan to major jointly in philosophy and one of the social and natural sciences or humanities; and
- those who have a professional interest in philosophy and intend to do graduate work in the subject.


## HOW TO GET IN

Students should inform the philosophy office of their intention to major and be assigned an advisor within the department. More information can be found at major declaration (http://philosophy.wisc.edu/ undergraduate/major_declaration.php).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4- or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, |
| :--- | :--- |
|  | COMP SCI, STAT |
|  | Limit one each: COMP SCI, STAT |

L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits and Science
Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR 27 CREDITS AND 8 COURSES IN PHILOS

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS 211 | Elementary Logic (or equivalent; <br> should be taken as early as <br> possible) |  |
| or PHILOS 511 | Symbolic Logic |  |
| PHILOS 430 | History of Ancient Philosophy | $3-4$ |
| PHILOS 432 | History of Modern Philosophy | $3-4$ |
| 5 PHILOS courses of at least 3 credits numbered 400 and |  |  |
| above |  |  |



## DISTRIBUTION

At least 1 course from each category:

## Category A

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS/ | Philosophy of Religion | $3-4$ |
| RELIG ST 501 | Theory of Knowledge | 3 |
| PHILOS 503 | Special Topics in the Theory of <br> Knowledge (Topics that count: <br> "Bayesian Epist" and "Epistemic <br> Ideals") | 3 |
| PHILOS 504 516 | Language and Meaning |  |
| PHILOS 520 | Philosophy of the Natural Sciences | 3 |
| PHILOS 530 | Freedom Fate and Choice | 3 |
| PHILOS 551 | Philosophy of Mind | 3 |
| PHILOS 560 | Metaphysics | 3 |
| PHILOS 562 | Special Topics in Metaphysics <br> (Topic that counts: | 3 |
|  | "Consciousness") | 3 |

## Category B

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS 241 | Introductory Ethics | $3-4$ |
| PHILOS 253 | Philosophy of the Arts | $3-4$ |
| PHILOS 454 | Classical Philosophers (Topic that | 3 |
| PHILOS 541 | counts: "Aristotle's Ethics") |  |
| PHILOS 549 | Modern Ethical Theories | 3 |
| PHILOS 553 | Aesthetics | 3 |
| PHILOS 555 | Political Philosophy | 3 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all PHILOS courses and courses that count for the major
2.000 GPA on 15 upper-level credits in the major, taken in residence ${ }^{3}$ 15 credits in PHILOS, taken on campus

3 PHILOS courses of at least 3 credits and numbered 400 and higher are upper level, except for. PHILOS/ JEWISH 442, PHILOS/MED HIST 505, PHILOS/ ED POL 545, PHILOS/MED HIST 558, PHILOS/ MATH 571, PHILOS 599, , PHILOS 681, PHILOS 682, PHILOS 691, PHILO and PHILOS 699.

## HONORS IN THE MAJOR

Students may declare Honors in the Philosophy Major in consultation with the Philosophy undergraduate advisor.

## HONORS IN THE PHILOSOPHY MAJOR: REQUIREMENTS

To earn Honors in the Major in Philosophy, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Minimum 3.300 overall university GPA
- Minimum a 3.500 GPA for all PHILOS courses
- 1 additional course from either Category A or Category B with a grade of $B$ or better
- Two-semester Senior Honors Thesis in PHILOS 681 (1-3 credits) and PHILOS 682 ( 3 credits) with a grade of $A B$ or better. ${ }^{4}$

4
Students will not be permitted to write a Senior Honors Thesis unless they have taken at least one advanced course on the topic on which they will be writing. Credits earned by writing a Senior Honors Thesis will not count toward the 27 minimum credits required for the major.

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Work ofUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Ability to think critically about arguments.
2. Ability to interpret complex texts accurately and analyze them logically.
3. Ability to communicate precisely and concisely in both writing and speech.
4. Familiarity with the history of Western philosophy and the major debates withing that tradition.
5. Ability to be engaged citizens who think carefully and well about their $s^{r}$ Esfzonsibilities to others.
6. Ability to exchange reasons about controversial matters respectfully and with the aim of uncovering the truth.
7. Interpretative charity and intellectual honesty, which includes appropriate attribution to others of their ideas, and recognition and frankness about the limitations of one's own ideas.

## ADVISING AND CAREERS

## ADVISING

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- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
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- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

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If you have any questions about these scholarships or essay prize, you may send an email to frontoffice@philosophy.wisc.edu.

## PHYSICS

The Department of Physics has a long history of providing students with a great educational experience. The department awarded its first Ph.D. in 1899. Since then, physics students have earned degrees in virtually every area of physics, and the department's faculty has played key roles in a myriad of important research efforts.

Physics is the science of the properties of matter, radiation, and energy in all forms. As such, it is the most fundamental of the sciences. It provides the underlying framework for the other physical sciences and engineering and for understanding physical processes in biological and environmental sciences.

## CHOOSE TO BE A PHYSICS MAJOR

WHY STUDY PHYSICS?

- Intellectual Satisfaction. First, and foremost, physics satisfies our deep desire to understand how the universe works. Physics is interesting.
- Intellectual Challenge. By striving for fundamental understanding, the physicist accepts the challenge to move past a merely descriptive approach of our world and probes deeply into how and why it works.
- Physics Produces New Technology. Today's esoteric physics research will become tomorrow's technological advances.
- Technical Expertise. Physicists exploit forefront technologies in their pursuits
- Flexibility. In a fast-paced and changing world, it is much more important to have a broad substantive education than to be trained in a specific skill. We teach people how to think, and how to apply and extend what they know to new types of problems.
- Physics is Analytical and Quantitative. People who can reason analytically and quantitatively are essential for the success of almost any pursuit.


## YOUR FUTURE IS SO BRIGHT . . .

A degree in physics helps prepare students for employment in industry, research, government, and academia. A bachelor's degree from the undergraduate physics program will provide an overall view of both classical and modern physics along with problem-solving ability and the flexibility to continue learning.

Your education can

Prepare you for employment in industrial or governmental laboratories

- Prepare you for graduate studies for master's or doctoral degrees in experimental or theoretical physics.
- Provide a broad background for further work in other sciences, such as materials sciences, aerospace, astronomy, computer science, geophysics, meteorology, radiology, medicine, biophysics, engineering, and environmental studies.
- Provide a science-oriented liberal education. This training can be useful in some areas of business administration, law, or other fields where a basic knowledge of science is useful.
Provide part of the preparation you need to teach physics. To teach physics in high school, you will also take education courses to become certified. You will need a doctoral degree to become a college or university professor


## PHYSICS MENTOR PROGRAM

Any student contemplating becoming a physics major is encouraged to obtain a faculty mentor. A mentor is a faculty member with whom students can discuss physics, courses, careers, graduate schools, aspirations, etc. Mentors are not primarily academic advisors. Information is available at the department office.

## OTHER PROGRAMS

## AMEP

A program in applied mathematics, engineering and physics (AMEP)
(p. 1077) is described in its own section of the Guide.

## Astronomy-Physics

Students interested in an astronomy-physics major should contact the astronomy department (p. 460).

## Education-Physics

A student working toward the Bachelor of Science-Education degree may major or minor in physics. Interested students should contact the School of Education (p. 1380). Upon request, the physics department will assign an advisor.

## Medical Physics

A suggested curriculum for students interested in graduate study in medical physics is available in the medical physics (https:// www.medphysics.wisc.edu) department office.

## DEGREES/MAJORS/CERTIFICATES

- Physics, B.A. (p. 1173)
- Physics, B.S. (p. 1180)
- Physics, Certificate (p. 1186)


## PEOPLE

## FACULTY

Yang Bai (https://www.physics.wisc.edu/people/yangbai), Associate Professor
Baha Balantekin (https://www.physics.wisc.edu/people/bahabalantekin), Professor
Vernon Barger (https://www.physics.wisc.edu/people/vernon-dbarger), Professor
Keith Bechtol (https://www.physics.wisc.edu/people/keithbechtol), Assistant Professor
Stas Boldyrev (https://www.physics.wisc.edu/people/stanislavboldyrev), Professor
Victor Brar (https://www.physics.wisc.edu/people/victorbrar), Assistant Professor
Duncan Carlsmith (https://www.physics.wisc.edu/people/ duncancarlsmith), Professor
Daniel Chung (https://www.physics.wisc.edu/people/daniel-jchung), Professor
Susan Coppersmith (https://www.physics.wisc.edu/people/susanncoppersmith), Professor
Sridhara Dasu (https://www.physics.wisc.edu/people/sridharadasu), Department Chair and Professor
Jan Egedal (https://www.physics.wisc.edu/people/janegedal), Associate Professor
Mark Eriksson (https://www.physics.wisc.edu/people/markeriksson), Professor
Lisa Everett (https://www.physics.wisc.edu/people/lisa-leverett), Professor
Cary Forest (https://www.physics.wisc.edu/people/cary-bforest),

## Professor

Pupa Gilbert (https://www.physics.wisc.edu/people/pupagilbert), Professor
Francis Halzen (https://www.physics.wisc.edu/people/francis-lhalzen), Professor
Kael Hanson (https://www.physics.wisc.edu/people/kael-dhanson), Professor
Aki Hashimoto (https://www.physics.wisc.edu/people/akihashimoto), Professor
Matthew Herndon (https://www.physics.wisc.edu/people/matthewfherndon), Professor
Lev loffe (https://www.physics.wisc.edu/people/levioffe), Professor Robert Joynt (https://www.physics.wisc.edu/people/robert-jjoynt), Professor
Albrecht Karle (https://www.physics.wisc.edu/people/albrechtkarle), Professor
Shimon Kolkowtiz (https://www.physics.wisc.edu/people/ shimonkolkowitz), Assistant Professor

James Lawler (https://www.physics.wisc.edu/people/james-elawler), Professor
Alex Levchenko (https://www.physics.wisc.edu/people/alexlevchenko),
Graduate Chair and Associate Professor
Dan McCammon (https://www.physics.wisc.edu/people/ danmccammon), Professor
Robert McDermott (https://www.physics.wisc.edu/people/robertfmcdermott), Professor
Marshall Onellion (https://www.physics.wisc.edu/people/marshallfonellion), Professor
Kimberly Palladino (https://www.physics.wisc.edu/people/kimberlyjpalladino), Assistant Professor
Yibin Pan (https://www.physics.wisc.edu/people/yibinpan), Associate

## Professor

Mark Rzchowski (https://www.physics.wisc.edu/people/markrzchowski), Undergraduate Chair and Professor
Mark Saffman (https://www.physics.wisc.edu/people/marksaffman), Professor
John Sarff (https://www.physics.wisc.edu/people/john-ssarff), Professor Gary Shiu (https://www.physics.wisc.edu/people/garyshiu), Professor Wesley Smith (https://www.physics.wisc.edu/people/wesley-hsmith),

## Professor

Paul Terry (https://www.physics.wisc.edu/people/paul-wterry), Professor
Peter Timbie (https://www.physics.wisc.edu/people/peter-ttimbie),

## Professor

Justin Vandenbroucke (https://www.physics.wisc.edu/people/ justinvandenbroucke), Assistant Professor
Maxim Vavilov (https://www.physics.wisc.edu/people/maxim-gvavilov),

## Professor

Thad Walker (https://www.physics.wisc.edu/people/thad-gwalker), Professor
Stefan Westerhoff (https://www.physics.wisc.edu/people/
stefanwesterhoff), Professor
Michael Winokur (https://www.physics.wisc.edu/people/michaeljwinokur), Professor
Sau Lan Wu (https://www.physics.wisc.edu/people/sau-lanwu), Professor
Deniz Yavuz (https://www.physics.wisc.edu/people/denizyavuz),

## Professor

Ellen Zweibel (https://www.physics.wisc.edu/people/ellen-gzweibel), Professor

## PHYSICS, B.A.

## WELCOME TO THE UW-MADISON DEPARTMENT OF PHYSICS

We have a long history of providing our students with a great educational experience. Our physics department awarded it's first Ph.D. in 1899. Since then, our students have earned degrees in virtually every area of physics, and our faculty have played key roles in a myriad of important research efforts.

Physics is the science of the properties of matter, radiation, and energy in all forms. As such, it is the most fundamental of the sciences. It provides the underlying framework for the other physical sciences and engineering and for understanding physical processes in biological and environmental sciences.

## CHOOSE TO BE A PHYSICS MAJOR

## WHY STUDY PHYSICS?

- Intellectual Satisfaction. First, and foremost, physics satisfies our deep desire to understand how the universe works. Physics is interesting.
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- Physics Produces New Technology. Today's esoteric physics research will become tomorrow's technological advances.
- Technical Expertise. Physicists exploit forefront technologies in their pursuits.
- Flexibility. In a fast-paced and changing world, it is much more important to have a broad substantive education than to be trained in a specific skill. We teach people how to think, and how to apply and extend what they know to new types of problems.
Physics is Analytical and Quantitative. People who can reason analytically and quantitatively are essential for the success of almost any pursuit.


## YOUR FUTURE IS SO BRIGHT...

A degree in physics helps prepare you for employment in industry, research, government, and academia. A bachelor's degree from the undergraduate physics program will provide an overall view of both classical and modern physics along with problem-solving ability and the flexibility to continue learning.

Your education can:

- Prepare you for employment in industrial or governmental laboratories
- Prepare you for graduate studies for master's or doctoral degrees in experimental or theoretical physics.
- Provide a broad background for further work in other sciences, such as materials sciences, aerospace, astronomy, computer science, geophysics, meteorology, radiology, medicine, biophysics, engineering, and environmental studies.
- Provide a science-oriented liberal education. This training can be useful in some areas of business administration, law, or other fields where a basic knowledge of science is useful.
- Provide part of the preparation you need to teach physics. To teach physics in high school, you will also take education courses to become certified. You will need a doctoral degree to become a college or university professor.

Interested in the undergraduate physics program? Check out the physics undergraduate page (https://www.physics.wisc.edu/academics/ undergrads) or browse the Undergraduate Physics Majors Handbook (https://www.physics.wisc.edu/undergrads/handbook.pdf).

## OTHER PROGRAMS

## AMEP

A program in applied mathematics, engineering and physics (AMEP)
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## Education-Physics

A student working toward the Bachelor of Science-Education degree may major or minor in physics. Interested students should contact the School of Education (p. 1380). Upon request, the physics department will assign an advisor.

## Medical Physics

A suggested curriculum for students interested in graduate study in medical physics is available in the medical physics (https:// www.medphysics.wisc.edu) department office.

## HOW TO GET IN

## TO DECLARE A PHYSICS MAJOR

Students must declare the physics major by filing out a major declaration form (https://www.physics.wisc.edu/sites/default/files/Physics \%20Declaration\%20Form.pdf), signed by a physics undergraduate advisor. They should talk with one of the undergraduate advisors (p. 1177) as soon as they know they might have an interest in the physics major. Students can declare their physics major at any time after completing their first physics course on the UW-Madison campus, and we encourage them to do this as early as possible. They must have a 2.5 GPA in physics and math courses taken at UW-Madison at the time they declare. In all cases, the major must be declared before the semester of graduation. The form can be obtained at the department office in 2320 Chamberlin Hall. Note: Students should bring a copy of their current course history when they talk with the undergraduate advisor.

## ENGINEERING AND OTHER NON-L\&S MAJORS SEEKING AN ADDITIONAL MAJOR IN PHYSICS

An undergraduate in any college other than Letters \& Science (L\&S) needs to complete the physics requirements for the physics major, and the L\&S residence and quality of work in the major requirements. None of the other requirements of L\&S need to be satisfied. Students majoring in any other program that is not in L\&S require formal approval from the other college to declare the additional major in physics. This process may delay declaring the major in physics.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

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## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
Foreign

Language

L\&S Breadth

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit |  |

Minimum
GPAs
2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The physics major requires 35 credits from the following:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Requirements for the Major |  |  |
| Introductory Physics |  |  |
| Select one of the | owing First Introductory Courses: | 5 |
| PHYSICS 247 | A Modern Introduction to Physics (recommended) ${ }^{1}$ |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| $\begin{aligned} & \text { E M A } 201 \\ & \& \text { E M A } 202 \end{aligned}$ | Statics and Dynamics ${ }^{2}$ |  |
| $\begin{aligned} & \text { E M A } 201 \\ & \text { \& M E } 240 \end{aligned}$ | Statics and Dynamics ${ }^{2}$ |  |

Select one of the following Second Introductory Courses: 5

PHYSICS 248 A Modern Introduction to Physics (recommended)
PHYSICS 208 General Physics
PHYSICS 202 General Physics
Select one of the following Third Introductory Courses: 3-4
PHYSICS 249 A Modern Introduction to Physics (recommended)
PHYSICS 205 Modern Physics for Engineers
PHYSICS/ Introduction to Solid State
ECE 235 Electronics
PHYSICS 241 Introduction to Modern Physics
Core Physics 3

PHYSICS 311 Mechanics
Select one of the following options: 3
Option 1:
PHYSICS 322 Electromagnetic Fields
Option 2: ${ }^{3}$
E C E 220 Electrodynamics I
ECE $320 \quad$ Electrodynamics II

| E C E 420 | Electromagnetic Wave Transmission |  |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| PHYSICS 415 | Thermal Physics |  |
| CHEM 561 \& CHEM 562 | Physical Chemistry and Physical Chemistry ${ }^{4}$ |  |
| M E 361 | Thermodynamics |  |
| Select one of the following: |  | 3-6 |
| PHYSICS 448 <br> \& PHYSICS 449 | Atomic and Quantum Physics and Atomic and Quantum Physics (recommended) |  |
| PHYSICS 531 | Introduction to Quantum Mechanics |  |
| Laboratory ${ }^{5}$ |  |  |
| Select 6 credits from the following: |  | 6 |
| Full registered credit per course: |  |  |
| PHYSICS 307 | Intermediate Laboratory-Mechanics and Modern Physics |  |
| PHYSICS 308 | Intermediate LaboratoryElectromagnetic Fields and Optics |  |
| PHYSICS 407 | Advanced Laboratory |  |
| Two credits applies for each of these courses: |  |  |
| PHYSICS 321 | Electric Circuits and Electronics |  |
| PHYSICS 623 | Electronic Aids to Measurement |  |
| PHYSICS 625 | Applied Optics |  |
| N E 427 | Nuclear Instrumentation Laboratory |  |
| N E 428 | Nuclear Reactor Laboratory |  |
| One credit applies for each of these courses: |  |  |
| E C E 305 | Semiconductor Properties Laboratory |  |
| E C E 313 | Optoelectronics Lab |  |
| Select additional electives to reach 35-credit minimum for the major: |  |  |
| Advanced Physics Electives ${ }^{5}$ |  |  |
| PHYSICS 301 | Physics Today ${ }^{6}$ |  |
| PHYSICS 325 | Wave Motion and Optics |  |
| PHYSICS 406 | Special Topics in Physics |  |
| PHYSICS/ <br> ENVIR ST 472 | Scientific Background to Global Environmental Problems |  |
| PHYSICS/B M E/ <br> H ONCOL/ <br> MED PHYS 501 | Radiological Physics and Dosimetry |  |
| PHYSICS 507 | Graduate Laboratory |  |
| PHYSICS/E C E/ <br> NE 525 | Introduction to Plasmas |  |
| PHYSICS/E C E/ NE 527 | Plasma Confinement and Heating |  |
| PHYSICS 535 | Introduction to Particle Physics |  |
| PHYSICS 545 | Introduction to Atomic Structure |  |
| PHYSICS/ <br> ECE 546 | Lasers |  |
| PHYSICS 551 | Solid State Physics |  |

PHYSICS/ Microscopy of Life
ANATOMY/B M E/
MED PHYS/
PHMCOL-M/
RADIOL 619

It is recommended that students follow one of the sequences PHYSICS 247-PHYSICS 248, PHYSICS 207-PHYSICS 208, or PHYSICS 201 -PHYSICS 202 for the first two courses, and PHYSICS 249 or PHYSICS 241 is strongly recommended for the third course. But any combination can be used to satisfy the requirements, except that students may not transfer into the PHYSICS 247-PHYSICS 248-PHYSICS 249 sequence from another introductory sequence.
A maximum of 5 credits from E M A 201, E M A 202 and M E 240 count toward the 35 required.

For nonphysics courses, students will receive only the credit applied as lab toward the 35 -credit requirement.
6 It is recommended that the student's program include the seminar PHYSICS 301 Physics Today.

## RESIDENCE AND QUALITY OF WORK IN THE MAJOR

- 2.000 GPA in all PHYSICS and major courses
- 2.000 on at least 15 credits in upper-level work taken in residence: courses in Core, Laboratory, and Advanced Physics Electives
- 15 credits in PHYSICS, taken on campus


## DISTINCTION IN THE MAJOR

Distinction in the Major requires no declaration, and is awarded at the time of graduation. Students may not receive Distinction and Honors in the same major. To receive Distinction in the Major, students must have met the following requirements:

- 3.300 university GPA
- 3.300 GPA in all major and major subject (physics) courses
- 6 additional credits in advanced-level physics beyond the minimum required for the major.


## THESIS OF DISTINCTION

An exceptional original thesis will be designated as a Thesis of Distinction upon recommendation by the department.

## MATHEMATICS

MATH 221 -MATH 222-MATH 234 or equivalents are necessary since they are prerequisites for other courses.

## CHEMISTRY

A college course in chemistry is advised for all physics students.

## COMPUTING

Students should become familiar with scientific programming using a language such as C or FORTRAN. The computer sciences department
offers introductory courses. The Division of Information Technology (DoIT) also offers short courses to introduce programming.

## HONORS IN THE MAJOR

Students may declare Honors in this Major in Physics in consultation with their major advisor.

## HONORS IN THE PHYSICS MAJOR: REQUIREMENTS

To earn Honors in the Major in Physics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 university GPA
- Earn a 3.300 GPA in all PHYSICS courses, and all courses accepted in the major
- Complete 12 credits for Honors in courses counting in the major, with a grade of $B$ or better, to include:
- 9 credits at the advanced level
- A two-semester Senior Honors Thesis in PHYSICS 681 Senior Honors Thesis and PHYSICS 682 Senior Honors Thesis for a total of 6 credits


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Understand basic physical principles.
2. Solve problems proficiently using both quantitative and qualitative applications of these physical principles.
3. Appreciate the excitement of physics and be acquainted with a wide range of research areas in physics.
4. Know how to perform quantitative measurements of physical phenomena and understand the statistical significance of observations made in the presence of statistical and systematic uncertainties.
5. Be prepared for graduate study and/or careers in STEM fields.
6. Communicate effectively with scientific peers and the public, both orally and in writing.
7. Understand their own learning processes and be able to continue to educate themselves after graduation.

## ADVISING AND CAREERS

## PHYSICS UNDERGRADUATE ADVISORS

## Professor Dan McCammon

6207 Chamberlin Hall
608-262-5916

## Professor Stefan Westerhoff

4209 Chamberlin Hall
608-262-3989

## Professor Michael Winokur

5106 Chamberlin Hall
608-262-5425

## AMEP Advisor

## Professor Cary Forest

3277 Chamberlin Hall 608-263-0486

## Professor Robert McDermott

5112 Chamberlin Hall
608-263-4476
The Department of Physics encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## Additional Resources:

- Link to physics department student jobs and research opportunities (https://www.physics.wisc.edu/academics/undergrads/news)


## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information,
see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

## FACULTY

Yang Bai (https://www.physics.wisc.edu/people/yangbai), Associate Professor
Baha Balantekin (https://www.physics.wisc.edu/people/bahabalantekin), Professor
Vernon Barger (https://www.physics.wisc.edu/people/vernon-dbarger), Professor
Keith Bechtol (https://www.physics.wisc.edu/people/keithbechtol), Assistant Professor
Stas Boldyrev (https://www.physics.wisc.edu/people/stanislavboldyrev), Professor
Victor Brar (https://www.physics.wisc.edu/people/victorbrar), Assistant Professor
Duncan Carlsmith (https://www.physics.wisc.edu/people/ duncancarlsmith), Professor
Daniel Chung (https://www.physics.wisc.edu/people/daniel-jchung), Professor
Susan Coppersmith (https://www.physics.wisc.edu/people/susanncoppersmith), Professor
Sridhara Dasu (https://www.physics.wisc.edu/people/sridharadasu), Department Chair and Professor
Jan Egedal (https://www.physics.wisc.edu/people/janegedal), Associate Professor
Mark Eriksson (https://www.physics.wisc.edu/people/markeriksson), Professor
Lisa Everett (https://www.physics.wisc.edu/people/lisa-leverett), Professor
Cary Forest (https://www.physics.wisc.edu/people/cary-bforest), Professor
Pupa Gilbert (https://www.physics.wisc.edu/people/pupagilbert), Professor
Francis Halzen (https://www.physics.wisc.edu/people/francis-lhalzen), Professor
Kael Hanson (https://www.physics.wisc.edu/people/kael-dhanson), Professor
Aki Hashimoto (https://www.physics.wisc.edu/people/akihashimoto), Professor
Matthew Herndon (https://www.physics.wisc.edu/people/matthewfherndon), Professor
Lev loffe (https://www.physics.wisc.edu/people/levioffe), Professor Robert Joynt (https://www.physics.wisc.edu/people/robert-jjoynt), Professor
Albrecht Karle (https://www.physics.wisc.edu/people/albrechtkarle), Professor
Shimon Kolkowtiz (https://www.physics.wisc.edu/people/ shimonkolkowitz), Assistant Professor
James Lawler (https://www.physics.wisc.edu/people/james-elawler), Professor
Alex Levchenko (https://www.physics.wisc.edu/people/alexlevchenko), Graduate Chair and Associate Professor
Dan McCammon (https://www.physics.wisc.edu/people/ danmccammon), Professor

Robert McDermott (https://www.physics.wisc.edu/people/robertfmcdermott), Professor
Marshall Onellion (https://www.physics.wisc.edu/people/marshallfonellion), Professor
Kimberly Palladino (https://www.physics.wisc.edu/people/kimberlyjpalladino), Assistant Professor
Yibin Pan (https://www.physics.wisc.edu/people/yibinpan), Associate Professor
Mark Rzchowski (https://www.physics.wisc.edu/people/markrzchowski), Undergraduate Chair and Professor
Mark Saffman (https://www.physics.wisc.edu/people/marksaffman), Professor
John Sarff (https://www.physics.wisc.edu/people/john-ssarff), Professor Gary Shiu (https://www.physics.wisc.edu/people/garyshiu), Professor
Wesley Smith (https://www.physics.wisc.edu/people/wesley-hsmith),
Professor
Paul Terry (https://www.physics.wisc.edu/people/paul-wterry), Professor
Peter Timbie (https://www.physics.wisc.edu/people/peter-ttimbie),
Professor
Justin Vandenbroucke (https://www.physics.wisc.edu/people/ justinvandenbroucke), Assistant Professor
Maxim Vavilov (https://www.physics.wisc.edu/people/maxim-gvavilov), Professor
Thad Walker (https://www.physics.wisc.edu/people/thad-gwalker), Professor
Stefan Westerhoff (https://www.physics.wisc.edu/people/
stefanwesterhoff), Professor
Michael Winokur (https://www.physics.wisc.edu/people/michaeljwinokur), Professor
Sau Lan Wu (https://www.physics.wisc.edu/people/sau-lanwu), Professor
Deniz Yavuz (https://www.physics.wisc.edu/people/denizyavuz), Professor
Ellen Zweibel (https://www.physics.wisc.edu/people/ellen-gzweibel), Professor

## WISCONSIN EXPERIENCE

## PHYSICS UNDERGRADUATE COLLOQUIUM

There is a weekly series of talks in the spring semester called "Physics Today," at which a topic of local research is described by one of the physics faculty. These are open and may be attended by anyone. They can also be taken as a course, PHYSICS 301 Physics Today. See the Course Guide for location and time.

## THE PHYSICS CLUB

The University Physical Society (UPS)-also known as the Physics Club -is a student organization for people interested in physics and related fields.

## WHAT DOES THE PHYSICS CLUB DO?

The Physics Club organizes events such as seminars, tours, trips, and socials for its members. Physics Club volunteers also offer free drop-in tutoring to students in introductory physics and astronomy classes. In addition, we maintain subscriptions to science related magazines such as Scientific American, Astronomy, and Physics Today, which are kept in the club's room located at 2328 Chamberlin Hall. Every Friday afternoon, we meet with the physics colloquium speaker to learn about the process of
becoming a scientist. In addition, UPS sponsors a variety of other events. For example, in the past, we have taken took a field trip to Fermilab, sponsored a racquetball tournament, and have frequently gathered for social events such as ice skating, movie night, and bowling.

## WHY SHOULD YOU JOIN THE PHYSICS CLUB?

By joining the Physics Club you'll be meeting many physics majors, who are, in general, really cool people to hang out with. If you are thinking about declaring a physics major, this is the place to come for helpful advice about taking classes and finding an undergraduate job in the physics department. If you join, you can get access to the Physics Club room, 2328 Chamberlin Hall. Joining also adds you to the club email list, so you can be notified about club sponsored events.

## PERKS OF BEING A PHYSICS CLUB MEMBER

When you join the Physics Club, you get access to an excellent room, 2328 Chamberlin Hall. This room contains a refrigerator, reference shelves of textbooks, couch, tables, and chairs, a phone, blackboards, and a microwave. We have a several computers in the room. You can get your own key to the room and visit at your leisure, and stay as long as you like. Plus, you get the added bonus of knowing people who are in your classes.

## University Physical Society

2328 Chamberlin Hall
ups.physics.wisc.edu
ups-officers@googlegroups.com
To Join:
Drop by Room 2328 Chamberlin Hall and pick up a membership form.
Turn in a completed form with your \$5 annual dues to a UPS club officer.

## PHYSICS LEARNING CENTER

The Physics Learning Center. Striving to help all students succeed in Physics

- Do you enjoy Physics?
- Are you patient?
- Do you like to teach?
-Would you like to help other undergraduate students?
The Physics Learning Center (PLC) matches upper-level undergraduate students as tutor/mentors in small study groups with students studying introductory physics (algebra-based PHYSICS 103-PHYSICS 104 and calculus-based PHYSICS 207-PHYSICS 208). Physics Peer Mentor Tutors meet twice a week with the same small group of students to overview key concepts, choose and supervise practice problems, answer questions, and serve as a mentor. We strive to create a supportive learning environment to help students gain skills, increase confidence, and meet potential study partners.

Peer mentor tutors receive extensive training in teaching physics and in general pedagogy. Tutors meet with a PLC staff member each week to discuss strategies for teaching course content, including how to use teaching materials that stress conceptual understanding. In addition, tutors from all courses meet as a group for a weekly teaching seminar to discuss issues such as group dynamics, techniques for actively involving students in learning, helping students to prepare for exams, raising awareness of diversity in student experiences, resources on campus, and so on.

Our peer mentor tutors report that they greatly enjoy working with their students and in the process strengthen their own foundation in physics and presentation skills. They also tell us that teaching physics helps to
review for the Graduate Record Exam and to prepare for postgraduate teaching in middle/high school or as a university teaching assistant. Most tutors are upper-class students majoring in physics, astrophysics, secondary science education, and engineering. We also welcome students from other fields if they have a strong physics background. Students receive either independent study credit or a stipend for participation in the Physics Peer Mentor Tutor program. To apply, please submit a resume, your transcript (unofficial copy is fine), and a short statement about why you would like to be a physics peer mentor yutor (1⁄2-1 page).

Physics Learning Center
2337/2338 Chamberlin Hall
Contact: Susan Nossal
2328 Chamberlin Hall
nossal@physics.wisc.edu
608-262-9107

## PHYSICS MENTOR PROGRAM

Any student contemplating becoming a physics major is encouraged to obtain a faculty mentor. A mentor is a faculty member with whom students can discuss physics, courses, careers, graduate schools, aspirations, and so on. Mentors are not primarily academic advisors.

## RESOURCES AND SCHOLARSHIPS

## STUDENT AWARDS

The Fay Ajzenberg-Selove Award is presented to undergraduate women majoring in physics, astronomy, or physics/astronomy for the purpose of encouraging women to continue their careers in science. Dr. AjzenbergSelove, who received her Ph.D. in physics in 1952, is currently a professor emerita the University of Pennsylvania.

The Dr. Maritza Irene Stapanian Crabtree Award in physics was established by William Crabtree to honor his wife, Dr. Maritza Crabtree, who graduated with a physics degree in 1971. This annual award benefits undergraduate students in physics based equally on merit and need. The Bernice Durand Undergraduate Research Scholarship was established by Vice Provost/Physics Professor Bernice Durand to promote meaningful undergraduate research opportunities and to support and encourage women and ethnic minorities as undergraduate majors in the departments of physics and astronomy.

The Henry and Eleanor Firminhac Physics Undergraduate Scholarship is given to undergraduates in physics with financial need as the primary consideration. Funding provided by Ralph Firminhac in honor of his parents.

The L. R. Ingersoll Prize is given for distinguished achievement in introductory physics. This prize is underwritten by a fund established by the family and friends of the late Professor Ingersoll, a distinguished physicist and teacher at the university who served as department chair for many years.

The Liebenberg Family Research Scholarship is for physics, AMEP (applied mathematics, engineering, and physics) or astronomy/physics majors. This scholarship opportunity was initiated by the Liebenberg
family for the purpose of promoting undergraduate summer research opportunities.

The Albert Augustus Radtke Scholarship Award is given to outstanding junior or senior students majoring in physics or AMEP. This award was made possible by a bequest of the late Mrs. Elizabeth S. Radtke in honor of her husband, a 1900 degree recipient from UW-Madison.

For more information. Go to www.physics.wisc.edu/awards (https:// www.physics.wisc.edu/awards) or contact info@physics.wisc.edu.

Application Process. The deadline for student application materials is March 15th. No late applications will be accepted.

To Apply. Please submit a statement of interest and how this award would help your education. If it is an award that is for financial need (Crabtree and Firminhac) you need to emphasize what the need is. If the award you are applying for also has a merit requirement, the department will run your transcript.

## PHYSICS, B.S.

The Department of Physics has a long history of providing students with a great educational experience. The department awarded its first Ph.D. in 1899. Since then, physics students have earned degrees in virtually every area of physics, and the department's faculty has played key roles in a myriad of important research efforts.

Physics is the science of the properties of matter, radiation, and energy in all forms. As such, it is the most fundamental of the sciences. It provides the underlying framework for the other physical sciences and engineering and for understanding physical processes in biological and environmental sciences.

## CHOOSE TO BE A PHYSICS MAJOR

## WHY STUDY PHYSICS?

- Intellectual Satisfaction. First, and foremost, physics satisfies our deep desire to understand how the universe works. Physics is interesting.
Intellectual Challenge. By striving for fundamental understanding, the physicist accepts the challenge to move past a merely descriptive approach of our world and probes deeply into how and why it works.
- Physics Produces New Technology. Today's esoteric physics research will become tomorrow's technological advances.
- Technical Expertise. Physicists exploit forefront technologies in their pursuits.
- Flexibility. In a fast-paced and changing world, it is much more important to have a broad substantive education than to be trained in a specific skill. We teach people how to think, and how to apply and extend what they know to new types of problems.
- Physics is Analytical and Quantitative. People who can reason analytically and quantitatively are essential for the success of almost any pursuit.


## YOUR FUTURE IS SO BRIGHT . .

A degree in physics helps prepare students for employment in industry, research, government, and academia. A bachelor's degree from the undergraduate physics program will provide an overall view of both
classical and modern physics along with problem-solving ability and the flexibility to continue learning.

Your education can:
Prepare you for employment in industrial or governmental laboratories
Prepare you for graduate studies for master's or doctoral degrees in experimental or theoretical physics.

- Provide a broad background for further work in other sciences, such as materials sciences, aerospace, astronomy, computer science, geophysics, meteorology, radiology, medicine, biophysics, engineering, and environmental studies.
- Provide a science-oriented liberal education. This training can be useful in some areas of business administration, law, or other fields where a basic knowledge of science is useful.
- Provide part of the preparation you need to teach physics. To teach physics in high school, you will also take education courses to become certified. You will need a doctoral degree to become a college or university professor.


## PHYSICS MENTOR PROGRAM

Any student contemplating becoming a physics major is encouraged to obtain a faculty mentor. A mentor is a faculty member with whom students can discuss physics, courses, careers, graduate schools, aspirations, etc. Mentors are not primarily academic advisors. Information is available at the department office.

## OTHER PROGRAMS

## AMEP

A program in applied mathematics, engineering and physics (AMEP)
(p. 1077) is described in its own section of the Guide.

## Astronomy-Physics

Students interested in an astronomy-physics major should contact the astronomy department (p. 460).

## Education-Physics

A student working toward the Bachelor of Science-Education degree may major or minor in physics. Interested students should contact the School of Education (p. 1380). Upon request, the physics department will assign an advisor.

## Medical Physics

A suggested curriculum for students interested in graduate study in medical physics is available in the medical physics (https:// www.medphysics.wisc.edu) department office.

## HOW TO GET IN

## TO DECLARE A PHYSICS MAJOR

Students must declare the physics major by filing out a major declaration form (https://www.physics.wisc.edu/sites/default/files/Physics \%20Declaration\%20Form.pdf), signed by a physics undergraduate advisor. They should talk with one of the undergraduate advisors (p. 1177) as soon as they know they might have an interest in the physics major. Students can declare their physics major at any time after completing their first physics course on the UW-Madison campus, and we encourage them to do this as early as possible. They must have a 2.5 GPA in physics and math courses taken at UW-Madison at the time they
declare. In all cases, the major must be declared before the semester of graduation. The form can be obtained at the department office in 2320 Chamberlin Hall. Note: Students should bring a copy of their current course history when they talk with the undergraduate advisor.

## ENGINEERING AND OTHER NON-L\&S MAJORS SEEKING AN ADDITIONAL MAJOR IN PHYSICS

An undergraduate in any college other than Letters \& Science (L\&S) needs to complete the physics requirements for the physics major, and the L\&S residence and quality of work in the major requirements. None of the other requirements of L\&S need to be satisfied. Students majoring in any other program that is not in L\&S require formal approval from the other college to declare the additional major in physics. This process may delay declaring the major in physics.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, <br> COMP SCI, STAT |
| :--- | :--- |
|  | Limit one each: COMP SCI, STAT |
| Foreign | Complete the third unit of a foreign language <br> Language <br> Note: A unit is one year of high school work or one <br> semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in <br> literature |
|  | - Social Sciences, 12 credits |
|  | - Natural Sciences, 12 credits: must include 6 credits |
| in biological science; and must include 6 credits in |  |
| physical science |  |

Liberal Arts 108 credits and Science Coursework
Depth of
60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- <br>  Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The physics major requires $\mathbf{3 5}$ credits from the following:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Requirements for the Major |  |  |
| Introductory Physics |  |  |
| Select one of th | wing First Introductory Courses: | 5 |
| PHYSICS 247 | A Modern Introduction to Physics (recommended) ${ }^{1}$ |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| $\begin{aligned} & \text { E M A } 201 \\ & \& \text { E M A } 202 \end{aligned}$ | Statics and Dynamics ${ }^{2}$ |  |


| $\begin{aligned} & \text { E M A } 201 \\ & \& \text { M E } 240 \end{aligned}$ | Statics and Dynamics ${ }^{2}$ |  |
| :---: | :---: | :---: |
| Select one of the following Second Introductory Courses: |  | 5 |
| PHYSICS 248 | A Modern Introduction to Physics (recommended) |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| Select one of the following Third Introductory Courses: |  | 3-4 |
| PHYSICS 249 | A Modern Introduction to Physics (recommended) |  |
| PHYSICS 205 | Modern Physics for Engineers |  |
| PHYSICS/ <br> ECE 235 | Introduction to Solid State Electronics |  |
| PHYSICS 241 | Introduction to Modern Physics |  |
| Core Physics |  | 3 |
| PHYSICS 311 | Mechanics |  |
| Select one of the following options: |  | 3 |
| Option 1: |  |  |
| PHYSICS 322 | Electromagnetic Fields |  |
| Option 2: ${ }^{3}$ |  |  |
| E C E 220 | Electrodynamics I |  |
| E C E 320 | Electrodynamics II |  |
| E C E 420 | Electromagnetic Wave Transmission |  |
| Select one of the following: |  | 3 |
| PHYSICS 415 | Thermal Physics |  |
| CHEM 561 \& CHEM 562 | Physical Chemistry and Physical Chemistry ${ }^{4}$ |  |
| M E 361 | Thermodynamics |  |
| Select one of the following: |  | 3-6 |
| PHYSICS 448 <br> \& PHYSICS 449 | Atomic and Quantum Physics and Atomic and Quantum Physics (recommended) |  |
| PHYSICS 531 | Introduction to Quantum Mechanics |  |
| Laboratory ${ }^{5}$ |  |  |
| Select 6 credits from the following: |  | 6 |
| Full registered credit per course: |  |  |
| PHYSICS 307 | Intermediate Laboratory-Mechanics and Modern Physics |  |
| PHYSICS 308 | Intermediate LaboratoryElectromagnetic Fields and Optics |  |
| PHYSICS 407 | Advanced Laboratory |  |
| Two credits applies for each of these courses: |  |  |
| PHYSICS 321 | Electric Circuits and Electronics |  |
| PHYSICS 623 | Electronic Aids to Measurement |  |
| PHYSICS 625 | Applied Optics |  |
| N E 427 | Nuclear Instrumentation Laboratory |  |
| N E 428 | Nuclear Reactor Laboratory |  |
| One credit applies for each of these courses: |  |  |
| E C E 305 | Semiconductor Properties Laboratory |  |
| E C E 313 | Optoelectronics Lab |  |

[^42]
## Advanced Physics Electives

| PHYSICS 301 | Physics Today ${ }^{6}$ |
| :--- | :--- |
| PHYSICS 325 | Wave Motion and Optics |
| PHYSICS 406 | Special Topics in Physics |
| PHYSICS/ | Scientific Background to Global |
| ENVIR ST 472 | Environmental Problems |
| PHYSICS/B M E/ | Radiological Physics and Dosimetry |
| H ONCOL/ |  |
| MED PHYS 501 |  |
| PHYSICS 507 | Graduate Laboratory |
| PHYSICS/E C E/ | Introduction to Plasmas |
| N E 525 |  |
| PHYSICS/E C E/ | Plasma Confinement and Heating |
| N E 527 |  |
| PHYSICS 535 | Introduction to Particle Physics |
| PHYSICS 545 | Introduction to Atomic Structure |
| PHYSICS/ | Lasers |
| EC E 546 |  |
| PHYSICS 551 | Solid State Physics |
| PHYSICS/ | Microscopy of Life |
| ANATOMY/B M E/ |  |
| MED PHYS/ |  |
| PHMCOL-M/ |  |
| RADIOL 619 |  |

1 It is recommended that students follow one of the sequences PHYSICS 247-PHYSICS 248, PHYSICS 207-PHYSICS 208, or PHYSICS 201-PHYSICS 202 for the first two courses, and PHYSICS 249 or PHYSICS 241 is strongly recommended for the third course. But any combination can be used to satisfy the requirements, except that students may not transfer into the PHYSICS 247-PHYSICS 248-PHYSICS 249 sequence from another introductory sequence.
A maximum of 5 credits from E M A 201, E M A 202 and M E 240 count toward the 35 required.
3 A maximum of 3 credits from E C E 220 and E C E 320 and E C E 420 apply toward the 35 required.
4 A maximum of 3 credits from CHEM 561 and CHEM 562 apply toward the 35 required.
5 For nonphysics courses, students will receive only the credit applied as lab toward the 35 -credit requirement.
6 It is recommended that the student's program include the seminar PHYSICS 301 Physics Today.

## RESIDENCE AND QUALITY OF WORK IN THE MAJOR

- 2.000 GPA in all PHYSICS and major courses
- 2.000 on at least 15 credits in upper-level work taken in residence: courses in Core, Laboratory, and Advanced Physics Electives
- 15 credits in PHYSICS, taken on campus


## DISTINCTION IN THE MAJOR

Distinction in the Major requires no declaration, and is awarded at the time of graduation. Students may not receive Distinction and Honors in the same major. To receive Distinction in the Major, students must have met the following requirements:

[^43]- 3.300 GPA in all major and major subject (physics) courses
- 6 additional credits in advanced-level physics beyond the minimum required for the major.


## THESIS OF DISTINCTION

An exceptional original thesis will be designated as a Thesis of Distinction upon recommendation by the department.

## MATHEMATICS

MATH 221 -MATH 222-MATH 234 or equivalents are necessary since they are prerequisites for other courses.

## CHEMISTRY

A college course in chemistry is advised for all physics students.

## COMPUTING

Students should become familiar with scientific programming using a language such as $C$ or FORTRAN. The computer sciences department offers introductory courses. The Division of Information Technology (DoIT) also offers short courses to introduce programming.

## HONORS IN THE MAJOR

Students may declare Honors in this Major in Physics in consultation with their major advisor.

## HONORS IN THE PHYSICS MAJOR: REQUIREMENTS

To earn Honors in the Major in Physics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 university GPA
- Earn a 3.300 GPA in all PHYSICS courses, and all courses accepted in the major
- Complete 12 credits for Honors in courses counting in the major, with a grade of $B$ or better, to include:
- 9 credits at the advanced level
- A two-semester Senior Honors Thesis in PHYSICS 681 Senior Honors Thesis and PHYSICS 682 Senior Honors Thesis for a total of 6 credits


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Understand basic physical principles.
2. Solve problems proficiently using both quantitative and qualitative applications of these physical principles.
3. Appreciate the excitement of physics and be acquainted with a wide range of research areas in physics.
4. Know how to perform quantitative measurements of physical phenomena and understand the statistical significance of observations made in the presence of statistical and systematic uncertainties.
5. Be prepared for graduate study and/or careers in STEM fields.
6. Communicate effectively with scientific peers and the public, both orally and in writing.
7. Understand their own learning processes and be able to continue to educate themselves after graduation.

## ADVISING AND CAREERS

## PHYSICS UNDERGRADUATE ADVISORS

Professor Dan McCammon

6207 Chamberlin Hall
608-262-5916
Professor Stefan Westerhoff
4209 Chamberlin Hall
608-262-3989

## Professor Michael Winokur

5106 Chamberlin Hall
608-262-5425

## AMEP Advisor <br> Professor Cary Forest <br> 3277 Chamberlin Hall <br> 608-263-0486 <br> Professor Robert McDermott <br> 5112 Chamberlin Hall <br> 608-263-4476

The Department of Physics encourages our majors to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Science. L\&S graduates are in high demand by employers and graduate programs. It is important to us that our students are career ready at the time of graduation, and we are committed to your success.

## Additional Resources:

- Link to physics department student jobs and research opportunities (https://www.physics.wisc.edu/academics/undergrads/news)


## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.ls.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

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## Professor

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Ellen Zweibel (https://www.physics.wisc.edu/people/ellen-gzweibel), Professor

## WISCONSIN EXPERIENCE

## PHYSICS UNDERGRADUATE COLLOQUIUM

There is a weekly series of talks in the spring semester called "Physics Today," at which a topic of local research is described by one of the physics faculty. These are open and may be attended by anyone. They can also be taken as a course, PHYSICS 301 Physics Today. See the Course Guide for location and time.

## THE PHYSICS CLUB

The University Physical Society (UPS)-also known as the Physics Club -is a student organization for people interested in physics and related fields.

## WHAT DOES THE PHYSICS CLUB DO?

The Physics Club organizes events such as seminars, tours, trips, and socials for its members. Physics Club volunteers also offer free drop-in tutoring to students in introductory physics and astronomy classes. In addition, we maintain subscriptions to science related magazines such as Scientific American, Astronomy, and Physics Today, which are kept in the club's room located at 2328 Chamberlin Hall. Every Friday afternoon, we meet with the physics colloquium speaker to learn about the process of becoming a scientist. In addition, UPS sponsors a variety of other events. For example, in the past, we have taken took a field trip to Fermilab, sponsored a racquetball tournament, and have frequently gathered for social events such as ice skating, movie night, and bowling.

## WHY SHOULD YOU JOIN THE PHYSICS CLUB?

By joining the Physics Club you'll be meeting many physics majors, who are, in general, really cool people to hang out with. If you are thinking about declaring a physics major, this is the place to come for helpful advice about taking classes and finding an undergraduate job in the physics department. If you join, you can get access to the Physics Club room, 2328 Chamberlin Hall. Joining also adds you to the club email list, so you can be notified about club sponsored events.

## PERKS OF BEING A PHYSICS CLUB MEMBER

When you join the Physics Club, you get access to an excellent room, 2328 Chamberlin Hall. This room contains a refrigerator, reference shelves of textbooks, couch, tables, and chairs, a phone, blackboards, and a microwave. We have a several computers in the room. You can get your own key to the room and visit at your leisure, and stay as long as you like. Plus, you get the added bonus of knowing people who are in your classes.

## University Physical Society

2328 Chamberlin Hall
ups.physics.wisc.edu
ups-officers@googlegroups.com

## To Join:

Drop by Room 2328 Chamberlin Hall and pick up a membership form. Turn in a completed form with your $\$ 5$ annual dues to a UPS club officer.

## PHYSICS LEARNING CENTER

The Physics Learning Center. Striving to help all students succeed in Physics

- Do you enjoy Physics?
- Are you patient?
- Do you like to teach?
- Would you like to help other undergraduate students?

The Physics Learning Center (PLC) matches upper-level undergraduate students as tutor/mentors in small study groups with students studying introductory physics (algebra-based PHYSICS 103-PHYSICS 104 and calculus-based PHYSICS 207-PHYSICS 208). Physics Peer Mentor Tutors meet twice a week with the same small group of students to overview key concepts, choose and supervise practice problems, answer questions, and serve as a mentor. We strive to create a supportive learning environment to help students gain skills, increase confidence, and meet potential study partners.

Peer mentor tutors receive extensive training in teaching physics and in general pedagogy. Tutors meet with a PLC staff member each week to discuss strategies for teaching course content, including how to use teaching materials that stress conceptual understanding. In addition, tutors from all courses meet as a group for a weekly teaching seminar to discuss issues such as group dynamics, techniques for actively involving students in learning, helping students to prepare for exams, raising awareness of diversity in student experiences, resources on campus, and so on.

Our peer mentor tutors report that they greatly enjoy working with their students and in the process strengthen their own foundation in physics and presentation skills. They also tell us that teaching physics helps to review for the Graduate Record Exam and to prepare for postgraduate teaching in middle/high school or as a university teaching assistant. Most tutors are upper-class students majoring in physics, astrophysics, secondary science education, and engineering. We also welcome students from other fields if they have a strong physics background. Students receive either independent study credit or a stipend for participation in the Physics Peer Mentor Tutor program. To apply, please submit a resume, your transcript (unofficial copy is fine), and a short statement about why you would like to be a physics peer mentor yutor (1⁄2-1 page).

## Physics Learning Center

2337/2338 Chamberlin Hall
Contact: Susan Nossal
2328 Chamberlin Hall
nossal@physics.wisc.edu
608-262-9107

## PHYSICS MENTOR PROGRAM

Any student contemplating becoming a physics major is encouraged to obtain a faculty mentor. A mentor is a faculty member with whom students can discuss physics, courses, careers, graduate schools, aspirations, and so on. Mentors are not primarily academic advisors.

## RESOURCES AND SCHOLARSHIPS

## STUDENT AWARDS

The Fay Ajzenberg-Selove Award is presented to undergraduate women majoring in physics, astronomy, or physics/astronomy for the purpose of encouraging women to continue their careers in science. Dr. Ajzenberg-

Selove, who received her Ph.D. in physics in 1952, is currently a professor emerita the University of Pennsylvania.

The Dr. Maritza Irene Stapanian Crabtree Award in physics was established by William Crabtree to honor his wife, Dr. Maritza Crabtree, who graduated with a physics degree in 1971. This annual award benefits undergraduate students in physics based equally on merit and need. The Bernice Durand Undergraduate Research Scholarship was established by Vice Provost/Physics Professor Bernice Durand to promote meaningful undergraduate research opportunities and to support and encourage women and ethnic minorities as undergraduate majors in the departments of physics and astronomy.

The Henry and Eleanor Firminhac Physics Undergraduate Scholarship is given to undergraduates in physics with financial need as the primary consideration. Funding provided by Ralph Firminhac in honor of his parents.

The L. R. Ingersoll Prize is given for distinguished achievement in introductory physics. This prize is underwritten by a fund established by the family and friends of the late Professor Ingersoll, a distinguished physicist and teacher at the university who served as department chair for many years.

The Liebenberg Family Research Scholarship is for physics, AMEP (applied mathematics, engineering, and physics) or astronomy/physics majors. This scholarship opportunity was initiated by the Liebenberg family for the purpose of promoting undergraduate summer research opportunities.

The Albert Augustus Radtke Scholarship Award is given to outstanding junior or senior students majoring in physics or AMEP. This award was made possible by a bequest of the late Mrs. Elizabeth S. Radtke in honor of her husband, a 1900 degree recipient from UW-Madison

For more information. Go to www.physics.wisc.edu/awards (https:// www.physics.wisc.edu/awards) or contact info@physics.wisc.edu.

Application Process. The deadline for student application materials is March 15th. No late applications will be accepted.

To Apply. Please submit a statement of interest and how this award would help your education. If it is an award that is for financial need (Crabtree and Firminhac) you need to emphasize what the need is. If the award you are applying for also has a merit requirement, the department will run your transcript.

## PHYSICS, CERTIFICATE

The department offers an undergraduate certificate in physics. An understanding of the physical universe informs many disciplines. The study of physics is essential to understanding nature and to advancing technology in the coming century. A certificate in physics increases the opportunities for students to become better informed on technological issues at the local, state, national, and international levels.

The certificate is designed to serve undergraduates majoring in biology, chemistry, mathematics, engineering, education and other fields who wish to extend their study of physics beyond what may be required or
recommended for their major without completing the full L\&S physics major requirements.

## HOW TO GET IN

To declare a certificate in physics, the student must fill out a major/ certificate declaration form. An undergraduate physics advisor must sign the form. The form to declare the certificate can be obtained at the Department of Physics office in 2320 Chamberlin Hall.

## REQUIREMENTS

## PHYSICS CERTIFICATE

1. All undergraduates and Special students are eligible (physics majors are not eligible).
2. The certificate will be awarded upon completion of requirements.
3. At least 9 of the credits must be in residence
4. Only graded courses may be used toward the certificate.
5. A minimum grade point average of 2.000 is required for courses used toward the certificate.

## REQUIREMENTS FOR THE CERTIFICATE

The physics certificate requires 18 credits of undergraduate PHYSICS courses with the following restrictions:

| Code |  | Credits |
| :---: | :---: | :---: |
| Maximum 1 First Introductory Course |  |  |
| Select one of the following: |  | 5 |
| PHYSICS 247 | A Modern Introduction to Physics (recommended) |  |
| PHYSICS 207 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| $\begin{aligned} & \text { E M A } 201 \\ & \& \text { E M A } 202 \end{aligned}$ | Statics and Dynamics ${ }^{1}$ |  |
| $\begin{aligned} & \text { E M A } 201 \\ & \& \text { M E } 240 \end{aligned}$ | Statics and Dynamics ${ }^{1}$ |  |
| Maximum 1 Second Introductory Course |  |  |
| Select one of the following: |  | 5 |
| PHYSICS 248 | A Modern Introduction to Physics (recommended) |  |
| PHYSICS 208 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| Maximum 1 Third Introductory Course |  |  |
| Select one of the following: |  | 3-4 |
| PHYSICS 249 | A Modern Introduction to Physics (recommended) |  |
| PHYSICS 205 | Modern Physics for Engineers |  |
| PHYSICS/ <br> ECE 235 | Introduction to Solid State Electronics |  |
| PHYSICS 241 | Introduction to Modern Physics |  |
| Maximum 3 credits of PHYSICS Directed Study |  |  |
| Select one of the following: |  | 1-3 |
| PHYSICS 198 | Directed Study |  |
| PHYSICS 199 | Directed Study |  |
| PHYSICS 298 | Directed Study |  |


| PHYSICS 299 | Directed Study |
| :---: | :---: |
| PHYSICS 498 | Directed Study |
| PHYSICS 499 | Directed Study |
| PHYSICS 681 | Senior Honors Thesis |
| PHYSICS 682 | Senior Honors Thesis |
| PHYSICS 691 | Senior Thesis |
| PHYSICS 692 | Senior Thesis |
| Total Credits Needed: 18 credits ${ }^{2}$ |  |
| A maximum of 5 credits from E M A 201 Statics, E M A 202 Dynamics and M E 240 Dynamics count toward the 18 required. |  |
| 2 PHYSICS cou required cred | 200 and above may be used to reach the 18 ecluding introductory courses beyond maximu |

## Notes:

Students may not transfer into the
PHYSICS 247-PHYSICS 248-PHYSICS 249 sequence from another introductory sequence.

No more than 3 credits of independent study or directed study and no special topics courses (PHYSICS 206 and PHYSICS 406) may be used to satisfy the certificate requirements.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## ADVISING AND CAREERS

## PHYSICS UNDERGRADUATE ADVISORS

Professor Dan McCammon
6207 Chamberlin Hall
Tel: 608.262.5916
Professor Stefan Westerhoff
4209 Chamberlin Hall
Tel: 608.262.3989
Professor Michael Winokur
5106 Chamberlin Hall
Tel: 608.262.5425

## AMEP ADVISOR

Professor Cary Forest
3277 Chamberlin Hall
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fherndon), Professor
Lev loffe (https://www.physics.wisc.edu/people/levioffe), Professor
Robert Joynt (https://www.physics.wisc.edu/people/robert-jjoynt),

## Professor

Albrecht Karle (https://www.physics.wisc.edu/people/albrechtkarle),

## Professor

Shimon Kolkowtiz (https://www.physics.wisc.edu/people/
shimonkolkowitz), Assistant Professor
James Lawler (https://www.physics.wisc.edu/people/james-elawler),

## Professor

Alex Levchenko (https://www.physics.wisc.edu/people/alexlevchenko),
Graduate Chair and Associate Professor
Dan McCammon (https://www.physics.wisc.edu/people/ danmccammon), Professor
Robert McDermott (https://www.physics.wisc.edu/people/robertfmcdermott), Professor
Marshall Onellion (https://www.physics.wisc.edu/people/marshallfonellion), Professor
Kimberly Palladino (https://www.physics.wisc.edu/people/kimberlyjpalladino), Assistant Professor
Yibin Pan (https://www.physics.wisc.edu/people/yibinpan), Associate Professor
Mark Rzchowski (https://www.physics.wisc.edu/people/markrzchowski), Undergraduate Chair and Professor
Mark Saffman (https://www.physics.wisc.edu/people/marksaffman),

## Professor

John Sarff (https://www.physics.wisc.edu/people/john-ssarff), Professor Gary Shiu (https://www.physics.wisc.edu/people/garyshiu), Professor

Wesley Smith (https://www.physics.wisc.edu/people/wesley-hsmith), Professor
Paul Terry (https://www.physics.wisc.edu/people/paul-wterry), Professor Peter Timbie (https://www.physics.wisc.edu/people/peter-ttimbie), Professor
Justin Vandenbroucke (https://www.physics.wisc.edu/people/ justinvandenbroucke), Assistant Professor
Maxim Vavilov (https://www.physics.wisc.edu/people/maxim-gvavilov), Professor
Thad Walker (https://www.physics.wisc.edu/people/thad-gwalker), Professor
Stefan Westerhoff (https://www.physics.wisc.edu/people/ stefanwesterhoff), Professor
Michael Winokur (https://www.physics.wisc.edu/people/michaeljwinokur), Professor
Sau Lan Wu (https://www.physics.wisc.edu/people/sau-lanwu), Professor
Deniz Yavuz (https://www.physics.wisc.edu/people/denizyavuz), Professor
Ellen Zweibel (https://www.physics.wisc.edu/people/ellen-gzweibel), Professor

## PLANNING AND LANDSCAPE ARCHITECTURE

The Department of Landscape Architecture offers two undergraduate programs. One is a professional landscape design and planning program, fully accredited by the American Society of Landscape Architects, and leads to the bachelor of science-landscape architecture degree (BSLA). The other program introduces the field of landscape studies and leads to a bachelor of science degree with a major in landscape architecture (B.S.).

## DEGREES/MAJORS/CERTIFICATES

- Landscape Architecture, BLA (p. 1188)


## PEOPLE

## FACULTY

## Landscape Architecture

David Bart, Associate Professor; Samuel Dennis Jr, Associate Professor; Travis Flohr, Faculty Associate; Janet Gilmore, Professor; Doug Hadley, Senior Lecturer; John Harrington, Professor; Evelyn A. Howell, Professor; Shawn T. Kelly, Faculty Associate; James LaGro, Jr, Professor; Eric Schcuhardt, Associate Lecturer; Janet Silbernagel, Professor; James Steiner, Senior Lecturer; Kristin Thorleifsdottir, Assistant Professor

## Urban and Regional Planning

Ken Genskow, Chair and Professor; Asligül Göçmen, Associate Professor; Harvey M. Jacobs, Professor; Yunji Kim, Assistant Professor; James LaGro, Jr, Professor; Dave Marcouiller, Professor; Alfonso Morales, Professor; Brian W. Ohm, Professor; Kurt Paulsen, Associate Professor; Revel Sims, Assistant Professor; Jeff Sledge, Associate Scientist;

Deborah Griffin, Undergraduate Coordinator; Lauren Szafranski, Graduate Coordinator

## ADMINISTRATIVE STAFF

Patrick J. Cunniffe, Financial Specialist-Senior; Ken Genskow, Chair; Shira Hand, Department Administrator; W. Math Heinzel, Senior Information Processing Consultant, IT Support, GIS Specialist

For more contact information please go to:
https://dpla.wisc.edu/facstaff/faculty

## LANDSCAPE ARCHITECTURE, BLA

Students who enjoy art, science, technology, problem-solving, and design should consider a career in landscape architecture. Graduates in landscape architecture influence the design and management of cities, parks, and open spaces. They often advise park managers, citizen groups, landowners, and state agencies. Landscape architects design public and private outdoor spaces, restore and help preserve natural areas, develop and implement regional planning and public policy, and revitalize urban neighborhoods. The Professional Landscape Architecture degree program focuses on form-giving design, design implementation, and professional practice. Emphasis is placed on principles of design theory and process; problem solving in relationship to human needs and aspirations, and environmental awareness and stewardship; and on the development of technical proficiencies required of professional practice. Students learn site analysis, graphic communication, design synthesis, construction technology, and planting design.

The Professional Landscape Architecture degree program provides professional education accredited by the American Society of Landscape Architects (ASLA). Completion of this program is the first step in becoming a licensed landscape architect. The program emphasizes the exploration and understanding of design processes and graphic and verbal communication skills. The program also develops a student's sensitivity to natural, physical, historical, and cultural contexts of landscape design.

Students completing the requirements for this program are granted a bachelor of landscape architecture degree.

## HOW TO GET IN

Admission to the professional program during the sophomore year, or in the second year of the degree plan, is on a competitive basis.

1. Eligibility for Consideration into the Landscape Architecture Accredited Professional Program. Eligibility for consideration into the Landscape Architecture Accredited Professional Program depends on fulfillment of these requirements: students apply for formal admission to the program during the spring semester of each academic year. Selections are made only once a year for the fall semester. The first round of selections takes place in early summer. All students will be notified of their status at least two weeks before the start of the fall semester. Students who plan to complete their prerequisite courses during the summer session must so indicate on their application. The department will admit up to a maximum of 22 students, as resources permit. Selection will be based on a letter of intent, written by the applicant, which will address their reasons for entering the major, submission of portfolio, and on grades
earned in the following three prerequisite courses: LAND ARC 250 Survey of Landscape Architecture Design, LAND ARC 211 Landscape Inventory and Evaluation Methods, and LAND ARC 210 Introduction to Landscape Architecture Design.
2. AND the applicant must have completed BOTANY 100 Survey of Botany, or equivalent, as well as a minimum of 24 credit hours. Cumulative GPA will be considered.
For more information on the professional design degree program and the application process please go to this link (https://dpla.wisc.edu).
3. Selection Policies. On-campus selections for admission will be made as soon as possible after spring semester grades are received.
4. Notification of Status. Applicants who have completed their prerequisite courses at the end of spring semester will be notified of their status between June 1 and July 1 of each year for fall semester admission. Decisions on those applicants completing prerequisites during summer session will be made as soon as grades are received.
5. Appeal Procedures. An appeal to the department's curriculum committee may be presented to clarify an error of fact or extenuating circumstances.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS AND SCIENCE BREADTH REQUIREMENTS: BLA

Mathematics Fulfilled with completion of university general education requirements Quantitative Reasoning A and Quantitative Reasoning B coursework
Foreign Completion of the 3rd unit of one language Language

| L\&S Breadth | Humanities, 12 credits: minimum 3 credits in Literature <br> Social Sciences, 12 credits |
| :--- | :--- |
|  | Natural Sciences, 12 credits: 6 in Biological Sciences and |
|  | 6 in Physical Sciences |$\quad$| Liberal Arts | 108 credits |
| :--- | :--- |
| $\&$ Science |  |
| credits (C) |  |

## REQUIREMENTS FOR THE MAJOR

| Cod | Titl | Credits |
| :---: | :---: | :---: |
| Introduction and Foundation |  |  |
| LAND ARC 210 | Introduction to Landscape Architecture Design | 4 |
| LAND ARC 211 | Landscape Inventory and Evaluation Methods | 4 |
| LAND ARC 250 | Survey of Landscape Architecture Design | 3 |
| LAND ARC 260 | History of Landscape Architecture | 3 |
| Other Required Foundation Courses |  |  |
| BOTANY 100 | Survey of Botany | 3 |
| DS 221 | Person and Environment Interactions | 3 |
| HORT/ <br> LAND ARC 263 | Landscape Plants I | 3 |
| BOTANY/ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology | 3 |
| $\begin{aligned} & \text { SOIL SCI/ENVIR ST/ } \\ & \text { GEOG } 230 \\ & \text { or SOIL SCI } 301 \end{aligned}$ | Soil: Ecosystem and Resource <br> General Soil Science | 3-4 |
| Intermediate Studio Sequence |  |  |
| LAND ARC 261 | Principles of Landscape <br> Architecture Design and Graphics | 4 |
| LAND ARC 321 | Environment and Behavior Studio - Designing Health Promoting Environments | 3 |
| LAND ARC 353 | Landscape Architectural Technology I | 3 |
| LAND ARC 354 | Landscape Architectural Technology II | 3 |
| Professional Theory and Practice Core |  |  |
| LAND ARC 399 | Coordinative Internship/Cooperative Education | 3 |
| LAND ARC 460 | Advanced Visual Communication in Landscape Architecture | 3 |
| LAND ARC 550 | Professional Practice in Landscape Architecture | 3 |
| LAND ARC/ ENVIR ST/ SOIL SCI 695 | Applications of Geographic Information Systems in Natural Resources | 3 |
| Advanced Studio Sequence |  |  |
| LAND ARC 365 | Planting Design I | 3 |
| LAND ARC 351 | Housing and Urban Design | 4 |
| LAND ARC 451 | Open Space Planning and Design | 3 |
| LAND ARC 563 | Designing Sustainable and Resilient Regions | 4 |


| LAND ARC 610 | Landscape Architecture Seminar | 7 |
| :--- | :--- | :--- |
| \& LAND ARC 551 | and Senior Project in Landscape <br> Architecture |  |

Total Credits
75-76

## QUALITY OF WORK

2.000 GPA in all LAND ARC courses and courses that count toward the major
2.000 GPA on 15 upper-level credits, taken in residence ${ }^{1}$

15 credits in LAND ARC, taken on the UW-Madison campus
1 LAND ARC and major courses numbered 500 and higher are upper level.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Demonstrate competence and critical judgement in applying intellectual and technical skills necessary for site and landscape-scale design, in particular skills of problem-solving using site inventory/ analysis; spatial/temporal analysis; programming; synthesis; oral, written, and visual communication; construction implementation; and post-occupancy evaluation.
2. Demonstrate critical thinking and the ability to explore ideas and synthesize information, both independently and in collaboration with interdisciplinary team members to identify and solve complicated landscape design and planning problems.
3. Understand, apply, and evaluate the principles, theories, and recent research findings in the discipline of landscape architecture.
4. Integrate humanistic, scientific, legal, political, economic, social, ecological, and technological dimensions in solving novel design and planning problems concerning the betterment of rural and urban natural and cultural landscapes.
5. Understand, analyze, and apply design and planning theories and principles to urban and rural landscapes to benefit human living conditions.

## ADVISING AND CAREERS

Students are assigned to a faculty advisor once they declare the major. Prospective students should contact the academic coordinator, Debi Griffin (dagriffin@wisc.edu, 608-263-7301) for more information.

The Professional Landscape Architecture degree program provides professional education accredited by the American Society of Landscape Architects (ASLA). Completion of this program is the first step in becoming a licensed landscape architect.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

## Landscape Architecture

David Bart, Associate Professor; Samuel Dennis Jr, Associate Professor; Travis Flohr, Faculty Associate; Janet Gilmore, Professor; Doug Hadley, Senior Lecturer; John Harrington, Professor; Evelyn A. Howell, Professor; Shawn T. Kelly, Faculty Associate; James LaGro, Jr, Professor; Eric Schcuhardt, Associate Lecturer; Janet Silbernagel, Professor; James Steiner, Senior Lecturer; Kristin Thorleifsdottir, Assistant Professor

## Urban and Regional Planning

Ken Genskow, Chair and Professor; Asligül Göçmen, Associate Professor; Harvey M. Jacobs, Professor; Yunji Kim, Assistant Professor; James LaGro, Jr, Professor; Dave Marcouiller, Professor; Alfonso Morales, Professor; Brian W. Ohm, Professor; Kurt Paulsen, Associate Professor; Revel Sims, Assistant Professor; Jeff Sledge, Associate Scientist;

## ACADEMIC ADVISING

Deborah Griffin, Undergraduate Coordinator; Lauren Szafranski, Graduate Coordinator

## ADMINISTRATIVE STAFF

Patrick J. Cunniffe, Financial Specialist-Senior; Ken Genskow, Chair; Shira Hand, Department Administrator; W. Math Heinzel, Senior Information Processing Consultant, IT Support, GIS Specialist

For more contact information please go to:
https://dpla.wisc.edu/facstaff/faculty

## ACCREDITATION

## Accreditation

Landscape Architecture Accreditation Board (https://www.asla.org/ AccreditationLAAB.aspx)

Accreditation status: Accredited. Next accreditation review: 2019.

## Certification/Licensure

Landscape Architecture Registration Exam (http://www.clarb.org)

## POLITICAL SCIENCE

There are many definitions of political science. But whether a definition focuses on the analysis of governmental structures, or influences on voter choice, or the relationship between national governments, or the best form of government, at base, political science is about the systematic study of power. Whether power is exercised formally, as is the case between government and the individual, or informally, as is the case between individuals, it is the systematic study of power relationships that provides the subject matter for the discipline. Majors in political science obtain not only an understanding of the workings of government, but they also develop important skills in critical thinking and analysis. These skills make them ideal candidates for careers in law; in government at the state, national, and international levels; in business; in journalism; and in politics.

## DEGREES/MAJORS/CERTIFICATES

- Political Economy, Philosophy, and Politics, Certificate (p. 1191)
- Political Science, B.A. (p. 1192)
- Political Science, B.S. (p. 1198)


## PEOPLE

Professors Burden, Canon, Cramer, Gehlbach, Hendley, Herrera, Marquez, Martin, Mayer, Pevehouse, Schatzberg, Schweber, Shafer, Straus, Tripp, Weimer, Yackee, Zumbrunnen

Associate Professors Ahlquist, Avramenko, Copelovitch, Ewig, Kapust, Kinsella, Kydd, Owens, Ringe, Shelef

Assistant Professors Bhavnani, Lindsay, Lupu, Powell, Renshon, Simmons, Tahk, Weeks

For appointments, see schedule an advising appointment (http:// www.polisci.wisc.edu/undergrad/scheduling-advising-appointment) on the Political Science Major page on the department website.

## POLITICAL ECONOMY, PHILOSOPHY, AND POLITICS, CERTIFICATE

Why enroll in the political economy, philosophy, and politics certificate?
The political economy, philosophy, and politics (PEPP) certificate is rooted in a core insight: social, economic, and political problems have ethical, political, and economic dimensions. While the first program (politics, philosophy, and economics, or PPE) formally combining these three approaches was created at Oxford University in 1920, it drew on a tradition of inquiry that brought the three perspectives together. Since its creation at Oxford, similar programs have been created at a wide range of the world's leading universities.

If we move from the insight behind the program to what it means in practice, we can see that understanding, for example, immigration requires understanding it from political, economic, and ethical perspectives. In short, understanding the pressing political, economic, or philosophical problems of the day entails seeing them from a perspective that brings together all three disciplines. As a result, the PEPP curriculum brings together faculty and coursework from three different academic departments: Economics, Philosophy, and Political Science. This crossdisciplinary curriculum is important not just for intellectual development, but also for fostering the habits of mind central to democratic citizenship.

Students who enroll in the PEPP certificate will thus take coursework from political science, economics, and philosophy, and the certificate program will culminate in a small-enrollment, research- and writingoriented capstone seminar, POLI SCI 461. Combining breadth across the three disciplines with depth within two of the three, the PEPP certificate is a rigorous and exciting opportunity for cross-disciplinary study.

## HOW TO GET IN

Acceptance of applications for the certificate program will begin in fall 2017. Declaration is easy; declare with our online form (https:// polisci.wisc.edu/undergrad/declare-pepp-certificate).

## REQUIREMENTS

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Certificate Requirements |  |
| Core Breadth | 12 |
| Elective Depth | 3 |
| Capstone Seminar | 3 |
| Total Credits | 18 |

## CORE BREADTH COURSES

Take one course from each of the following four areas for a total of 12 credits:

## Economics

| Code | Title | Credits |
| :--- | :--- | ---: |
| ECON 330 | Money and Banking | 4 |
| ECON 435 | The Financial System | 3 |
| ECON 464 | International Trade and Finance | $3-4$ |
| ECON/HISTORY | 465 | The American Economy to 1865 |

## ECON/HISTORY 466 The American Economy Since 1865

## Philosophy

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHILOS/ECON 524 | Philosophy and Economics ${ }^{1}$ | 3 |
| PHILOS 541 | Modern Ethical Theories | 3 |
| PHILOS 549 | Great Moral Philosophers | 3 |
| PHILOS 555 | Political Philosophy | 3 |
| PHILOS 559 | Philosophy of Law | 3 |

1 Although PHILOS/ECON 524 is cross\#listed with Economics, it will count only as a Philosophy course.

| Political Science: Political Theory |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 360 | History of American Political Thought | 3-4 |
| POLI SCI 361 | Contemporary American Political Thought | 3-4 |
| POLI SCI 363 | Literature and Politics | 3-4 |
| POLI SCI 411 | The American Constitution : Powers and Structures of Government | 4 |
| POLI SCI 463 | Deception and Politics | 4 |
| Political Science: Institutions and Political Economy |  |  |
| Code | Title | Credits |
| POLI SCI 274 | Political Choice and Strategy | 3-4 |
| POLI SCI 330 | Political Economy of Development | 3 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |

## ELECTIVE DEPTH COURSE

Take one (1) additional course (3 credits) from the list of courses above in either Economics (p. 1191) or Philosophy (p. 1192).

## CAPSTONE SEMINAR

Take POLI SCI 461 Interdisciplinary Seminar in Political Economy, Philosophy, \& Politics for 3 credits.

## RESIDENCY AND QUALITY OF WORK

- 2.000 GPA in all courses eligible for the certificate
- 9 credits in residence

Courses taken on a pass/fail basis are not eligible to meet requirements in this program.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Knowing key concepts and arguments from economics, philosophy, and political science
2. Synthesizing arguments, concepts, and methods from philosophy, politics, and economics.
3. Applying arguments, concepts, and methods from philosophy, politics, and economics to contemporary policy debates.

## ADVISING AND CAREERS

Ricardo Court, Associate Director, Political Economy, Philosophy, and Politics Certificate

## 301 North Hall

Appointments: Online Scheduling Assistant (https:// calendar.wisc.edu/scheduling-assistant/public/profiles/ zDhyzyHO.html)
(Skype appointments available. Please indicate your Skype ID if you will be requesting a remote meeting.)

## PEOPLE

Faculty Director. Daniel Kapust (https://polisci.wisc.edu/people/faculty/ daniel-kapust), Associate Professor, Political Science

Program Core Faculty with Departmental Affiliation:

- Jim Walker, Professor, Economics
- Maria Muniagurria, Economics
- Daniel Hausman, Professor, Philosophy
- Harry Brighouse, Professor, Philosophy.
- Daniel Kapust, Associate Professor, Political Science
- Helen Kinsella, Associate Professor, Political Science
- Howard Schweber, Professor, Political Science
- John Zumbrunnen, Professor, Political Science
- Genevieve Rousseliere, Assistant Professor, Political Science
- Michelle Schwarze, Assistant Professor, Political Science
- Richard Avramenko, Associate Professor, Political Science

Advising: Ricardo Court, Director of Undergraduate Studies, Political Science

## POLITICAL SCIENCE, B.A.

## WHY STUDY POLITICAL SCIENCE?

Politics have been put under scrutiny in a systematic way since the ancient Greeks. Aristotle even called it the Queen of the Sciences. Our own Constitution is the product of both the scholarly study of political theory and a practical framework for political institutions and norms. Our faculty in the Department of Political Science engage politics in a scientific and rigorous way to understand human behavior and world events. Study political science to prepare yourself for a career in campaigns, public
policy, business, administration, political advocacy, or public service, but also to become an informed and active citizen.

Political science is a broad and rich discipline. Some of our faculty members conduct research on the psychology of why people behave the way they do politically. Others study institutions such as legislatures, courts, and bureaucracies both as organizations and as political actors themselves. Other faculty members seek to clarify recent constitutional and legal issues. Many study foreign political systems to learn the peculiarities of different political systems comparing them regionally and globally. Our political theorists are intellectual historians and social critics interested in the millennia-long quest for the good society. Still others are policy analysts and dedicated students of American politics. Many are statistical theorists and specialists in surveying political attitudes. Our comparative and international relations experts investigate the causes of war and the conditions for peace among nations.

Political science majors are comfortable at the intersection of the humanities and the sciences. Poli Sci majors can apply rigor to problems and they can articulate solutions with clarity and with an analytical command of data. Poli Sci graduates move into a wide spectrum of positions that demand well-honed writing and presentation skills. Poli Sci graduates can apply reason and rigor to problems that are often consumed by ideology and emotion. Other disciplines may also stress rigor, but Political Science will keep you honest. The ability to define a problem and contribute to its solution while placing it within political, social, and cultural realities is a rare skill indeed, with applications well beyond the narrow confines of political work. The wide range of intellectual, analytical, qualitative, and quantitative skills, and a broad knowledge of world events that Poli Sci majors develop form the cornerstone of a powerful liberal arts education.

## WHAT CAREERS DO POLITICAL SCIENCE MAJORS PURSUE?

Poli Sci majors learn quickly, work well in teams, and have basic understanding of the policy process and the operations of government. Poli Sci majors understand that for every endeavor, no matter how important, there is a mountain of ordinary grunt work that has to be done. Poli Sci majors can be counted on to do the foot-work, put in the facetime, and endure the slog necessary of everything of consequence.

Poli Sci majors go on to work in all levels of government. Local and state governments have a direct impact on the quality of life of all Americans. Courses on state and urban government, public policy, administrative law, and public administration are especially valuable. Quantitative and statistical skills developed in these courses and applied in the internships many of our students do provide a powerful combination.

Poli Sci majors go on to work in a wide range of International careers, in business, Foreign Service, and non-governmental organizations. Political Science offers a wide variety of courses in comparative politics, international relations and organizations, public policy, political development, and interest group politics. These courses in combination with economics, statistics, computer science, and international trade.

Poli Sci majors pursue careers in campaign management, political polling, national political committees, and consulting. They will have taken multiple courses in the American political system, comparative political parties, elections, public opinion, and voting behavior; as well as committing themselves to developing their writing and data analysis. There are over half a million campaigns in the United States annually, and while entry level jobs have long hours, low pay, and enormous demands,
they are places where you can 'cut your political teeth'. Local campaigns lead to statewide or national campaigns, and then perhaps to consulting and polling if that strikes your interest.

Poli Sci majors have also traditionally gone into law. Some lawyers are litigators while others are employed by corporations, government, and other organizations. Political Science track fits nicely for students seeking law degrees as official credentials to 'practice law' and those students who seek a law degree as an additional 'tool' to make positive impacts in their professional areas of interest. Some individuals with legal training work in other areas such as corporate or public management. The department offers a wide variety of political theory, constitutional law, and public policy courses that will help you explore the interaction between law, politics, and society.

## HOW TO GET IN

Students in the College of Letters \& Science can declare political science as their major by filling out a form on the political science department's website. After a first meeting with an academic advisor that declaration will be made official. Students in other schools and colleges on campus should make an appointment with an advisor and obtain a signed declaration form to take to their prospective college or school for approval.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF ARTS DEGREE REQUIREMENTS
Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :--- | :--- |
| Language | Complete the third unit of a foreign language and the |
|  | second unit of an additional foreign language |

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences


Depth of 60 intermediate or advanced credits
Intermediate/

## Advanced

work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- <br>  Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

A minimum of 30 credits is required for the major.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one course in three of the following subfields: |  | 9-12 |
| International Relations |  |  |
| American Government |  |  |
| Political Theory |  |  |
| Comparative Politics |  |  |
| Select at least one research methods course from the following: |  | 3-4 |
| POLI SCI 170 | Research Methods in Political Science |  |
| POLI SCI 270 | Understanding Political Numbers |  |
| POLI SCI 274 | Political Choice and Strategy |  |
| POLI SCI 348 | Analysis of International Relations |  |
| POLI SCI/JOU URB R PL 37 | Introduction to Survey Research |  |
| POLI SCI 374 | Introduction to Statistical Inference for Political Research |  |
| Additional credits in POLI SCI to reach 30 credit minimum for the major ${ }^{1}$ |  |  |
| No more than 6 credits of Directed Study (POLI SCI 199 Directed Study, POLI SCI 698 Directed Study, POLI SCI 699 Directed Study) and/or Internship (POLI SCI 315 Legislative Internship, POLI SCI 303 Election Campaign Practicum) may be counted toward the major. Note: After the sixth week of class, students adding a Directed Study must obtain permission from the department chair. |  |  |
| SUBFIELDS |  |  |
| International Relations |  |  |
| Code | Title | Credits |
| POLI SCI 140 | Introduction to International Relations | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 343 | Theories of International Security | 3-4 |
| POLI SCI 345 | Conflict Resolution | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |


| POLI SCI/ | Gender and Politics in Comparative | $3-4$ |
| :--- | :--- | :---: |
| GEN\&WS 429 | Perspective |  |
| POLI SCI/ECON/ | Government and Natural Resources | $3-4$ |
| ENVIR ST/ |  | $3-4$ |
| URB R PL 449 | African International Relations | $3-4$ |
| POLI SCI 455 | The Politics of Development | $1-4$ |
| POLI SCI 652 | Study Abroad Topics in Political <br> Science: International Relations |  |

## American Government

| Code | Title | Credits |
| :---: | :---: | :---: |
| POLI SCI 104 | Introduction to American Politics and Government | 3-4 |
| POLI SCI 184 | Introduction to American Politics | 3 |
| POLI SCI 205 | Introduction to State Government | 3-4 |
| POLI SCI 206 | Introduction to Political Psychology | 3-4 |
| POLI SCI/ LEGALST 217 | Law, Politics and Society | 3-4 |
| POLI SCI/ CHICLA 231 | Politics in Multi-Cultural Societies | 3-4 |
| POLI SCI/AFRICAN/ <br> AFROAMER/ <br> HISTORY 297 | African and African-American Linkages: An Introduction | 4 |
| POLI SCI/ <br> CHICLA 302 | Mexican-American Politics | 3-4 |
| POLI SCI 303 | Election Campaign Practicum | 3 |
| POLI SCI 304 | The Political Economy of Race in the United States | 3-4 |
| POLI SCI 305 | Elections and Voting Behavior | 3-4 |
| POLI SCI 308 | Public Administration | 3-4 |
| POLI SCI 309 | Civil Liberties in the United States | 3-4 |
| POLI SCI 311 | United States Congress | 3-4 |
| POLI SCI 314 | Criminal Law and Justice | 3-4 |
| POLI SCI 315 | Legislative Internship | 3 |
| POLI SCI 402 | Wisconsin in Washington Internship Course | 4 |
| POLI SCI 405 | State Government and Public Policy | 3-4 |
| POLI SCI 408 | The American Presidency | 3-4 |
| POLI SCI 409 | American Parties and Politics | 3-4 |
| POLI SCI 410 | Citizenship, Democracy, and Difference | 4 |
| POLI SCI 411 | The American Constitution: Powers and Structures of Government | 4 |
| POLI SCI 412 | The American Constitution: Rights and Civil Liberties | 4 |
| POLI SCI 414 | The Supreme Court as a Political Institution | 3 |
| POLI SCI 415 | The Separation of Powers and Federal Courts | 3 |
| POLI SCI 416 | Community Power and Grass Roots Politics | 3 |
| POLI SCI 417 | The American Judicial System | 3-4 |
| POLI SCI/ <br> PUB AFFR 419 | Administrative Law | 3-4 |
| POLI SCI 507 | Health Policy and Health Politics | 3-4 |


| POLI SCI 508 | American National Security: Policy <br> and Process | $3-4$ |
| :--- | :--- | :---: |
| POLI SCI 510 | Politics of Government Regulation | $3-4$ |
| POLI SCI 511 | Campaign Finance | $3-4$ |
| POLI SCI 514 | Interest Group Politics | $3-4$ |
| POLI SCI 515 | Public Opinion | $3-4$ |
| POLI SCI 516 | Political Communications | $3-4$ |
| POLI SCI/ | African American Political Theory | $3-4$ |
| AFROAMER 519 | Wisconsin in Washington Advanced | 4 |
| POLI SCI 602 | Public Policy Course | $1-4$ |
| POLI SCI 490 | Study Abroad Topics in Political <br> Science: American Government |  |

## Political Theory

| Code | Title | Credits |
| :--- | :--- | ---: |
| POLI SCI 160 | Introduction to Political Theory | $3-4$ |
| POLI SCI 265 | Development of Ancient and <br> Medieval Western Political Thought | $3-4$ |
| POLI SCI 266 | The Development of Modern <br> Western Political Thought | $3-4$ |
| POLI SCI 360 | History of American Political <br> Thought | $3-4$ |
| POLI SCI 361 | Contemporary American Political <br> Thought | $3-4$ |
| POLI SCI 363 | Literature and Politics | $3-4$ |
| POLI SCI 460 | Topics in Political Philosophy | $3-4$ |
| POLI SCI 463 | Deception and Politics | 4 |
| POLI SCI/ | Women and Politics | $3-4$ |
| GEN\&WS 469 | African American Political Theory | $3-4$ |
| POLI SCI/ | Radical Political Theory | $3-4$ |
| PFROAMER 519 | Study Abroad Topics in Political | $1-4$ |
| POLI SCI 561 | Science: Political Theory | 3 |

## Comparative Politics

Code Title Credits
POLI SCI $120 \quad$ Politics Around the World 4
POLI SCI 182 Politics Around the World (Honors) 3

POLI SCI/ Politics in Multi-Cultural Societies 3-4
CHICLA 231
POLI SCI/GEOG/ Introduction to Southeast Asia: 4
HISTORY/LCA/ Vietnam to the Philippines
SOC 244
POLI SCI/GEOG/ The Civilizations of India-Modern 4
HISTORY/LCA/ Period
SOC 252
POLI SCI/GEOG/ Russia: An Interdisciplinary Survey 4
HISTORY/
SLAVIC 253
POLI SCI/GEOG/
HISTORY/
SLAVIC 254
POLI SCI/E A STDS/ Introduction to East Asian 3-4 HISTORY 255 Civilizations

| POLI SCI/ | Latin America: An Introduction | 3-4 |
| :---: | :---: | :---: |
| AFROAMER/ |  |  |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  |  |
| LACIS/SOC/ |  |  |
| SPANISH 260 |  |  |
| POLI SCI/AFRICAN/ | Af | 4 |
| AFROAMER/ |  |  |
| ANTHRO/GEOG/ |  |  |
| HISTORY/SOC 277 |  |  |
| POLI SCI/AFRICAN/ | African and African-American | 4 |
| AFROAMER/ | Linkages: An Introduction |  |
| HISTORY 297 |  |  |
| POLI SCI 321 | Latin-American Politics | 3-4 |
| POLI SCI 322 | Politics of Southeast Asia | 3-4 |
| POLI SCI 324 | Political Power in Contemporary | 3-4 |
|  | China |  |
| POLI SCI/ | Social Movements and Revolutions | 3-4 |
| INTL ST 325 | in Latin America |  |
| POLI SCI/LCA 326 | Politics of South Asia | 3-4 |
| POLI SCI/ | Indian Politics in Comparative | 3 |
| INTL ST 327 | Perspective |  |
| POLI SCI 329 | African Politics | 3-4 |
| POLI SCI 330 | Political Economy of Development | 3 |
| POLI SCI 332 | German Politics | 3-4 |
| POLI SCI 333 | International Politics of the Middle | 3-4 |
|  | East |  |
| POLI SCI 334 | Russian Politics | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |
| POLI SCI/ <br> INTL ST 423 | Social Mobilization in Latin America | 3 |
|  |  |  |
| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative | 3-4 |
|  | Perspective |  |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
|  |  |  |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI/ RELIG ST 433 | Religion and Politics | 3-4 |
|  |  |  |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
|  |  |  |
| POLI SCI/INTL ST 436 | Political Inequality: Measures, | 3 |
|  | Causes, Effects and Remedies |  |
| POLI SCI 437 | Nationalism and Ethnic Conflict | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
|  |  |  |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 534 | Socialism and Transitions to the | 3-4 |
|  | Market |  |
| POLI SCI 537 | Electoral Systems and | 3-4 |
|  | Representation |  |
| POLI SCI 538 | Politics and Policies in the | 3-4 |
|  | European Union |  |
| POLI SCI 635 | Comparative Politics of Sport | 3-4 |


| POLI SCI 637 | Comparative Political Economy | $3-4$ |
| :--- | :--- | :--- |
| POLI SCI 690 | Study Abroad Topics in Political <br> Science: Comparative Politics | $1-4$ |
|  |  |  |

## NOTES

Courses listed in two groups may be counted in either, but not both, groups. Students must have a grade of at least C in at least one course in each group.

Note that courses at the 300-600 level are generally comparable in difficulty. The 300-level courses are generally international relations; 400level courses are American politics (with the exception of POLI SCI 400 Topics in Political Science and POLI SCI 401 Selected Topics in Political Science Topics courses); 500-level courses are political theory; and 600level courses below 680 are comparative politics.

POLI SCI 400 and POLI SCI 401 Topics courses can be used to satisfy the distribution requirements as appropriate. Distribution requirements met by a specific topics course will be announced prior to enrollment.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all POLI SCI courses and courses that count toward the major
2.000 GPA on 15 upper-level credits in the major, taken in residence ${ }^{1}$

15 credits in POLI SCI, taken on campus
1 POLI SCI courses numbered 300 and higher that are designated as intermediate or advanced count as upper level in the major.

## DISTINCTION IN THE MAJOR IN POLITICAL SCIENCE

Students who are not enrolled in the honors program may be awarded Distinction in Political Science. To receive Distinction students must have:

- 3.700 GPA or higher on all POLI SCI courses and courses that count toward the major
- A minimum university GPA of 3.000
- Completed at least 20 credits of upper-level work in the major, taken in residence (POLI SCI courses numbered 300 and higher).
- Completed at least one of the following: senior thesis (POLI SCI 691 Senior Thesis-POLI SCI 692 Senior Thesis); POLI SCI 601 Proseminar. Topics in Political Science; other "advanced level" coursework (see a political science advisor for details); or submit a letter from an instructor describing "substantial additional work" in an advanced political science course.

Students qualifying for Distinction in Political Science will be informed as they graduate.

## HONORS IN THE MAJOR

Students may declare Honors in the Political Science Major in consultation with the Political Science major advisors. To be admitted to the Honors Program in Political Science, students must have declared a major in political science, complete or be enrolled in at least one POLI SCI course with an Honors component, and have a 3.300 overall university GPA.

To earn Honors in the Major in Political Science, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn 3.500 GPA for all POLI SCI courses
- Complete at least 20 credits in POLI SCI, for Honors, with a grade of B or better, to include: ${ }^{1}$
- POLI SCI 601 Political Science Proseminar, POLI SCI 685 Honors Research Internship in Political Science, or other advancedlevel coursework with permission of the undergraduate political science advisor and the consent of the instructor
- A two-semester Senior Honors Thesis in POLI SCI 681 Senior Honors Thesis or POLI SCI 683 and POLI SCI 682 Senior Honors Thesis or POLI SCI 684, for a total of 6 credits
${ }^{1}$ INTL ST 601 Topics in Global Security may count if the "Politics" topic is taken


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| grade point average specified by the school, college, or |  |
| academic program to remain in good academic standing. |  |
| Students whose academic performance drops below |  |
| these minimum thresholds will be placed on academic |  |
| probation. |  |

## LEARNING OUTCOMES

1. Develop an understanding of and appreciation for the methods and approaches of diverse subfields in Political Science--\#American Politics, Comparative Politics, International Relations, and Political Theory--\#and their relevance to important theoretical and pragmatic questions.
2. Analyze different forms and practices of governance both democratic and non\#democratic.
3. Argue effectively and defend propositions with intellectual integrity, while considering a range of alternative points of view and evidence.
4. Analyze relations among individuals, civil society, political institutions, and states.
5. Analyze the motivations and consequences of political decision\# making and activities.

## ADVISING AND CAREERS

## ADVISING

The Department of Political Science has two academic advisors and one career advisor who are available to meet with you to offer guidance on:

- Course selection
- Program planning
- Internships opportunities
- Study abroad programs
- Post-college plans
- Career prospects
- Scholarship opportunities
- Student research interests
- Transfer and study abroad credits

Advisors are available for 30-minute appointments and are available for walk-in advising Mondays from 9 a.m. to 12 noon and Thursdays from 1 to 4 p.m. each week during the academic year. Please note that no advising appointments are scheduled via email. Information about scheduling appointments can be found here (http://polisci.wisc.edu/undergrad/ scheduling-advising-appointment).

## ENROLLMENT INFORMATION

Political science majors who wish to enroll in the following course(s) must obtain prior consent/authorization:

- Directed Study (note that after the sixth week of class students adding a Directed Study must obtain permission from the department chair)
- Thesis
- Proseminars (varies by specific course; check footnotes in the class schedule)
- Specific Topic
- Honors Research Internship
- Other advanced-level coursework with permission of the undergraduate advisor and consent of the instructor in lieu of other required courses

Information and course descriptions for topics courses (POLI SCI 201, POLI SCI 400, POLI SCI 401) and proseminars (POLI SCI 601, POLI SCI 601, POLI SCI 601) are posted on the department website prior to each enrollment period. POLI SCI 315 Legislative Internship is available by application only. Specific deadlines will be announced each semester. For further information, see Internships on the department website. Students with a classification making them ineligible for certain courses due to retroactive or AP credits may see the instructor for possible permission to enroll on a space available basis. Students who wish to enroll in a course that is closed may use the online wait list available through the Student Center in MyUW. The number of credits for variable credit courses is determined by course format and contact periods for a specific semester as noted in the class schedule. For graduate programs, see the Graduate section of this Guide.

## HONORS IN POLITICAL SCIENCE

Honors in the Major in Political Science is intended for students who are eager to experience the excitement of original research and who wish to graduate with the best possible undergraduate training in the
discipline. Honors in the Major is especially appropriate for students who are considering graduate work in political science or who want an especially rigorous training in research, reasoning, and writing skills. Students should consult with the department advisor to determine the best way to fulfill Honors requirements and how to make the most out of the Honors in the Major experience in the field.

See the Requirements section for political science Honors in the Major requirements.

Proactive planning and frequent collaboration with majors advisors is key to successfully completing Honors in the Major. It is recommended that students complete the Proseminar or Honors Research Internship in their junior year.

Students should secure a faculty thesis advisor by the end of their junior year; successful theses normally include planning activities during the junior year. Students should enroll for the Honors Thesis Colloquium, POLI SCI 683 in the Fall and POLI SCI 684 in the Spring. Students must be making sufficient progress in POLI SCI 683 to be admitted into POLI SCI 684; Students not making sufficient progress will not be admitted into POLI SCI 684, and will consequently not complete Honors in Political Science. Rarely, students may enroll in the independent honors thesis, POLI SCI 681 in the Fall and POLI SCI 682 with the permission of the Political Science advisor and the supervising faculty thesis advisor. Likewise, students must be making sufficient progress in POLI SCI 681 to be admitted into POLI SCI 682; Students not making sufficient progress will not be admitted into POLI SCI 682, and will consequently not complete Honors in Political Science.

## CAREER ADVISING

Students can find information about meeting with the career and internship advisor here (http://polisci.wisc.edu/undergrad/scheduling-advising-appointment).

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Professors Burden, Canon, Cramer, Gehlbach, Hendley, Herrera, Marquez, Martin, Mayer, Pevehouse, Schatzberg, Schweber, Shafer, Straus, Tripp, Weimer, Yackee, Zumbrunnen

Associate Professors Ahlquist, Avramenko, Copelovitch, Ewig, Kapust, Kinsella, Kydd, Owens, Ringe, Shelef

Assistant Professors Bhavnani, Lindsay, Lupu, Powell, Renshon, Simmons, Tahk, Weeks

For appointments, see schedule an advising appointment (http:// www.polisci.wisc.edu/undergrad/scheduling-advising-appointment) on the Political Science Major page on the department website.

## POLITICAL SCIENCE, B.S.

## WHY STUDY POLITICAL SCIENCE?

Politics have been put under scrutiny in a systematic way since the ancient Greeks. Aristotle even called it the Queen of the Sciences. Our own Constitution is the product of both the scholarly study of political theory and a practical framework for political institutions and norms. Our faculty in the Department of Political Science engage politics in a scientific and rigorous way to understand human behavior and world events. Study political science to prepare yourself for a career in campaigns, public policy, business, administration, political advocacy, or public service, but also to become an informed and active citizen.

Political science is a broad and rich discipline. Some of our faculty members conduct research on the psychology of why people behave the way they do politically. Others study institutions such as legislatures, courts, and bureaucracies both as organizations and as political actors themselves. Other faculty members seek to clarify recent constitutional and legal issues. Many study foreign political systems to learn the peculiarities of different political systems comparing them regionally and globally. Our political theorists are intellectual historians and social critics interested in the millennia-long quest for the good society. Still others are policy analysts and dedicated students of American politics. Many are statistical theorists and specialists in surveying political attitudes. Our comparative and international relations experts investigate the causes of war and the conditions for peace among nations.

Political science majors are comfortable at the intersection of the humanities and the sciences. Poli Sci majors can apply rigor to problems and they can articulate solutions with clarity and with an analytical command of data. Poli Sci graduates move into a wide spectrum of positions that demand well-honed writing and presentation skills. Poli Sci graduates can apply reason and rigor to problems that are often consumed by ideology and emotion. Other disciplines may also stress rigor, but Political Science will keep you honest. The ability to define a problem and contribute to its solution while placing it within political, social, and cultural realities is a rare skill indeed, with applications well beyond the narrow confines of political work. The wide range of intellectual, analytical, qualitative, and quantitative skills, and a broad knowledge of world events that Poli Sci majors develop form the cornerstone of a powerful liberal arts education.

## WHAT CAREERS DO POLITICAL SCIENCE MAJORS PURSUE?

Poli Sci majors learn quickly, work well in teams, and have basic understanding of the policy process and the operations of government. Poli Sci majors understand that for every endeavor, no matter how important, there is a mountain of ordinary grunt work that has to be done. Poli Sci majors can be counted on to do the foot-work, put in the facetime, and endure the slog necessary of everything of consequence.

Poli Sci majors go on to work in all levels of government. Local and state governments have a direct impact on the quality of life of all Americans. Courses on state and urban government, public policy, administrative law, and public administration are especially valuable. Quantitative and statistical skills developed in these courses and applied in the internships many of our students do provide a powerful combination.

Poli Sci majors go on to work in a wide range of International careers, in business, Foreign Service, and non-governmental organizations. Political Science offers a wide variety of courses in comparative politics, international relations and organizations, public policy, political development, and interest group politics. These courses in combination with economics, statistics, computer science, and international trade.

Poli Sci majors pursue careers in campaign management, political polling, national political committees, and consulting. They will have taken multiple courses in the American political system, comparative political parties, elections, public opinion, and voting behavior; as well as committing themselves to developing their writing and data analysis.
There are over half a million campaigns in the United States annually, and while entry level jobs have long hours, low pay, and enormous demands, they are places where you can 'cut your political teeth'. Local campaigns lead to statewide or national campaigns, and then perhaps to consulting and polling if that strikes your interest.

Poli Sci majors have also traditionally gone into law. Some lawyers are litigators while others are employed by corporations, government, and other organizations. Political Science track fits nicely for students seeking law degrees as official credentials to 'practice law' and those students who seek a law degree as an additional 'tool' to make positive impacts in their professional areas of interest. Some individuals with legal training work in other areas such as corporate or public management. The department offers a wide variety of political theory, constitutional law, and public policy courses that will help you explore the interaction between law, politics, and society.

## HOW TO GET IN

Students in the College of Letters \& Science can declare political science as their major by filling out a form on the political science department's website. After a first meeting with an academic advisor that declaration will be made official. Students in other schools and colleges on campus should make an appointment with an advisor and obtain a signed declaration form to take to their prospective college or school for approval.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |

Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison <br> GPAs |
|  | 2.000 in intermediate/advanced coursework at UW- <br> Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

A minimum of $\mathbf{3 0}$ credits is required for the major.


## SUBFIELDS

## International Relations

| Code | Title | Credits |
| :---: | :---: | :---: |
| POLI SCI 140 | Introduction to International Relations | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 343 | Theories of International Security | 3-4 |
| POLI SCI 345 | Conflict Resolution | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| POLI SCI/ECON/ ENVIR ST/ URB R PL 449 | Government and Natural Resources | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 390 | Study Abroad Topics in Political Science: International Relations | 1-4 |

## American Government

| Code | Title | Credits |
| :--- | :--- | ---: |
| POLI SCI 104 | Introduction to American Politics <br> and Government | $3-4$ |
| POLI SCI 184 | Introduction to American Politics | 3 |
| POLI SCI 205 | Introduction to State Government | $3-4$ |
| POLI SCI 206 | Introduction to Political Psychology | $3-4$ |
| POLI SCI/ | Law, Politics and Society | $3-4$ |
| LEGAL ST 217 | Politics in Multi-Cultural Societies | $3-4$ |
| POLI SCI/ | African and African-American | 4 |
| CHICLA 231 | Linkages: An Introduction | 4 |
| POLI SCI/AFRICAN/ |  |  |
| AFROAMER/ | Mexican-American Politics | $3-4$ |
| HISTORY 297 | Election Campaign Practicum | 3 |
| POLI SCI/ | The Political Economy of Race in | $3-4$ |
| CHICLA 302 | the United States | $3-4$ |
| POLI SCI 303 | Elections and Voting Behavior | $3-4$ |
| POLI SCI 304 | Public Administration | $3-4$ |
| POLI SCI 305 | Civil Liberties in the United States | $3-4$ |
| POLI SCI 308 | United States Congress | $3-4$ |
| POLI SCI 309 | Criminal Law and Justice | 3 |
| POLI SCI 311 | Legislative Internship | 3 |


| POLI SCI 402 | Wisconsin in Washington Internship Course | 4 |
| :---: | :---: | :---: |
| POLI SCI 405 | State Government and Public Policy | 3-4 |
| POLI SCI 408 | The American Presidency | 3-4 |
| POLI SCI 409 | American Parties and Politics | 3-4 |
| POLI SCI 410 | Citizenship, Democracy, and Difference | 4 |
| POLI SCI 411 | The American Constitution : Powers and Structures of Government | 4 |
| POLI SCI 412 | The American Constitution: Rights and Civil Liberties | 4 |
| POLI SCI 414 | The Supreme Court as a Political Institution | 3 |
| POLI SCI 415 | The Separation of Powers and Federal Courts | 3 |
| POLI SCI 416 | Community Power and Grass Roots Politics | 3 |
| POLI SCI 417 | The American Judicial System | 3-4 |
| POLI SCI/ <br> PUB AFFR 419 | Administrative Law | 3-4 |
| POLI SCI 507 | Health Policy and Health Politics | 3-4 |
| POLI SCI 508 | American National Security: Policy and Process | 3-4 |
| POLI SCI 510 | Politics of Government Regulation | 3-4 |
| POLI SCI 511 | Campaign Finance | 3-4 |
| POLI SCI 514 | Interest Group Politics | 3-4 |
| POLI SCI 515 | Public Opinion | 3-4 |
| POLI SCI 516 | Political Communications | 3-4 |
| POLI SCI/ <br> AFROAMER 519 | African American Political Theory | 3-4 |
| POLI SCI 602 | Wisconsin in Washington Advanced Public Policy Course | 4 |
| POLI SCI 490 | Study Abroad Topics in Political Science: American Government | 1-4 |

## Political Theory

| Code | Title | Credits |
| :--- | :--- | ---: |
| POLI SCI 160 | Introduction to Political Theory | $3-4$ |
| POLI SCI 265 | Development of Ancient and <br> Medieval Western Political Thought | $3-4$ |
| POLI SCI 266 | The Development of Modern <br> Western Political Thought | $3-4$ |
| POLI SCI 360 | History of American Political <br> Thought | $3-4$ |
| POLI SCI 361 | Contemporary American Political <br> Thought | $3-4$ |
| POLI SCI 363 | Literature and Politics | $3-4$ |
| POLI SCI 460 | Topics in Political Philosophy | $3-4$ |
| POLI SCI 463 | Deception and Politics | 4 |
| POLI SCI/ | Women and Politics | $3-4$ |
| GEN\&WS 469 | African American Political Theory | $3-4$ |
| POLI SCI/ | Radical Political Theory | $3-4$ |


| POLI SCI 590 | Study Abroad Topics in Political <br> Science: Political Theory | $1-4$ |
| :--- | :--- | :--- |

## Comparative Politics

| Code | Title | Credits |
| :---: | :---: | :---: |
| POLI SCI 120 | Politics Around the World | 4 |
| POLI SCI 182 | Politics Around the World (Honors) | 3 |
| POLI SCI/ <br> CHICLA 231 | Politics in Multi-Cultural Societies | 3-4 |
| POLI SCI/GEOG/ HISTORY/LCA/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| POLI SCI/GEOG/ <br> HISTORY/LCA/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| POLI SCI/GEOG/ HISTORY/ SLAVIC 253 | Russia: An Interdisciplinary Survey | 4 |
| POLI SCI/GEOG/ <br> HISTORY/ <br> SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 |
| POLI SCI/E A STDS/ HISTORY 255 | Introduction to East Asian Civilizations | 3-4 |
| POLI SCI/ | Latin America: An Introduction | 3-4 |

AFROAMER/
ANTHRO/C\&E SOC/
GEOG/HISTORY/
LACIS/SOC/
SPANISH 260
POLI SCI/AFRICAN/ Africa: An Introductory Survey 4
AFROAMER/
ANTHRO/GEOG/
HISTORY/SOC 277
POLI SCI/AFRICAN/ African and African-American 4

| AFROAMER/ | Linkages: An Introduction |
| :--- | :--- |
| HISTORY 297 |  |


| POLI SCI 321 | Latin-American Politics | $3-4$ |
| :--- | :--- | :--- |
| POLI SCI 322 | Politics of Southeast Asia | $3-4$ |


| POLI SCI 324 | Political Power in Contemporary <br> China | $3-4$ |
| :--- | :--- | :--- |


| POLI SCI/ | Social Movements and Revolutions | $3-4$ |
| :--- | :--- | :---: |
| INTL ST 325 | in Latin America |  |
| POLI SCI/LCA 326 | Politics of South Asia | $3-4$ |

POLI SCI/ Indian Politics in Comparative 3

| INTL ST 327 | Perspective |  |
| :--- | :--- | :--- |
| POLI SCI 329 | African Politics | $3-4$ |

POLI SCI $330 \quad$ Political Economy of Development 3
POLI SCI 332 German Politics 3-4
POLI SCI 333 International Politics of the Middle 3-4
POLI SCI 334 Russian Politics 3-4
POLI SCI 421 The Challenge of Democratization 3-4

POLI SCI/CHICLA/ Latino History and Politics 3
HISTORY 422
POLI SCI/ Social Mobilization in Latin America 3

| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| :---: | :---: | :---: |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI/ <br> RELIG ST 433 | Religion and Politics | 3-4 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| POLI SCI/ <br> INTL ST 436 | Political Inequality: Measures, Causes, Effects and Remedies | 3 |
| POLI SCI 437 | Nationalism and Ethnic Conflict | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 534 | Socialism and Transitions to the Market | 3-4 |
| POLI SCI 537 | Electoral Systems and Representation | 3-4 |
| POLI SCI 538 | Politics and Policies in the European Union | 3-4 |
| POLI SCI 635 | Comparative Politics of Sport | 3-4 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics | 1-4 |

## NOTES

Courses listed in two groups may be counted in either, but not both, groups. Students must have a grade of at least C in at least one course in each group.

Note that courses at the 300-600 level are generally comparable in difficulty. The 300 -level courses are generally international relations; 400level courses are American politics (with the exception of POLI SCI 400 Topics in Political Science and POLI SCI 401 Selected Topics in Political Science Topics courses); 500-level courses are political theory; and 600level courses below 680 are comparative politics.

POLI SCI 400 and POLI SCI 401 Topics courses can be used to satisfy the distribution requirements as appropriate. Distribution requirements met by a specific topics course will be announced prior to enrollment.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all POLI SCI courses and courses that count toward the major
2.000 GPA on 15 upper-level credits in the major, taken in residence ${ }^{1}$

15 credits in POLI SCI, taken on campus
1 POLI SCI courses numbered 300 and higher that are designated as intermediate or advanced count as upper level in the major.

## DISTINCTION IN THE MAJOR IN POLITICAL SCIENCE

Students who are not enrolled in the honors program may be awarded Distinction in Political Science. To receive Distinction students must have:

- 3.700 GPA or higher on all POLI SCI courses and courses that count toward the major
- A minimum university GPA of 3.000
- Completed at least 20 credits of upper-level work in the major, taken in residence (POLI SCI courses numbered 300 and higher).
- Completed at least one of the following: senior thesis (POLI SCI 691 Senior Thesis-POLI SCI 692 Senior Thesis); POLI SCI 601 Proseminar. Topics in Political Science; other "advanced level" coursework (see a political science advisor for details); or submit a letter from an instructor describing "substantial additional work" in an advanced political science course.

Students qualifying for Distinction in Political Science will be informed as they graduate.

## HONORS IN THE MAJOR

Students may declare Honors in the Political Science Major in consultation with the Political Science major advisors. To be admitted to the Honors Program in Political Science, students must have declared a major in political science, complete or be enrolled in at least one POLI SCI course with an Honors component, and have a 3.300 overall university GPA.

To earn Honors in the Major in Political Science, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn 3.500 GPA for all POLI SCI courses
- Complete at least 20 credits in POLI SCI, for Honors, with a grade of B or better, to include: ${ }^{1}$
- POLI SCI 601 Political Science Proseminar, POLI SCI 685 Honors Research Internship in Political Science, or other advancedlevel coursework with permission of the undergraduate political science advisor and the consent of the instructor
- A two-semester Senior Honors Thesis in POLI SCI 681 Senior Honors Thesis or POLI SCI 683 and POLI SCI 682 Senior Honors Thesis or POLI SCI 684, for a total of 6 credits
${ }^{1}$ INTL ST 601 Topics in Global Security may count if the "Politics" topic is taken


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br>  <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
|  | Abroad/Study Away programs. |

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Develop an understanding of and appreciation for the methods and approaches of diverse subfields in Political Science--\#American Politics, Comparative Politics, International Relations, and Political Theory--\#and their relevance to important theoretical and pragmatic questions.
2. Analyze different forms and practices of governance both democratic and non\#democratic.
3. Argue effectively and defend propositions with intellectual integrity, while considering a range of alternative points of view and evidence.
4. Analyze relations among individuals, civil society, political institutions, and states.
5. Analyze the motivations and consequences of political decision\# making and activities.

## ADVISING AND CAREERS

## ADVISING

The Department of Political Science has two academic advisors and one career advisor who are available to meet with you to offer guidance on:

- Course selection
- Program planning
- Internships opportunities
- Study abroad programs
- Post-college plans
- Career prospects
- Scholarship opportunities
- Student research interests
- Transfer and study abroad credits

Advisors are available for 30-minute appointments and are available for walk-in advising Mondays from 9 a.m. to 12 noon and Thursdays from 1 to 4 p.m. each week during the academic year. Please note that no advising appointments are scheduled via email. Information about scheduling appointments can be found here (http://polisci.wisc.edu/undergrad/ scheduling-advising-appointment).

## ENROLLMENT INFORMATION

Political science majors who wish to enroll in the following course(s) must obtain prior consent/authorization:

- Directed Study (note that after the sixth week of class students adding a Directed Study must obtain permission from the department chair)
- Thesis
- Proseminars (varies by specific course; check footnotes in the class schedule)
- Specific Topic
- Honors Research Internship
- Other advanced-level coursework with permission of the undergraduate advisor and consent of the instructor in lieu of other required courses

Information and course descriptions for topics courses (POLI SCI 201, POLI SCI 400, POLI SCI 401) and proseminars (POLI SCI 601, POLI SCI 601, POLI SCI 601) are posted on the department website prior to each enrollment period. POLI SCI 315 Legislative Internship is available by application only. Specific deadlines will be announced each semester. For further information, see Internships on the department website. Students with a classification making them ineligible for certain courses due to retroactive or AP credits may see the instructor for possible permission to enroll on a space available basis. Students who wish to enroll in a course that is closed may use the online wait list available through the Student Center in MyUW. The number of credits for variable credit courses is determined by course format and contact periods for a specific semester as noted in the class schedule. For graduate programs, see the Graduate section of this Guide.

## HONORS IN POLITICAL SCIENCE

Honors in the Major in Political Science is intended for students who are eager to experience the excitement of original research and who wish to graduate with the best possible undergraduate training in the discipline. Honors in the Major is especially appropriate for students who are considering graduate work in political science or who want an especially rigorous training in research, reasoning, and writing skills. Students should consult with the department advisor to determine the best way to fulfill Honors requirements and how to make the most out of the Honors in the Major experience in the field.

See the Requirements section for political science Honors in the Major requirements.

Proactive planning and frequent collaboration with majors advisors is key to successfully completing Honors in the Major. It is recommended that students complete the Proseminar or Honors Research Internship in their junior year.

Students should secure a faculty thesis advisor by the end of their junior year; successful theses normally include planning activities during the junior year. Students should enroll for the Honors Thesis Colloquium, POLI SCI 683 in the Fall and POLI SCI 684 in the Spring. Students must be making sufficient progress in POLI SCI 683 to be admitted into POLI SCI 684; Students not making sufficient progress will not be admitted into POLI SCI 684, and will consequently not complete Honors in Political Science. Rarely, students may enroll in the independent honors thesis, POLI SCI 681 in the Fall and POLI SCI 682 with the permission of the Political Science advisor and the supervising faculty thesis advisor. Likewise, students must be making sufficient progress in POLI SCI 681 to be admitted into POLI SCI 682; Students not making sufficient progress will not be admitted into POLI SCI 682, and will consequently not complete Honors in Political Science.

## CAREER ADVISING

Students can find information about meeting with the career and internship advisor here (http://polisci.wisc.edu/undergrad/scheduling-advising-appointment).

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Burden, Canon, Cramer, Gehlbach, Hendley, Herrera, Marquez, Martin, Mayer, Pevehouse, Schatzberg, Schweber, Shafer, Straus, Tripp, Weimer, Yackee, Zumbrunnen

Associate Professors Ahlquist, Avramenko, Copelovitch, Ewig, Kapust, Kinsella, Kydd, Owens, Ringe, Shelef

Assistant Professors Bhavnani, Lindsay, Lupu, Powell, Renshon Simmons, Tahk, Weeks

For appointments, see schedule an advising appointment (http:// www.polisci.wisc.edu/undergrad/scheduling-advising-appointment) on the Political Science Major page on the department website.

## PSYCHOLOGY

The psychology major is the largest major in the College of Letters \& Science, focusing on five areas in the field of psychological science: biological, clinical, cognitive and cognitive neuroscience, developmental, and social and personality.

The mission of the undergraduate program in psychology is to provide students with opportunities to:

- learn about the multiple content areas of scientific psychology
- develop the ability to think critically and quantitatively
- enhance written and oral communication skills
- prepare for the most rigorous graduate and professional programs
- apply the science of psychology to the well-being of citizens of Wisconsin and the global community

Some students will go to graduate school and become the next generation of psychological scientists and educators who will create and disseminate new knowledge. Others will choose careers in other areas, including but not limited to business, medicine, law, education,
and counseling. Through its strong interdisciplinary connections with the natural sciences, social sciences, humanities, and medical sciences, scientific psychology is positioned well to influence critical issues for society. Because all courses in psychology emphasize critical thinking and the analysis of research, the undergraduate program prepares students to take on the challenges of and fully participate in an increasingly complex, multicultural world.

## DEGREES/MAJORS/CERTIFICATES

- Psychology, B.A. (p. 1204)
- Psychology, B.S. (p. 1208)


## PEOPLE

Professors Goldsmith (chair), Abramson, Alibali, Auger, Berridge, Brauer, Coe, Curtin, Davidson, Devine, Gernsbacher, Goldsmith, Gooding, Harackiewicz, Hyde, MacDonald, Marler, Niedenthal, Pollak, Postle, Rogers, Rosengren, Ryff, Saffran, Seidenberg, Snowdon

Associate Professors Bennett, Green, Lupyan, Miyamoto, Rokers, Shutts
Assistant Professors Austerweil, Li, Saalmann, Schloss, Simmering

## PSYCHOLOGY, B.A.

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## HOW TO GET IN

To declare the psychology major, a student must successfully complete PSYCH 202 Introduction to Psychology (or equivalent) with a grade of C or better and schedule an appointment (http://
psych.wisc.edu/undergraduate-program/schedule-an-appointment)with an advisor.

1 Equivalents include a score of 4 or higher on the IB Psychology exam or or a score of 4 or 5 on the AP Psychology exam.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b(Q R B)$ coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR

Language

- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

Liberal Arts 108 credits
and Science
Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- <br>  Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major requires 33 credits in PSYCH and completion of these four learning areas:

## FOUNDATION

Foundation courses provide a grounding in basic psychological facts and an understanding of the methodologies used to produce those facts. Four courses are required with grades of $C$ or better in each category:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Introductory Psychology-one course: ${ }^{1}$ | $3-4$ |  |
| PSYCH 202 | Introduction to Psychology |  |
| Statistics-one course: | 3-4 |  |
| PSYCH 210 |  | Basic Statistics for Psychology ${ }^{1}$ |


| SOC/ <br> C\&E SOC 360 | Statistics for Sociologists I |
| :---: | :---: |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |
| Research Methods-one course: |  |
| PSYCH 225 | Research Methods |
| Introductory Biology | -select one of the three: ${ }^{2}$ 3-5 |
| ZOOLOGY/ <br> BIOLOGY 101 <br> \& ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology and Animal Biology Laboratory |
| ZOOLOGY/ BIOLOGY/ BOTANY 151 | Introductory Biology |
| BIOCORE 381 <br> \& BIOCORE 382 <br> \& BIOCORE 383 <br> \& BIOCORE 384 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory and Cellular Biology and Cellular Biology Laboratory |
| Total Credits | 13-17 |
| 1 A score of 4 or higher on the IB Psychology exam or a score of 4 or 5 on the AP Psychology exam. |  |
| 2 A score of 4 or b 5 on the AP Biolo requirement. | tter on the IB Biology exam, or a score of 4 or gy exam will satisfy the Introductory Biology |

## BREADTH

Breadth courses familiarize students with the breadth of psychology.
Three (3) courses from at least three different topic groups are required:

| Biological |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| PSYCH 449 | Animal Behavior | 3 |
| PSYCH 450 | Primates and Us: Insights into |  |
|  | Human Biology and Behavior | 3 |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| PSYCH/ | Neurobiology | 3 |
| ZOOLOGY 523 |  |  |


| Clinical |  | Credits |
| :--- | :--- | ---: |
| Code | Title | $1-4$ |
| PSYCH 311 | Issues in Psychology (Topic: <br> Psychology Law and Social <br> Policies) |  |
|  | Psychology, Law, and Social Policy | 3 |
| PSYCH 401 | Abnormal Psychology | $3-4$ |
| PSYCH 405 | Behavior Pathology: Neuroses | 3 |
| PSYCH 511 | Behavior Pathology-Psychoses | 3 |


| Cognitive and Perceptual Sciences |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| PSYCH 406 | Psychology of Perception | $3-4$ |
| PSYCH 413 | Language, Mind, and Brain | 3 |
| PSYCH 414 | Cognitive Psychology | 3 |


| Developmental |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| PSYCH/SOC 453 | Human Sexuality | 4 |
| PSYCH 460 | Child Development | $3-4$ |
| PSYCH 464 | Adult Development and Aging | 3 |


| Social and Personality |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| PSYCH 403 | Psychology of Personality | 3 |
| PSYCH/SOC 456 | Introductory Social Psychology | $3-4$ |
| PSYCH/ | Psychology of Women and Gender | 3 |
| GEN\&WS 522 |  |  |
| PSYCH 428 | Introduction to Cultural Psychology | $3-4$ |
| DEPTH |  |  |

Depth courses allow students to engage in depth with material in specific content areas in psychology. Depth courses include both a lecture component and a required discussion/lab section for all students, and they help students develop a deeper understanding of particular areas of psychology. Each depth course has a prerequisite of one relevant breadth course; please check each course for possible prerequisites. Two courses are required:

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 501 | Depth Topic in Social Science <br> (multiple separate topics offered <br> each semester) | 4 |
| PSYCH 502 | Cognitive Development | 4 |
| PSYCH 503 | Social Development | 4 |
| PSYCH 505 | Depth Topic in Biological Science | $3-4$ |
| PSYCH 508 | Psychology of Human Emotions: <br> From Biology to Culture | 4 |
| PSYCH 510 | Critical Issues in Child <br> Psychopathology | 4 |
| PSYCH 513 | Hormones, Brain, and Behavior |  |
| PSYCH 520 | How We Read: The Science of <br> Reading and Its Educational | 4 |
| Implications |  |  |

## CAPSTONE

Capstone courses allow students to engage in depth with particular content areas in psychology in a seminar setting. One course is required:

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 601 | Current Topics in Psychology (many <br> separate topics each semester) | 3 |
| PSYCH 602 | Intermediate Statistics for <br> Psychology | 3 |
| PSYCH 607 | Introduction to Clinical Psychology | 3 |


| PSYCH 610 | Statistical Analysis of <br> Psychological Experiments | 3 |
| :--- | :--- | :--- |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all PSYCH and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{2}$

15 credits in PSYCH, taken on the UW-Madison campus
2 PSYCH 300-699 are upper level in the major.

## HONORS IN THE MAJOR

Students may apply for Honors in the Psychology Major in consultation with the psychology undergraduate advisor(s). Decisions on admission to the Honors in the Major in Psychology program are made on a rolling basis throughout the year by a committee of psychology faculty. Overall, criteria emphasize demonstrated ability and commitment to becoming a first-rate scholar. Performance in coursework at the university, particularly Honors courses in psychology and related fields, is among the criteria for admission. Consistent with the philosophy that there is more to honors scholarship than distinguished grades, commitment to excellence in the science of psychology, evidence of broad scholarship (including mathematics and sciences), and evidence of involvement within the university and the broader community enhance students' credentials.

## HONORS IN THE PSYCHOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Psychology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.300 GPA for all PSYCH courses, and all courses in the major
- Complete the following courses, taken for Honors, with individual grades of B or better:
- PSYCH 380 Junior Honors Seminar
- Three Psychology Breadth and/or Depth courses
- A two-semester Senior Honors Thesis in PSYCH 681 Senior Honors Thesis and PSYCH 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| formats and credits earned in UW-Madison Study |  |
| Abroad/Study Away programs. |  |

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Gain an appreciation for the contributions that psychology is making to our understanding of human and animal behavior.
2. Learn to analyze and construct arguments, define and solve problems, and understand and apply scientific reasoning.
3. Learn to communicate their ideas, both written and spoken, in a clear, organized, and compelling way.
4. Gain a specific understanding of how to use data and research methodology in their critical thinking.
5. Acquire an appreciation of and respect for individual differences and diversity of experiences and background.
6. Acquire the statistical and research skills used in the behavioral sciences.
7. Have the opportunity to evaluate the diverse professional opportunities in psychology.

## ADVISING AND CAREERS

Advising appointments can be made through the WiscCal Scheduling Assistant. All major declarations require an appointment. You must have a NetID to make an appointment.

Valerie Johnson (https://calendar.wisc.edu/scheduling-assistant/public/ profiles/ZRvJFZZg.html) or Stephanie Osborn (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/PmTkxMuT.html): Students whose last name begins with A-H; Room 426 or 430 Brogden Psychology Building

Stephanie Osborn (https://calendar.wisc.edu/scheduling-assistant/ public/profiles/PmTkxMuT.html): Students whose last name begins with I-L; Room 428 Brogden Psychology Building

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Appointments may be made up to two weeks in advance, with at least 24 hours advance notice. Students are allowed only one appointment in a two week period. Please note that students are limited to one 25-minute appointment within a two-week interval. Students who are more than 10 minutes late for an appointment will be required to reschedule.

If you need to cancel an appointment, you must do so through Scheduling Assistant. Students who have migrated to Office365 and are using the

Outlook Web App should be sure to send us a response if they decline their appointment.

Please also note that there is a high demand for advising in the psychology department. It is common for appointments to be filled quickly. Requests for appointments cannot be made via email. If you have more immediate advising needs, please refer to the weekly dropin hours (http://psych.wisc.edu/undergraduate-program/drop-in-hours). All students, regardless of their assigned advisor, may attend drop-in advising.

## Are you a prospective student?

We are happy to meet with prospective UW-Madison students to discuss the psychology major during winter, spring, and summer break. We require a minimum of two weeks advance notice to schedule an appointment. You may contact us via email: advisor@psych.wisc.edu.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Goldsmith (chair), Abramson, Alibali, Auger, Berridge, Brauer, Coe, Curtin, Davidson, Devine, Gernsbacher, Goldsmith, Gooding, Harackiewicz, Hyde, MacDonald, Marler, Niedenthal, Pollak, Postle, Rogers, Rosengren, Ryff, Saffran, Seidenberg, Snowdon

Associate Professors Bennett, Green, Lupyan, Miyamoto, Rokers, Shutts
Assistant Professors Austerweil, Li, Saalmann, Schloss, Simmering

- learn about the multiple content areas of scientific psychology
- develop the ability to think critically and quantitatively
- enhance written and oral communication skills
- prepare for the most rigorous graduate and professional programs
- apply the science of psychology to the well-being of citizens of Wisconsin and the global community

Some students will go to graduate school and become the next generation of psychological scientists and educators who will create and disseminate new knowledge. Others will choose careers in other areas, including but not limited to business, medicine, law, education, and counseling. Through its strong interdisciplinary connections with the natural sciences, social sciences, humanities, and medical sciences, scientific psychology is positioned well to influence critical issues for society. Because all courses in psychology emphasize critical thinking and the analysis of research, the undergraduate program prepares students to take on the challenges of and fully participate in an increasingly complex, multicultural world.

## HOW TO GET IN

To declare the psychology major, a student must successfully complete PSYCH 202 Introduction to Psychology (or equivalent) with a grade of C or better and schedule an appointment (http:// psych.wisc.edu/undergraduate-program/schedule-an-appointment)with an advisor.

Equivalents include a score of 4 or higher on the IB Psychology exam or or a score of 4 or 5 on the AP Psychology exam.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## PSYCHOLOGY, B.S.

The psychology major is the largest major in the College of Letters \& Science, focusing on five areas in the field of psychological science: biological, clinical, cognitive and cognitive neuroscience, developmental, and social and personality

The mission of the undergraduate program in psychology is to provide students with opportunities to:

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF SCIENCE DEGREE REQUIREMENTS

| Mathematics | Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT <br> Limit one each: COMP SCI, STAT |
| :---: | :---: |
| Foreign <br> Language | Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

The major requires 33 credits in PSYCH and completion of these four learning areas:

## FOUNDATION

Foundation courses provide a grounding in basic psychological facts and an understanding of the methodologies used to produce those facts. Four courses are required with grades of $C$ or better in each category:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Introductory Psychology-one course: ${ }^{1}$ |  | 3-4 |
| PSYCH 202 | Introduction to Psychology |  |
| Statistics-one course: |  | 3-4 |
| PSYCH 210 | Basic Statistics for Psychology ${ }^{1}$ |  |
| $\begin{aligned} & \text { SOC/ } \\ & \text { C\&E SOC } 360 \end{aligned}$ | Statistics for Sociologists I |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |

Research Methods-one course: 4

| PSYCH 225 | Research Methods |  |
| :---: | :---: | :---: |
| ntroductory Biology-select one of the three: |  |  |


| ZOOLOGY/ | Animal Biology |
| :--- | :--- |
| BIOLOGY 101 | and Animal Biology Laboratory |
| \& ZOOLOGY/ |  |
| BIOLOGY 102 |  |
| ZOOLOGY/ | Introductory Biology |
| BIOLOGY/ |  |
| BOTANY 151 |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| \& BIOCORE 382 | and Evolution, Ecology, and |
| \& BIOCORE 383 | Genetics Laboratory <br> \& BIOCORE 384 |
| and Cellular Biology <br> and Cellular Biology Laboratory |  |

Total Credits
13-17
1 A score of 4 or higher on the IB Psychology exam or a score of 4 or 5 on the AP Psychology exam.
2 A score of 4 or better on the IB Biology exam, or a score of 4 or 5 on the AP Biology exam will satisfy the Introductory Biology requirement.

## BREADTH

Breadth courses familiarize students with the breadth of psychology.
Three (3) courses from at least three different topic groups are required:

| Biological |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 3 |
| PSYCH 449 | Animal Behavior | 3 |
| PSYCH 450 | Primates and Us: Insights into <br>  <br>  <br> Human Biology and Behavior |  |
| PSYCH 454 | Behavioral Neuroscience | 3 |
| PSYCH/ | Neurobiology | 3 |
| ZOOLOGY 523 |  |  |


| PSYCH 510 | Critical Issues in Child <br> Psychopathology | 4 |
| :--- | :--- | ---: |
| PSYCH 513 | Hormones, Brain, and Behavior <br> PSYCH 520 | How We Read: The Science of <br> Reading and Its Educational <br> Implications |
| PSYCH 521 | The Structure of Human Thought: <br> Concepts, Language and Culture | 4 |
| PSYCH 525 | Cognition in Health and Society | 4 |
| PSYCH 526 | The Criminal Mind: Forensic and <br> Psychobiological Perspectives <br> Psychological Effects of the | 4 |
| PSYCH 532 | Internet | 4 |

## CAPSTONE

Capstone courses allow students to engage in depth with particular content areas in psychology in a seminar setting. One course is required:

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 601 | Current Topics in Psychology (many | 3 |
|  | separate topics each semester) |  |
| PSYCH 602 | Intermediate Statistics for |  |
|  | Psychology | 3 |
| PSYCH 607 | Introduction to Clinical Psychology | 3 |
| PSYCH 610 | Statistical Analysis of | 3 |
|  | Psychological Experiments |  |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all PSYCH and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{2}$

15 credits in PSYCH, taken on the UW-Madison campus

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 403 | Psychology of Personality | 3 |
| PSYCH/SOC 456 | Introductory Social Psychology | $3-4$ |
| PSYCH/ | Psychology of Women and Gender | 3 |
| GEN\&WS 522 |  |  |
| PSYCH 428 | Introduction to Cultural Psychology | $3-4$ |

## DEPTH

Depth courses allow students to engage in depth with material in specific content areas in psychology. Depth courses include both a lecture component and a required discussion/lab section for all students, and they help students develop a deeper understanding of particular areas of psychology. Each depth course has a prerequisite of one relevant breadth course; please check each course for possible prerequisites. Two courses are required:

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 501 | Depth Topic in Social Science <br> (multiple separate topics offered <br> each semester) | 4 |
|  | Cognitive Development | 4 |
| PSYCH 502 | Social Development | 4 |
| PSYCH 503 | Depth Topic in Biological Science | $3-4$ |
| PSYCH 505 | Psychology of Human Emotions: | 4 |
| PSYCH 508 | From Biology to Culture |  |

## HONORS IN THE PSYCHOLOGY MAJOR REQUIREMENTS

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| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
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## LEARNING OUTCOMES

1. Gain an appreciation for the contributions that psychology is making to our understanding of human and animal behavior.
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last name begins with A-H; Room 426 or 430 Brogden Psychology Building

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- SuccessWorks (https://careers.Is.wisc.edu)
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Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)

## PEOPLE

Professors Goldsmith (chair), Abramson, Alibali, Auger, Berridge, Brauer, Coe, Curtin, Davidson, Devine, Gernsbacher, Goldsmith, Gooding, Harackiewicz, Hyde, MacDonald, Marler, Niedenthal, Pollak, Postle, Rogers, Rosengren, Ryff, Saffran, Seidenberg, Snowdon

Associate Professors Bennett, Green, Lupyan, Miyamoto, Rokers, Shutts

Assistant Professors Austerweil, Li, Saalmann, Schloss, Simmering

## RELIGIOUS STUDIES

Religious studies is an academic discipline that looks at religious phenomena worldwide from a variety of angles in order to understand the many roles that religion plays in human life. To this end, students of religion learn to use a variety of theoretical analyses and methods. These include historical methods to understand how religions develop in time; critical literary methods to understand religious ideas; aesthetic methods to understand religious art and material culture; social-scientific methods to understand the relationship between religion, society and culture. Religious studies can also engage a variety of professional disciplines in analysis of how religion functions in economic, educational or political contexts, healthcare and scientific research, to name some examples.

Some ways of studying religion emphasize understanding religions on their own terms, other ways use comparative methods to discern differences and similarities between religions. Students of religion also study ways that people use religious resources to make meaning outside the boundaries of religious institutions and identities. Above all, the field of religious studies requires a willingness to explore different ways of interpreting human life and diligent effort to develop understanding of how religious ideas, symbols, rituals and spaces serve as resources for people in a variety of contexts as they make sense of and live out their lives in the world. Thus, religious studies provides important preparation for thinking, communicating and functioning professionally and personally in a complex, multi-dimensional world.

## COURSES

Because religious studies is an interdisciplinary program drawing upon many departments, some courses may have prerequisites in their home departments that must be fulfilled even though the prerequisites themselves have no bearing on progress within the religious studies major. Students are responsible for ensuring that they have met all the prerequisites to enter a course before they enroll in it. The current list of courses can be found in the Religious Studies course list page (http:// guide.wisc.edu/courses/relig_st) in the Guide

## DEGREES/MAJORS/CERTIFICATES

- Religious Studies, B.A. (p. 1212)
- Religious Studies, B.S. (p. 1217)
- Religious Studies, Certificate (p. 1221)


## PEOPLE

## PROFESSORS

Bell, Bowie, Brenner, Bühnemann, Chamberlain, Cohen, Dale, DuBois, Dunne, Gade, Hansen, Hardin, Hildner, Howard, Hsia, Koshar, Langer, Livorni, Louden, Nadler, Ohnuki-Tierney, Phillips, Rosenblum, Schamiloglu, Schenck, Schweber, Stanford Friedman, Thompson, Wandel, Wink, Wolf, Zaeske

ASSOCIATE PROFESSORS<br>Beneker, Cerulli, Hutton, Livanos, Ridgely, Shelef, Shoemaker, Thal, Todorovic

ASSISTANT PROFESSORS<br>Al-Mohammad, Chamedes, Hollander, Mandell, Pruitt

DISTINGUISHED FACULTY ASSOCIATE Brown

FACULTY ASSOCIATES
Mellor, Norman, Rosenhagen

## ASSOCIATE FACULTY ASSOCIATE

Whelan

## LECTURER

Carlsson

## FACULTY DIVERSITY LIAISON

Program Director Rosenblum

## RELIGIOUS STUDIES, B.A.

Religious studies is an academic discipline that looks at religious phenomena worldwide from a variety of angles in order to understand the many roles that religion plays in human life. To this end, students of religion learn to use a variety of theoretical analyses and methods. These include historical methods to understand how religions develop in time; critical literary methods to understand religious ideas; aesthetic methods to understand religious art and material culture; social-scientific methods to understand the relationship between religion, society and culture. Religious studies can also engage a variety of professional disciplines in analysis of how religion functions in economic, educational or political contexts, healthcare and scientific research, to name some examples.

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## HOW TO GET IN

Students who wish to declare their intention to major or earn a certificate in religious studies must meet with the undergraduate advisor during regular office hours or by making an appointment. Students are encouraged to do this early in their academic careers in order to plan for successful completion and take advantage of opportunities such as Honors, special research, internship, service learning, or study abroad opportunities in associate with the major or certificate.

Dr. Corrie Norman is the undergraduate advisor and Honors in the Major advisor. Contact her by email at cenorman@wisc.edu.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

| Mathematics | Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning $b$ (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement. |
| :---: | :---: |
| Foreign Language | - Complete the fourth unit of a foreign language; OR <br> - Complete the third unit of a foreign language and the second unit of an additional foreign language <br> Note: A unit is one year of high school work or one semester/term of college work. |
| L\&S Breadth | - Humanities, 12 credits: 6 of the 12 credits must be in literature <br> - Social Sciences, 12 credits <br> - Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences |
| Liberal Arts and Science Coursework | 108 credits |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)


## - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work)

## MAJOR REQUIREMENTS

30 credits in Religious Studies course work, to include:

## GATEWAY

| Code | Title | Credits |
| :---: | :---: | :---: |
| 2 courses from: |  | 6 |
| RELIG ST 101 | Religion in Global Perspective |  |
| RELIG ST 102 | Exploring Religion in Sickness and Health |  |
| RELIG ST 103 | Exploring Religion and Sexuality |  |
| Total Credits |  | 6 |
| MIDDLE SEQUENCE |  |  |
| Code | Title | Credits |
| 9 credits from: |  | 9 |
| RELIG ST 300 | America and Religions |  |
| RELIG ST/ GEN\&WS 305 | Women, Gender and Religion |  |
| RELIG ST/ <br> E ASIAN/ <br> HISTORY/ <br> LCA 308 | Introduction to Buddhism |  |
| RELIG ST/ HISTORY/ MEDIEVAL 309 | The Crusades: Christianity and Islam |  |
| RELIG ST 311 | Sects and Cults |  |
| RELIG ST/ HISTORY/ MEDIEVAL 312 | The Medieval Church |  |
| RELIG ST/ HISTORY/ MEDIEVAL 318 | Medieval Social and Intellectual History, 1200-1450 |  |
| RELIG ST/ <br> SLAVIC 325 | Eastern Christianity/Russian Orthodoxy in a Global Context |  |
| RELIG ST 327 | Christianity and the Almighty Dollar |  |
| RELIG ST/ JEWISH/ LITTRANS 328 | Classical Rabbinic Literature in Translation |  |
| RELIG ST/ HIST SCI/ MED HIST 331 | Science, Medicine and Religion |  |
| RELIG ST/ CLASSICS/HEBRBIB/JEWISH/ LITTRANS 332 | Prophets of the Bible |  |
| RELIG ST 333 | Early Christian Literature: MatthewRevelation |  |
| RELIG ST/ HISTORY 334 | The Reformation |  |
| RELIG ST/ CLASSICS/ JEWISH 335 | King David in History and Tradition |  |

RELIG ST/ In Translation: Mythology of FOLKLORE/ Scandinavia
LITTRANS/
MEDIEVAL 342
RELIG ST/ Anthropology of Religion
ANTHRO 343
RELIG ST/ Jewish Literature of the Greco-
CLASSICS/ Roman Period
JEWISH 346
RELIG ST/ Introduction to Taoism
EASIAN 350
RELIG ST/ Shamanism
FOLKLORE 352
RELIG ST/ Hinduism
LCA 355
RELIG ST/ Islam, Science \& Technology, and
ENVIR ST/ the Environment
HIST SCI 356
RELIG ST/ Literatures of Muslim Societies
LCA 357
RELIG ST/ Myth
FOLKLORE 359
RELIG ST/ENGL/ The Anglo-Saxons
HISTORY 360
RELIG ST 361 Early Christian Literature: Pauline Christianity
RELIG ST/ Introduction to Confucianism
EASIAN 363
RELIG ST/ Jainism: Religion of Non-Violence
LCA 367
RELIG ST/ The Bible in the Middle Ages
HISTORY/
JEWISH/
MEDIEVAL 368
RELIG ST/ Islam: Religion and Culture
AFRICAN/
LCA 370
RELIG ST/ Great Cities of Islam
ART HIST 373
RELIG ST/ The Rhetoric of Religion
COM ARTS 374
RELIG ST/ Jewish Cultural History (in English)
JEWISH 377
RELIG ST/ Islam in Iran
HISTORY 379
RELIG ST 400 Topics in Religious Studies -
Humanities
RELIG ST 401 Topics in Religious Studies - Social
Studies
RELIG ST/ Thought of Gandhi
LCA 402

| RELIG ST 403 | Topics in Religious Studies-US <br> Ethnic Studies |
| :--- | :--- |
| RELIG ST/ | African American Religions |
| AFROAMER 404 |  |
| RELIG ST 406 | The Amish |


| RELIG ST/ <br> LCA 421 | A Survey of Tibetan Buddhism |
| :---: | :---: |
| RELIG ST/ POLI SCI 433 | Religion and Politics |
| RELIG ST/ <br> ENGL 434 | Milton |
| RELIG ST/ <br> JEWISH/ <br> PHILOS 435 | Jewish Philosophy from Antiquity to the Seventeenth Century |
| RELIG ST/ HISTORY 437 | Western Christianity from Augustine to Darwin |
| RELIG ST/ <br> HISTORY/ <br> LCA 438 | Buddhism and Society in Southeast Asian History |
| RELIG ST/ HISTORY 439 | Islamic History From the Origin of Islam to the Ottoman Empire |
| RELIG ST/ <br> MEDIEVAL 440 | Francis of Assisi: Literature and the Arts |
| $\begin{aligned} & \text { RELIG ST/ } \\ & \text { LCA } 444 \end{aligned}$ | Introduction to Sufism (Islamic Mysticism) |
| RELIG ST/ JEWISH 448 | Classical Rabbinic Texts |
| RELIG ST/ <br> EASIAN/LCA 466 | Buddhist Thought |
| RELIG ST/ HISTORY 470 | Religious Thought in Modern Europe |
| RELIG ST 472 | Christian Literature: The Gospels |
| RELIG ST/ ART HIST 478 | Art and Religious Practice in Medieval Japan |
| RELIG ST 500 | Advanced Topics in Religious Studies |
| RELIG ST/ <br> PHILOS 501 | Philosophy of Religion |
| RELIG ST/ PHILOS 502 | Special Topics in Philosophy of Religion |
| HISTORY/ <br> RELIG ST 411 | The Enlightenment and Its Critics |
| RELIG ST/ CURRIC/ ED POL 516 | Religion and Public Education |
| RELIG ST/ CLASSICS/ HISTORY 517 | Religions of the Ancient Mediterranean |
| RELIG ST/ HISTORY/ JEWISH 529 | Intellectual and Religious History of European Jewry, 1648-1939 |
| RELIG ST/ <br> HISTORY/ <br> LCA 547 | Religion, Colonialism \& Modernity in Southeast Asia |
| RELIG ST/LCA/ SOC 614 | Social Structures of Muslim Societies |
| RELIG ST/ POLISCI 618 | Political Islam |
| RELIG ST/ <br> LCA 620 | Proseminar: Studies in Religions of Asia |
| RELIG ST/ <br> LCA 623 | Yoga: Methods and Goals |


| RELIG ST/ <br> LCA 624 | Meditation in Indian Buddhism and Hinduism |  |
| :---: | :---: | :---: |
| RELIG ST/ <br> LCA 626 | Gods and Goddesses of South Asia |  |
| RELIG ST/LCA/ LEGAL ST 628 | Hindu Law |  |
| RELIG ST/LCA/ SOC 634 | Social Structure of India |  |
| RELIG ST/ <br> LCA 650 | Proseminar in Buddhist Thought |  |
| RELIG ST/ ANTHRO 666 | The Anthropology of Shamanism and Occult Experience |  |
| Total Credits |  | 9 |
| CAPSTONE |  |  |
| Code | Title | Credits |
| 2 courses: |  | 7 |
| RELIG ST 600 | Religion in Critical Perspective |  |
| RELIG ST 601 | Senior Capstone Research and Colloquium |  |
| Total Credits |  | 7 |
| ELECTIVES |  |  |
| Code | Title | Credits |
| Credits to achieve 30 in the major: |  | 11 |
| Religious Studies course offerings (http:// guide.wisc.edu/courses/relig_st) |  |  |
| Total Credits |  | 11 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all RELIG ST and major courses
2.000 GPA on 15 upper-level credits for the major, taken in residence ${ }^{1}$

15 credits in RELIG ST or the major, taken on campus
1 Courses counting as upper level in the major include:
RELIG ST/HISTORY 208, RELIG ST/HISTORY 209, RELIG ST/ HISTORY 212, RELIG ST/CLASSICS/JEWISH/LITTRANS 227, RELIG ST/ILS 234, RELIG ST/E ASIAN/LCA 235, RELIG ST/ CLASSICS/JEWISH/LITTRANS 237, RELIG ST/LITTRANS/ MEDIEVAL 253, RELIG ST/LITTRANS 257, RELIG ST/PHILOS 261, RELIG ST/ENVIR ST 270 and all courses numbered RELIG ST 300699, except RELIG ST/CLASSICS/HEBR-BIB/JEWISH/LITTRANS 332.

## HONORS IN THE MAJOR

Students may declare Honors in the Religious Studies Major in consultation with the Religious Studies undergraduate advisor.

## HONORS IN THE RELIGIOUS STUDIES MAJOR: REQUIREMENTS

To earn Honors in the Major in Religious Studies, students must satisfy both the requirements for the major (above) and these additional requirements:

- Minimum 3.300 University GPA
- Minimum 3.500 GPA in all RELIG ST and major courses
- 19 credits, taken for Honors, with individual grades of $B$ or better, to include:
- RELIG ST 600 Religion in Critical Perspective
- RELIG ST 601 Senior Capstone Research and Colloquium
- RELIG ST 681 and RELIG ST 682 for at least 6 credits
- 6 credits of intermediate- or advanced-level RELIG ST and major coures


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Proficiency in close reading, interpretation, and written and oral analysis.
2. Proficiency in accessing, appraising, and utilizing a variety of resources and methods for research across disciplinary lines.
3. Proficiency in categorizing, analyzing and comparing diverse systems of value and belief in a variety of contexts
4. Global and local religious literacy; identifying, evaluating, and interpreting the interrelationships and impact of religious worldviews and communities in Wisconsin, the United States and globally.
5. Ability to conduct and present sustained research on primary sources using methodologies/analysis of religious studies culminating in the senior capstone project.

## ADVISING AND CAREERS

## ADVISING

Dr. Corrie Norman is the undergraduate advisor and Honors in the Major advisor. Contact her by email at cenorman@wisc.edu to meet with her. Students are encouraged to meet with Dr. Norman early in their academic careers in order to plan for successful completion and take advantage of opportunities such as Honors, special research, internship, service learning or study abroad opportunities in associate with the major or certificate.

## CAREERS

Religious studies engages a variety of professional disciplines and provides important preparation for thinking, communicating and functioning professionally in a complex, multi-dimensional world

Religious studies sponsors workshops and other career exploration vehicles, often in collaboration with SuccessWorks at the College of Letters \& Science, to aid students in articulating the value of religious studies for their career preparation. Student-developed capstone projects in religious studies often make specific connections to experiential learning and career preparation in a range of fields. Talk with Dr. Norman about possibilities for combining internships and other forms of preprofessional training with the major and certificate.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## PROFESSORS

Bell, Bowie, Brenner, Bühnemann, Chamberlain, Cohen, Dale, DuBois, Dunne, Gade, Hansen, Hardin, Hildner, Howard, Hsia, Koshar, Langer, Livorni, Louden, Nadler, Ohnuki-Tierney, Phillips, Rosenblum, Schamiloglu, Schenck, Schweber, Stanford Friedman, Thompson, Wandel, Wink, Wolf, Zaeske

## ASSOCIATE PROFESSORS

Beneker, Cerulli, Hutton, Livanos, Ridgely, Shelef, Shoemaker, Thal, Todorovic

## ASSISTANT PROFESSORS

Al-Mohammad, Chamedes, Hollander, Mandell, Pruitt
DISTINGUISHED FACULTY ASSOCIATE
Brown
FACULTY ASSOCIATES
Mellor, Norman, Rosenhagen

ASSOCIATE FACULTY ASSOCIATE<br>Whelan

## LECTURER

Carlsson

## FACULTY DIVERSITY LIAISON

Program Director Rosenblum

## RELIGIOUS STUDIES, B.S.

Religious studies is an academic discipline that looks at religious phenomena worldwide from a variety of angles in order to understand the many roles that religion plays in human life. To this end, students of religion learn to use a variety of theoretical analyses and methods. These include historical methods to understand how religions develop in time; critical literary methods to understand religious ideas; aesthetic methods to understand religious art and material culture; social-scientific methods to understand the relationship between religion, society and culture. Religious studies can also engage a variety of professional disciplines in analysis of how religion functions in economic, educational or political contexts, healthcare and scientific research, to name some examples.

Some ways of studying religion emphasize understanding religions on their own terms, other ways use comparative methods to discern differences and similarities between religions. Students of religion also study ways that people use religious resources to make meaning outside the boundaries of religious institutions and identities. Above all, the field of religious studies requires a willingness to explore different ways of interpreting human life and diligent effort to develop understanding of how religious ideas, symbols, rituals and spaces serve as resources for people in a variety of contexts as they make sense of and live out their lives in the world. Thus, religious studies provides important preparation for thinking, communicating and functioning professionally and personally in a complex, multi-dimensional world.

## COURSES

Because religious studies is an interdisciplinary program drawing upon many departments, some courses may have prerequisites in their home departments that must be fulfilled even though the prerequisites themselves have no bearing on progress within the religious studies major. Students are responsible for ensuring that they have met all the prerequisites to enter a course before they enroll in it. The current list of courses can be found in the Religious Studies course list page (http:// guide.wisc.edu/courses/relig_st) in the Guide.

## HOW TO GET IN

Students who wish to declare their intention to major or earn a certificate in religious studies must meet with the undergraduate advisor during regular office hours or by making an appointment. Students are encouraged to do this early in their academic careers in order to plan for successful completion and take advantage of opportunities such as Honors, special research, internship, service learning, or study abroad opportunities in associate with the major or certificate.

Dr. Corrie Norman is the undergraduate advisor and Honors in the Major advisor. Contact her by email at cenorman@wisc.edu.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics

Foreign
Language
L\&S Breadth

Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts and Science Coursework

108 credits

| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| :--- | :--- |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## MAJOR REQUIREMENTS

30 credits in Religious Studies course work, to include:

| Code | Title | Credits |
| :---: | :---: | :---: |
| 2 courses from: |  | 6 |
| RELIG ST 101 | Religion in Global Perspective |  |
| RELIG ST 102 | Exploring Religion in Sickness and Health |  |
| RELIG ST 103 | Exploring Religion and Sexuality |  |
| Total Credits |  | 6 |
| MIDDLE SEQUENCE |  |  |
| Code | Title | Credits |
| 9 credits from: |  | 9 |
| RELIG ST 300 | America and Religions |  |
| RELIG ST/ GEN\&WS 305 | Women, Gender and Religion |  |
| RELIG ST/ <br> E ASIAN/ <br> HISTORY/ <br> LCA 308 | Introduction to Buddhism |  |
| RELIG ST/ <br> HISTORY/ <br> MEDIEVAL 309 | The Crusades: Christianity and Islam |  |
| RELIG ST 311 | Sects and Cults |  |
| RELIG ST/ <br> HISTORY/ <br> MEDIEVAL 312 | The Medieval Church |  |


| RELIG ST/ | Medieval Social and Intellectual |
| :--- | :--- |
| HISTORY/ | History, 1200-1450 |
| MEDIEVAL 318 |  |
| RELIG ST/ | Eastern Christianity/Russian |
| SLAVIC 325 | Orthodoxy in a Global Context |
| RELIG ST 327 | Christianity and the Almighty Dollar |
| RELIG ST/ | Classical Rabbinic Literature in |
| JEWISH/ | Translation |
| LITTRANS 328 |  |
| RELIG ST/ | Science, Medicine and Religion |
| HIST SCI/ |  |
| MED HIST 331 |  |

RELIG ST/ Prophets of the Bible
CLASSICS/HEBR-
BIB/JEWISH/
LITTRANS 332

| RELIG ST 333 | Early Christian Literature: Matthew- <br>  <br> Revelation |
| :--- | :--- |

RELIG ST/ The Reformation
HISTORY 334
RELIG ST/ King David in History and Tradition
CLASSICS/
JEWISH 335
RELIG ST/ In Translation: Mythology of
FOLKLORE/ Scandinavia
LITTRANS/
MEDIEVAL 342
RELIG ST/ Anthropology of Religion
ANTHRO 343
RELIG ST/ Jewish Literature of the Greco-
CLASSICS/ Roman Period
JEWISH 346
RELIG ST/ Introduction to Taoism
E ASIAN 350
RELIG ST/ Shamanism
FOLKLORE 352
RELIG ST/ Hinduism
LCA 355
RELIG ST/ Islam, Science \& Technology, and
ENVIR ST/ the Environment
HIST SCI 356
RELIG ST/ Literatures of Muslim Societies
LCA 357
RELIG ST/ Myth
FOLKLORE 359
RELIG ST/ENGL/ The Anglo-Saxons
HISTORY 360
RELIG ST 361 Early Christian Literature: Pauline Christianity
RELIG ST/ Introduction to Confucianism
E ASIAN 363
RELIG ST/ Jainism: Religion of Non-Violence
LCA 367
RELIG ST/ The Bible in the Middle Ages
HISTORY/
JEWISH/
MEDIEVAL 368

| RELIG ST/ AFRICAN/ LCA 370 | Islam: Religion and Culture |
| :---: | :---: |
| RELIG ST/ <br> ART HIST 373 | Great Cities of Islam |
| RELIG ST/ COM ARTS 374 | The Rhetoric of Religion |
| RELIG ST/ JEWISH 377 | Jewish Cultural History (in English) |
| RELIG ST/ HISTORY 379 | Islam in Iran |
| RELIG ST 400 | Topics in Religious Studies Humanities |
| RELIG ST 401 | Topics in Religious Studies - Social Studies |
| $\begin{aligned} & \text { RELIG ST/ } \\ & \text { LCA } 402 \end{aligned}$ | Thought of Gandhi |
| RELIG ST 403 | Topics in Religious Studies-US Ethnic Studies |
| RELIG ST/ <br> AFROAMER 404 | African American Religions |
| RELIG ST 406 | The Amish |
| RELIG ST/ <br> LCA 421 | A Survey of Tibetan Buddhism |
| RELIG ST/ <br> POLISCI 433 | Religion and Politics |
| RELIG ST/ | Milton |
| RELIG ST/ JEWISH/ PHILOS 435 | Jewish Philosophy from Antiquity to the Seventeenth Century |
| RELIG ST/ HISTORY 437 | Western Christianity from Augustine to Darwin |
| RELIG ST/ HISTORY/ LCA 438 | Buddhism and Society in Southeast Asian History |
| RELIG ST/ HISTORY 439 | Islamic History From the Origin of Islam to the Ottoman Empire |
| RELIG ST/ MEDIEVAL 440 | Francis of Assisi: Literature and the Arts |
| $\begin{aligned} & \text { RELIG ST/ } \\ & \text { LCA } 444 \end{aligned}$ | Introduction to Sufism (Islamic Mysticism) |
| RELIG ST/ JEWISH 448 | Classical Rabbinic Texts |
| RELIG ST/ <br> EASIAN/LCA 466 | Buddhist Thought |
| RELIG ST/ HISTORY 470 | Religious Thought in Modern Europe |
| RELIG ST 472 | Christian Literature: The Gospels |
| RELIG ST/ <br> ART HIST 478 | Art and Religious Practice in Medieval Japan |
| RELIG ST 500 | Advanced Topics in Religious Studies |
| RELIG ST/ <br> PHILOS 501 | Philosophy of Religion |
| RELIG ST/ <br> PHILOS 502 | Special Topics in Philosophy of Religion |


| HISTORY/ <br> RELIG ST 411 | The Enlightenment and Its Critics |  |
| :---: | :---: | :---: |
| RELIG ST/ CURRIC/ ED POL 516 | Religion and Public Education |  |
| RELIG ST/ CLASSICS/ HISTORY 517 | Religions of the Ancient Mediterranean |  |
| RELIG ST/ HISTORY/ JEWISH 529 | Intellectual and Religious History of European Jewry, 1648-1939 |  |
| RELIG ST/ HISTORY/ LCA 547 | Religion, Colonialism \& Modernity in Southeast Asia |  |
| RELIG ST/LCA/ SOC 614 | Social Structures of Muslim Societies |  |
| RELIG ST/ POLISCI 618 | Political Islam |  |
| RELIG ST/ <br> LCA 620 | Proseminar: Studies in Religions of Asia |  |
| RELIG ST/ <br> LCA 623 | Yoga: Methods and Goals |  |
| RELIG ST/ <br> LCA 624 | Meditation in Indian Buddhism and Hinduism |  |
| RELIG ST/ <br> LCA 626 | Gods and Goddesses of South Asia |  |
| RELIG ST/LCA/ LEGAL ST 628 | Hindu Law |  |
| RELIG ST/LCA/ SOC 634 | Social Structure of India |  |
| RELIG ST/ <br> LCA 650 | LCA 650 |  |
| RELIG ST/ <br> ANTHRO 666 | The Anthropology of Shamanism and Occult Experience |  |
| Total Credits |  | 9 |
| CAPSTONE |  |  |
|  | Title | Credits |
| 2 courses: |  | 7 |
| RELIG ST 600 | Religion in Critical Perspective |  |
| RELIG ST 601 | Senior Capstone Research and Colloquium |  |
| Total Credits |  | 7 |
| ELECTIVES |  |  |
| Code | Title | Credits |
| Credits to achieve 30 in the major. |  | 11 |
| Religious Studies course offerings (http:// guide.wisc.edu/courses/relig_st) |  |  |
| Total Credits |  | 11 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all RELIG ST and major courses
2.000 GPA on 15 upper-level credits for the major, taken in residence ${ }^{1}$

15 credits in RELIG ST or the major, taken on campus

1 Courses counting as upper level in the major include: RELIG ST/HISTORY 208, RELIG ST/HISTORY 209, RELIG ST/ HISTORY 212, RELIG ST/CLASSICS/JEWISH/LITTRANS 227, RELIG ST/ILS 234, RELIG ST/E ASIAN/LCA 235, RELIG ST/ CLASSICS/JEWISH/LITTRANS 237, RELIG ST/LITTRANS/ MEDIEVAL 253, RELIG ST/LITTRANS 257, RELIG ST/PHILOS 261, RELIG ST/ENVIR ST 270 and all courses numbered RELIG ST 300699, except RELIG ST/CLASSICS/HEBR-BIB/JEWISH/LITTRANS 332.

## HONORS IN THE MAJOR

Students may declare Honors in the Religious Studies Major in consultation with the Religious Studies undergraduate advisor.

## HONORS IN THE RELIGIOUS STUDIES MAJOR: REQUIREMENTS

To earn Honors in the Major in Religious Studies, students must satisfy both the requirements for the major (above) and these additional requirements:

- Minimum 3.300 University GPA
- Minimum 3.500 GPA in all RELIG ST and major courses
- 19 credits, taken for Honors, with individual grades of B or better, to include:
- RELIG ST 600 Religion in Critical Perspective
- RELIG ST 601 Senior Capstone Research and Colloquium
- RELIG ST 681 and RELIG ST 682 for at least 6 credits.
- 6 credits of intermediate- or advanced-level RELIG ST and major coures


## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Quality of |
| Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Proficiency in close reading, interpretation, and written and oral analysis.
2. Proficiency in accessing, appraising, and utilizing a variety of resources and methods for research across disciplinary lines.
3. Proficiency in categorizing, analyzing and comparing diverse systems of value and belief in a variety of contexts.
4. Global and local religious literacy; identifying, evaluating, and interpreting the interrelationships and impact of religious worldviews and communities in Wisconsin, the United States and globally.
5. Ability to conduct and present sustained research on primary sources using methodologies/analysis of religious studies culminating in the senior capstone project.

## ADVISING AND CAREERS

## ADVISING

Dr. Corrie Norman is the undergraduate advisor and Honors in the Major advisor. Contact her by email at cenorman@wisc.edu to meet with her. Students are encouraged to meet with Dr. Norman early in their academic careers in order to plan for successful completion and take advantage of opportunities such as Honors, special research, internship, service learning or study abroad opportunities in associate with the major or certificate.

## CAREERS

Religious studies engages a variety of professional disciplines and provides important preparation for thinking, communicating and functioning professionally in a complex, multi-dimensional world.

Religious studies sponsors workshops and other career exploration vehicles, often in collaboration with SuccessWorks at the College of Letters \& Science, to aid students in articulating the value of religious studies for their career preparation. Student-developed capstone projects in religious studies often make specific connections to experiential learning and career preparation in a range of fields. Talk with Dr. Norman about possibilities for combining internships and other forms of preprofessional training with the major and certificate.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
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- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## PROFESSORS

Bell, Bowie, Brenner, Bühnemann, Chamberlain, Cohen, Dale, DuBois, Dunne, Gade, Hansen, Hardin, Hildner, Howard, Hsia, Koshar, Langer, Livorni, Louden, Nadler, Ohnuki-Tierney, Phillips, Rosenblum, Schamiloglu, Schenck, Schweber, Stanford Friedman, Thompson, Wandel, Wink, Wolf, Zaeske

## ASSOCIATE PROFESSORS

Beneker, Cerulli, Hutton, Livanos, Ridgely, Shelef, Shoemaker, Thal, Todorovic

## ASSISTANT PROFESSORS

Al-Mohammad, Chamedes, Hollander, Mandell, Pruitt
DISTINGUISHED FACULTY ASSOCIATE
Brown
FACULTY ASSOCIATES
Mellor, Norman, Rosenhagen
ASSOCIATE FACULTY ASSOCIATE
Whelan
LECTURER
Carlsson
FACULTY DIVERSITY LIAISON
Program Director Rosenblum

## RELIGIOUS STUDIES, CERTIFICATE

Religious studies is an academic discipline that looks at religious phenomena worldwide from a variety of angles in order to understand the many roles that religion plays in human life. To this end, students of religion learn to use a variety of theoretical analyses and methods. These include historical methods to understand how religions develop in time; critical literary methods to understand religious ideas; aesthetic methods to understand religious art and material culture; social-scientific methods to understand the relationship between religion, society and culture. Religious studies can also engage a variety of professional disciplines in analysis of how religion functions in economic, educational or political contexts, healthcare and scientific research, to name some examples.

Some ways of studying religion emphasize understanding religions on their own terms, other ways use comparative methods to discern differences and similarities between religions. Students of religion also study ways that people use religious resources to make meaning outside the boundaries of religious institutions and identities. Above all, the field of religious studies requires a willingness to explore different ways of interpreting human life and diligent effort to develop understanding of how religious ideas, symbols, rituals and spaces serve as resources for people in a variety of contexts as they make sense of and live out their lives in the world. Thus, religious studies provides important preparation for thinking, communicating and functioning professionally and personally in a complex, multi-dimensional world.

## COURSES

Because religious studies is an interdisciplinary program drawing upon many departments, some courses may have prerequisites in their home departments that must be fulfilled even though the prerequisites themselves have no bearing on progress within the religious studies major. Students are responsible for ensuring that they have met all the prerequisites to enter a course before they enroll in it. The current list of courses can be found in the Religious Studies course list page (http:// guide.wisc.edu/courses/relig_st) in the Guide.

## HOW TO GET IN

Students who wish to declare their intention to major or earn a certificate in religious studies must meet with the undergraduate advisor during regular office hours or by making an appointment. Students are encouraged to do this early in their academic careers in order to plan for successful completion and take advantage of opportunities such as Honors, special research, internship, service learning, or study abroad opportunities in associate with the major or certificate.

Dr. Corrie Norman is the undergraduate advisor and Honors in the Major advisor. Contact her by email at cenorman@wisc.edu.

## REQUIREMENTS

## REQUIREMENTS FOR THE CERTIFICATE IN RELIGIOUS STUDIES

A certificate in religious studies is available to all undergraduates and special students studying at UW-Madison. To earn the certificate, students must complete:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Gateway Courses, Select one of the following: |  |  |
| RELIG ST 101 | Religion in Global Perspective |  |
| RELIG ST 102 | Exploring Religion in Sickness and <br> Health |  |
| RELIG ST 103 | Exploring Religion and Sexuality |  |

Total Credits
Additional requirements:

- 2.000 GPA in all RELIG ST and certificate courses.
- At least 9 credits for the certificate must be earned in residence.


## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate is intended to be completed in the context of an undergraduate degree and for those seeking this certificate that is preferred. For students who have substantially completed this certificate
at UW-Madison (at least 12 credits) and may need one or two courses to complete the certificate, they may do so immediately after completion of the bachelor's degree by enrolling in the course as a University Special (nondegree) student. The certificate must be completed within a year of completion of the bachelor's degree. Students should keep in mind that University Special students have the last registration priority and that may limit availability of desired courses. Financial aid is not available when enrolled as a University Special student to complete an undergraduate certificate.

## LEARNING OUTCOMES

1. Proficiency in close reading, interpretation, and written and oral analysis.
2. Proficiency in accessing, appraising, and utilizing a variety of resources and methods for research across disciplinary lines.
3. Proficiency in categorizing, analyzing and comparing diverse systems of value and belief in a variety of contexts.
4. Global and local religious literacy; identifying, evaluating, and interpreting the interrelationships and impact of religious worldviews and communities in Wisconsin, the United States and globally.

## ADVISING AND CAREERS

## ADVISING

Dr. Corrie Norman is the undergraduate advisor and Honors in the Major advisor. Contact her by email at cenorman@wisc.edu to meet with her. Students are encouraged to meet with Dr. Norman early in their academic careers in order to plan for successful completion and take advantage of opportunities such as Honors, special research, internship, service learning or study abroad opportunities in associate with the major or certificate.

## CAREERS

Religious studies engages a variety of professional disciplines and provides important preparation for thinking, communicating and functioning professionally in a complex, multi-dimensional world.

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ASSISTANT PROFESSORS<br>Al-Mohammad, Chamedes, Hollander, Mandell, Pruitt

## DISTINGUISHED FACULTY ASSOCIATE

Brown

## FACULTY ASSOCIATES

Mellor, Norman, Rosenhagen

## ASSOCIATE FACULTY ASSOCIATE

Whelan

## LECTURER

Carlsson

## FACULTY DIVERSITY LIAISON

Program Director Rosenblum

## SCHOOL OF JOURNALISM AND MASS COMMUNICATION

The School of Journalism and Mass Communication (SJMC), founded in 1905, offers professional education within the context of the liberal arts degree of the College of Letters \& Science. The student earns the journalism bachelor of arts (JBA) or journalism bachelor of science (JBS) degree upon completion of the journalism program. Students are required to complete at least one of the two tracks described below.

The school seeks to provide students with both a broad cultural base for future careers and the competence to do professional work immediately after graduation. Of the 120 credits required for graduation, at least 21 must be in the social sciences/humanities-for example, economics,
history, psychology, political science, sociology. In addition to skills courses, students are required to take courses in conceptual subjects such as law and history of mass communication, public opinion, international communication and communication theory. The student approaches mass communication as science, art, and service while relating it to many facets of society.

## PRACTICAL EXPERIENCE: ORGANIZATIONS

The school encourages students to gain practical experience through part-time jobs and internships. Student media include (but are not limited to) The Daily Cardinal, the Badger Herald (http:// www.badgerherald.com), WSUM radio (http://wsum.wisc.edu) and the Wisconsin Union Directorate Publications (https://union.wisc.edu/ get-involved/wud/publications). Student organizations related to the school and major include (but are not limited to) the Public Relations Student Society of America (PRSSA), the Advertising Club, the Society of Professional Journalists (SPJ) and the Association for Women in Communication (AWC). Professionals from the media and related fields appear often in classes and meet with students in professional student organizations.

## INTERNSHIPS

Students planning careers as media professionals are encouraged to hold one or more internships in the area of their academic specialization(s). Declared journalism majors or prospective journalism majors with no other declared major may earn course credit for internships that relate to their professional tracks. As part of their degree programs, students may earn a maximum of 3 credits of JOURN 697 Internship during their undergraduate careers. Students may only earn one credit of JOURN 697 per semester, but may repeat the credit up to three times. Students who want to earn degree credit for their internships should consult with career advisor Pam Garcia-Rivera before they accept an internship. Students must enroll in JOURN 697 at the time they hold the internship.

JOURN 697 does not count as part of the 30 minimum journalism credits required for graduation. Students who wish to enroll in JOURN 697 should see Pam Garcia-Rivera for authorization to enroll.

## JOB INFORMATION SERVICE

The school provides a job listing service at this link (http:// journalism.wisc.edu/career-services/current-listings) on its website. Questions concerning that can be directed to Pam Garcia-Rivera.

Current students and recent alumni are encouraged to meet with the undergraduate career advisor to discuss career and internship opportunities. Students may consult the school website (http:// journalism.wisc.edu/career-services) or with the undergraduate career advisor for specific information.

## DEGREES/MAJORS/CERTIFICATES

- Journalism, JBA (p. 1223)
- Journalism, JBS (p. 1227)


## PEOPLE

Professors Baughman, Blum, Downey, Drechsel, Dunwoody, Fair, Friedland, Gunther, McLeod, Mitchell, Rojas, D. Shah, H. Shah (director), Vaughn

Associate Professors Kim, Riddle, Robinson
Assistant Professors Culver, Graves, Hull, Palmer, Steenson, Wagner, Wells

## JOURNALISM, JBA

The School of Journalism and Mass Communication (SJMC), founded in 1905, offers professional education within the context of the liberal arts degree of the College of Letters \& Science. The student earns the journalism bachelor of arts (JBA) or journalism bachelor of science (JBS) degree upon completion of the program. Students are required to complete at least one of the two professional tracks, Journalism or Strategic Communication.

The school seeks to provide students with both a broad cultural base for future careers and the competence to do professional work immediately after graduation. Of the 120 credits required for graduation, at least 21 must be in the social sciences/humanities-for example, economics, history, psychology, political science, sociology. In addition to skills courses, students are required to take courses in conceptual subjects such as law and history of mass communication, public opinion, international communication and communication theory. The student approaches mass communication as science, art, and service while relating it to many facets of society.

## PRACTICAL EXPERIENCE: ORGANIZATIONS

The school encourages students to gain practical experience through part-time jobs and internships. Student media include (but are not limited to) The Daily Cardinal, the Badger Herald (http:// www.badgerherald.com), WSUM radio (http://wsum.wisc.edu) and the Wisconsin Union Directorate Publications (https://union.wisc.edu/ get-involved/wud/publications). Student organizations related to the school and major include (but are not limited to) the Public Relations Student Society of America (PRSSA), the Advertising Club, the Society of Professional Journalists (SPJ) and the Association for Women in Communication (AWC). Professionals from the media and related fields appear often in classes and meet with students in professional student organizations.

## INTERNSHIPS

Students planning careers as media professionals are encouraged to hold one or more internships in the area of their academic specialization(s). Declared journalism majors or prospective Journalism majors with no other declared major may earn course credit for internships that relate to their professional tracks. As part of their degree programs, students may earn a maximum of 3 credits of JOURN 697 Internship during their undergraduate careers. Students may earn only one credit of JOURN 697 per semester, but may repeat the credit up to three times. Students who wish to earn degree credit for their internships should consult with career advisor Pam Garcia-Rivera before they accept an internship. Students must enroll in JOURN 697 at the time they hold the internship. Students
who wish to enroll in JOURN 697 should see Pam Garcia-Rivera for authorization to enroll.

## HOW TO GET IN

## ADMISSION TO THE JOURNALISM DEGREE PROGRAM

Students who wish to declare themselves as degree candidates in journalism must submit an application to the School of Journalism and Mass Communication (SJMC). Applications are accepted each fall and spring semester for admission the following semester. Prospective degree candidates must present to the school a record of academic achievement, writing ability and extracurricular participation that indicate a probability of success in some field of communication.

In order to apply for admission to the school, students must have met the following requirements:

- A minimum of 24 credits completed by the end of the semester in which they apply, including transfer credits but excluding AP and retroactive language credits.
- Completion of JOURN 201 Introduction to Mass Communication by the end of the semester in which they apply. Students may have no more than 16 credits in Journalism courses taken at UW-Madison when applying for admission.

Transfer students must be enrolled for at least one semester at UW-Madison before applying for admission to the SJMC (their first semester may be in progress at the time they submit their application). Students transferring journalism course credit from other colleges and universities should check their record of transferred credit with the SJMC undergraduate academic advisor. The academic advisor is available for consultation at most SOAR orientation sessions for transfer students.

The number of students to be admitted in a given semester is subject to change based on the school's capacity to provide adequate access to required courses. Admissions decisions are based on the entire application, with particular emphasis on academic performance and writing ability. Specific guidelines for submitting the application portfolio are available online at this link (http://journalism.wisc.edu/ undergraduate/admissions/the-application) or in SJMC academic advising. The academic advisor conducts one-hour information sessions for applicants each semester, with dates and times listed on the application; these sessions are highly recommended and provide more information for applicants than is possible in a one-on-one advising meeting.

After admission to the school, the student's classification will be changed to JBA or JBS to reflect this change in status.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic
values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General
Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one $3+$ credit course in the physical sciences

Liberal Arts and Science Coursework
Depth of Intermediate/
Advanced
work

Major Declare and complete at least one (1) major
108 credits

60 intermediate or advanced credits
-

| Total Credits | 120 credits |
| :--- | :--- |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

 Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR
31 credits in major course work to include:

| INTRODUCTORY REQUIREMENTS |  |  |
| :--- | :--- | :--- |
| Code | Title |  |
| Credits |  |  |


| Introduction to Journalism | 4 |  |
| :--- | :--- | ---: |
| JOURN 201 | Introduction to Mass |  |
|  | Communication |  |
| JOURN 202 | Mass Communication Practices | 6 |
| JOURN 203 | Information for Communication | 2 |

Social Science and Humanities 12
Intermediate/Advanced courses from at least three
distinct Subjects ${ }^{1}$
Total Credits
24
1 Courses cross-listed in JOURN may not count toward this requirement.

## TRACKS

Students must complete one of two tracks: Journalism, which focuses on reporting, or Strategic Communication, which focuses on forms of persuasive communication that includes advertising and public relations). ${ }^{3}$

| Journalism |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| JOURN 335 | Principles and Practices of Reporting | 4 |
| Advanced Reporting - | - one course: | 4 |
| JOURN 401 | In-Depth Reporting |  |
| JOURN 404 | Interpretation of Contemporary Affairs |  |
| JOURN 405 | Creative Nonfiction |  |
| JOURN 411 | Multimedia Design ${ }^{4}$ |  |


| JOURN 417 | Magazine Publishing ${ }^{4}$ |
| :--- | :--- |
| JOURN 420 | Investigative Reporting |
| JOURN 425 | Video Journalism ${ }^{4}$ |
| JOURN 426 | Community-Based Reporting |
| JOURN 453 | Strategic Media Relations |
| JOURN 455 | Emerging Media and the News |
| JOURN 456 | Long Form Video <br> JOURN 475Special Topics in Advanced <br> Concepts and Skills ${ }^{2}$ |

Total Credits

## Strategic Communication

Code Title Credits

JOURN 345 Principles and Practice of Strategic 4 Communication
Advanced Strategic Communication-one course: 4

| JOURN 411 | Multimedia Design ${ }^{4}$ |
| :--- | :--- |
| JOURN 417 | Magazine Publishing ${ }^{4}$ |
| JOURN 445 | Creative Campaign Messages ${ }^{4}$ |
| JOURN 447 | Strategic Media Planning |
| JOURN 449 | Account Planning and Strategy ${ }^{4}$ |
| JOURN 453 | Strategic Media Relations |
| JOURN 455 | Emerging Media and the News |
| JOURN 456 | Long Form Video |
| JOURN 463 | Digital Media Strategies ${ }^{4}$ |
| JOURN 464 | Public Relations Strategies ${ }^{4}$ |
| JOURN 470 | Strategic Communication <br> Campaigns Capstone |
| JOURN 475 | Special Topics in Advanced <br> Concepts and Skills ${ }^{2}$ |
| Total Credits |  |

## PERSPECTIVES, TOPICS AND ADVANCES

Code Title Credits
Perspectives (Two courses): 6-8

| JOURN/ | History of Mass Communication |
| :--- | :--- |
| HISTORY 560 |  |
| JOURN 561 | Mass Communication and Society |
| JOURN 563 | Law of Mass Communication |
| JOURN 564 | Media and the Consumer |
| JOURN 565 | Effects of Mass Communication |
| JOURN 566 | Communication and Public Opinion |
| Topics or Advances (1 course): |  |
| JOURN/ Mass Media and Youth <br> COM ARTS/  <br> HDFS 616  <br> JOURN 618 Mass Communication and Political <br> JOURN 620 International Communication <br> JOURN 658 Communication Research Methods <br> JOURN/ Mass Media and Minorities <br> ASIAN AM 662  <br> JOURN 666 Professional Responsibility in Mass |  |


| JOURN 669 | Literary Aspects of Journalism |
| :--- | :--- |
| JOURN 675 | Topics in Government and Mass <br> Media |
| JOURN 676 | Special Topics in Mass <br> Communication |
| Advances: | Health Communication in the <br> Information Age |
| JOURN/ <br> COM ARTS/ <br> LSC 617 <br> JOURN 622 | The Impact of Emerging Media |
| JOURN 664 | Social Networks in Communication <br> JOURN 670 |
| Technology for Social Change 4 |  |

## Total Credits

2
Special Topics courses may count for either track, or no track, depending on Topic. Consult the advisor for this major to determine eligibility of JOURN 475 to meet a major requirement.
3 Students planning to complete both tracks should consult with the undergraduate academic advisor about course availability and planning.
4 Course may be applied to the digital studies certificate.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all JOURN and major courses
2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{5}$

15 credits in JOURN, taken on the UW-Madison campus
5 JOURN 400-699 are upper level in the major.

## HONORS IN THE MAJOR

Students may declare Honors in the Journalism Major in consultation with the Journalism undergraduate advisor.

## HONORS IN THE JOURNALISM MAJOR REQUIREMENTS

To earn Honors in the Major in Journalism, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA for all JOURN courses and courses that count toward the major
- Complete one additional Topics or Advances course, for a total of two Topics or Advances courses
- Earn a grade of $B$ or better in the four Perspectives, Topics and Advances courses
- Complete a two-semesters of Senior Honors Thesis in JOURN 681 Senior Honors Thesis and JOURN 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college |
| :--- | :--- |
| or department advisor for information on specific credit |  |
| requirements. |  |

## LEARNING OUTCOMES

1. Convey information and express ideas effectively in contemporary media.
2. Understand the responsible and ethical use of mass media.
3. Appreciate the media's relationship with social, political, legal and economic systems.
4. Think strategically, creatively and critically, to solve problems in a professional context.

## ADVISING AND CAREERS

## JOB INFORMATION SERVICE

The school provides a job listing service at current listings (https:// journalism.wisc.edu/career-services/current-listings) on the SJMC website. Questions concerning that can be directed to Pam GarciaRivera.

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- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/Isci)


## PEOPLE

Professor and Director. H. Shah
Professors Downey, Friedland, Kim, McLeod, Robinson, Rojas, D. Shah
Associate Professors Riddle, Wagner, Wells
Assistant Professors Cascio, Culver, Graves, McGarr, Palmer

## JOURNALISM, JBS

The School of Journalism and Mass Communication (SJMC), founded in 1905, offers professional education within the context of the liberal arts degree of the College of Letters \& Science. The student earns the journalism bachelor of arts (JBA) or journalism bachelor of science (JBS) degree upon completion of the program. Students are required to complete at least one of the two professional tracks, Journalism or Strategic Communication.

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## HOW TO GET IN

## ADMISSION TO THE JOURNALISM DEGREE PROGRAM

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In order to apply for admission to the school, students must have met the following requirements:

- A minimum of 24 credits completed by the end of the semester in which they apply, including transfer credits but excluding AP and retroactive language credits.
- Completion of JOURN 201 Introduction to Mass Communication by the end of the semester in which they apply. Students may have no more than 16 credits in Journalism courses taken at UW-Madison when applying for admission.

Transfer students must be enrolled for at least one semester at UW-Madison before applying for admission to the SJMC (their first semester may be in progress at the time they submit their application). Students transferring journalism course credit from other colleges and universities should check their record of transferred credit with the SJMC undergraduate academic advisor. The academic advisor is available for consultation at most SOAR orientation sessions for transfer students.

The number of students to be admitted in a given semester is subject to change based on the school's capacity to provide adequate access to required courses. Admissions decisions are based on the entire application, with particular emphasis on academic performance and writing ability. Specific guidelines for submitting the application portfolio are available online at this link (http://journalism.wisc.edu/ undergraduate/admissions/the-application) or in SJMC academic advising. The academic advisor conducts one-hour information sessions for applicants each semester, with dates and times listed on the application; these sessions are highly recommended and provide more information for applicants than is possible in a one-on-one advising meeting.

After admission to the school, the student's classification will be changed to JBA or JBS to reflect this change in status.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts and Science Coursework
Depth of 60 intermediate or advanced credits
Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

31 credits in major course work to include:

## INTRODUCTORY REQUIREMENTS

| Code <br> Introduction to Journalism | Credits |  |
| :--- | :--- | ---: |
| JOURN 201 | Introduction to Mass <br> Communication | 4 |
| JOURN 202 Mass Communication Practices 6 <br> JOURN 203 Information for Communication 2 <br> Social Science and Humanities 12  <br> Intermediate/Advanced courses from at least three <br> distinct Subjects 1 24  <br> Total Credits   <br> 1 Courses cross-listed in JOURN may not count toward this  <br> requirement.   |  |  |

## TRACKS

Students must complete one of two tracks: Journalism, which focuses on reporting, or Strategic Communication, which focuses on forms of persuasive communication that includes advertising and public relations). ${ }^{3}$

| Journalism |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| JOURN 335 | Principles and Practices of Reporting | 4 |
| Advanced Reporting - one course: |  | 4 |
| JOURN 401 | In-Depth Reporting |  |
| JOURN 404 | Interpretation of Contemporary Affairs |  |
| JOURN 405 | Creative Nonfiction |  |
| JOURN 411 | Multimedia Design ${ }^{4}$ |  |
| JOURN 417 | Magazine Publishing ${ }^{4}$ |  |
| JOURN 420 | Investigative Reporting |  |
| JOURN 425 | Video Journalism ${ }^{4}$ |  |
| JOURN 426 | Community-Based Reporting |  |
| JOURN 453 | Strategic Media Relations |  |
| JOURN 455 | Emerging Media and the News |  |
| JOURN 456 | Long Form Video |  |
| JOURN 475 | Special Topics in Advanced Concepts and Skills ${ }^{2}$ |  |
| Total Credits |  | 8 |
| Strategic Communication |  |  |
| Code | Title | Credits |
| JOURN 345 | Principles and Practice of Strategic Communication | 4 |
| Advanced Strategic Communication-one course: |  | 4 |
| JOURN 411 | Multimedia Design ${ }^{4}$ |  |
| JOURN 417 | Magazine Publishing ${ }^{4}$ |  |
| JOURN 445 | Creative Campaign Messages ${ }^{4}$ |  |
| JOURN 447 | Strategic Media Planning |  |
| JOURN 449 | Account Planning and Strategy ${ }^{4}$ |  |
| JOURN 453 | Strategic Media Relations |  |
| JOURN 455 | Emerging Media and the News |  |
| JOURN 456 | Long Form Video |  |
| JOURN 463 | Digital Media Strategies ${ }^{4}$ |  |
| JOURN 464 | Public Relations Strategies ${ }^{4}$ |  |
| JOURN 470 | Strategic Communication Campaigns Capstone |  |
| JOURN 475 | Special Topics in Advanced Concepts and Skills ${ }^{2}$ |  |
| Total Credits |  | 8 |

PERSPECTIVES, TOPICS AND ADVANCES
code
Perspectives (Two courses): 6-8

| JOURN/ | History of Mass Communication |
| :--- | :--- |
| HISTORY 560 |  |
| JOURN 561 | Mass Communication and Society |
| JOURN 563 | Law of Mass Communication |
| JOURN 564 | Media and the Consumer |
| JOURN 565 | Effects of Mass Communication |
| JOURN 566 | Communication and Public Opinion |

[^44]| JOURN/ COM ARTS/ HDFS 616 | Mass Media and Youth |
| :---: | :---: |
| JOURN 618 | Mass Communication and Political Behavior |
| JOURN 620 | International Communication |
| JOURN 658 | Communication Research Methods |
| JOURN/ <br> ASIAN AM 662 | Mass Media and Minorities |
| JOURN 666 | Professional Responsibility in Mass Communication |
| JOURN 669 | Literary Aspects of Journalism |
| JOURN 675 | Topics in Government and Mass Media |
| JOURN 676 | Special Topics in Mass Communication |
| Advances: |  |
| JOURN/ COM ARTS/ LSC 617 | Health Communication in the Information Age |
| JOURN 622 | The Impact of Emerging Media |
| JOURN 664 | Social Networks in Communication |
| JOURN 670 | Community Service Learning: Technology for Social Change ${ }^{4}$ |
| JOURN/L I S 677 | Concepts and Tools for Data Analysis and Visualization ${ }^{4}$ |
| JOURN 678 | Legal \& Ethical Dimensions of Emerging Media |
| Total Credits | 9-12 |
| 2 Special Topics co depending on Top eligibility of JOUR | urses may count for either track, or no track, ic. Consult the advisor for this major to determine N 475 to meet a major requirement. |
| 3 Students plannin the undergraduat planning. | g to complete both tracks should consult with academic advisor about course availability and |
| 4 Course may be ap | pplied to the digital studies certificate. |
| RESIDENCE AND QUALITY OF WORK |  |
| 2.000 GPA in all JOURN and major courses |  |
| 2.000 GPA on 15 upper-level major credits, taken in residence 5 |  |
| 15 credits in JOURN, taken on the UW-Madison campus |  |
| 5 JOURN 400-699 | are upper level in the major. |

Students may declare Honors in the Journalism Major in consultation with the Journalism undergraduate advisor.

## HONORS IN THE JOURNALISM MAJOR REQUIREMENTS

To earn Honors in the Major in Journalism, students must satisfy both the requirements for the major (above) and the following additional requirements:

[^45]- Earn a 3.400 GPA for all JOURN courses and courses that count toward the major
- Complete one additional Topics or Advances course, for a total of two Topics or Advances courses
- Earn a grade of B or better in the four Perspectives, Topics and Advances courses
- Complete a two-semesters of Senior Honors Thesis in JOURN 681 Senior Honors Thesis and JOURN 682 Senior Honors Thesis, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
|  | Abroad/Study Away programs. |
| Quality of | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Convey information and express ideas effectively in contemporary media.
2. Understand the responsible and ethical use of mass media.
3. Appreciate the media's relationship with social, political, legal and economic systems.
4. Think strategically, creatively and critically, to solve problems in a professional context.

## ADVISING AND CAREERS

## JOB INFORMATION SERVICE

The school provides a job listing service at current listings (https:// journalism.wisc.edu/career-services/current-listings) on the SJMC website. Questions concerning that can be directed to Pam GarciaRivera.

Current students and recent alumni are encouraged to meet with the undergraduate career advisor to discuss career and internship opportunities. Students may consult the school website (http:// journalism.wisc.edu/career-services) or with the undergraduate career advisor for specific information.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professor and Director. H. Shah
Professors Downey, Friedland, Kim, McLeod, Robinson, Rojas, D. Shah
Associate Professors Riddle, Wagner, Wells
Assistant Professors Cascio, Culver, Graves, McGarr, Palmer

## SOCIAL WORK

Social work's special contribution rests on an established body of knowledge, values and skills pertinent to understanding human relationships and the interaction between people as individuals, in families, groups, organizations, and communities.

Undergraduates in the School of Social Work receive a liberal arts education in the social and behavioral sciences and their application to human problems that prepares them to be informed citizens involved in human services or social welfare problems and policies. Students take courses in a variety of social sciences to enable them to view social welfare in its broad social, economic, and political contexts.

Social work courses offer a theoretical understanding of social problems and an introduction to practice methods used by social workers. The curriculum covers such areas as aging, family and child welfare, poverty, mental health, developmental disabilities, alcohol and drug abuse, diversity, race and ethnicity, criminal justice, oppression and social, economic and environmental justice, and at-risk populations.

## MISSION

The mission of the UW-Madison School of Social Work is to enhance human well-being and promote human rights and social and economic justice for people who are disadvantaged to achieve an equitable, healthy, and productive society. The school aims to:

- Create, advance, strengthen, and integrate interdisciplinary knowledge for students and the profession through research, scholarship, teaching and practice.
- Educate students to become highly skilled, culturally competent and ethical practitioners who will provide effective leadership for the profession of social work within the State of Wisconsin, nationally, and internationally.
- Promote change at levels ranging from the individual to national and international policy, including empowering communities and populations that are disadvantaged and developing humane service delivery systems.
- Create and disseminate knowledge regarding the prevention and amelioration of social problems.


## UNDERGRADUATE DEGREE PROGRAMS

The School of Social Work offers a bachelor of social work (BSW) degree or a bachelor of arts (B.A.) or bachelor of science (B.S.) degree with a major in social welfare. The BSW and the social welfare major prepare students for further academic study or for employment in selected human service arenas. The BSW prepares students as beginning-level professional social workers. The social welfare major offers an overview of current social problems.

## CERTIFICATE PROGRAMS

BSW students and social welfare majors often choose the following certificate programs: American Indian studies, business, criminal justice, gender and women's studies, gerontology, global cultures, global health, LGBT studies, and religious studies.

## GRADUATE SCHOOL

BSW students completing professional foundation courses with a grade of $B$ or better are eligible for advanced standing in the master's program. For more information see the School of Social Work website FAQs on "Admissions: Advanced Standing \& Exemptions (https:// socwork.wisc.edu/fulltimemsw-faq)."

## DEGREES/MAJORS/CERTIFICATES

- Social Welfare, B.A. (p. 1231)
- Social Welfare, B.S. (p. 1237)
- Social Work, BSW (p. 1243)


## PEOPLE

Professors: Lawrence M. Berger, MSW, Ph.D.; Aaron Brower, MSW, Ph.D.; Maria Cancian Ph.D.; Jan Steven Greenberg, MSSW, Ph.D.; Betty J. Kramer, MSSW, Ph.D.; Katherine Magnuson, Ph.D.; Marsha Mailick, Ph.D.; Daniel R. Meyer, MSW, Ph.D.; Stephanie A. Robert, MSW, Ph.D.; Tracy Schroepfer, MSW, Ph.D., Kristen Shook Slack, A.M., Ph.D.

Associate Professors: Marah A. Curtis, MSW, Ph.D.; Tally Moses, MSW, Ph.D.

Assistant Professors: Lauren Bishop-Fitzpatrick, Ph.D.; Pajarita Charles, MPA, MSW, Ph.D.; Lara Gerassi, MSW, Ph.D.; Alejandra Ros Pilarz, Ph.D.; Yang Sao Xiong, Ph.D.

Clinical Associate Professor. Audrey Conn, MSSW, APSW; Ellen Smith, MSSW

Clinical Assistant Professors: Laura Dresser, MSW, Ph.D.; Amanda Ngola, MSW, LCSW; Lynette Studer, MSSW, Ph.D.; Angela Willits, MSW, LCSW

## SOCIAL WELFARE, B.A.

The School of Social Work offers two undergraduate programs: the bachelor of arts (B.A.) or bachelor of science (B.S.) degree with a major in social welfare; and the bachelor of social work (BSW) degree. Those who are interested in the professional social work degree (BSW) begin by declaring the social welfare major, applying to the BSW program in their junior year and, if accepted, changing their major to the BSW for their senior year.

## HOW TO GET IN

Regardless of program of interest, students begin their course of study by taking SOC WORK 205 Introduction to the Field of Social Work and SOC WORK 206 Introduction to Social Policy in either the freshman or sophomore year. Students can declare the social welfare major as early as the freshman year as long as they are enrolled in SOC WORK 205 and/or SOC WORK 206 and meet the L\&S requirement of a minimum cumulative GPA of 2.0. More typically, students declare the major in the sophomore year while in or having competed SOC WORK 205 and/or SOC WORK 206. To declare the major, students should make an appointment and meet with one of the two social work academic advisors at the School of Social Work.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics
Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

Foreign
Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework |  |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major |  |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |

Minimum
GPAs
2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

 SOCIAL WELFARE POLICY AND SERVICES| Code | Title | Credits |
| :--- | :--- | ---: |
| Complete the following |  |  |
| two courses: |  |  |
| SOC WORK 205 | Introduction to the Field of Social <br> Work | 4 |
| SOC WORK 206 | Introduction to Social Policy | 4 |

## SOCIAL SCIENCE CONCENTRATION

Select two intermediate- or advanced-level courses (I or A) from one of the following social science departments. ${ }^{1}$
Note: Completion of an elementary-level course may be a prerequisite to being able to take an I or A course.

## Afro-American Studies

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| AFROAMER/ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER/ED POL 567 | History of African American Education | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 |


| AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| :---: | :---: | :---: |
| AFROAMER 673 | Selected Topics in Afro-American Society | 3 |
| American Indian Studies |  |  |
| Code | Title | Credits |
| AMER IND/ <br> ANTHRO 314 | Indians of North America | 3 |
| AMER IND/ ANTHRO 353 | Indians of the Western Great Lakes | 3 |
| AMER IND/LSC 444 | Native American Environmental Issues and the Media | 3 |
| AMER IND 450 | Issues in American Indian Studies | 3 |
| AMER IND/ <br> HISTORY 490 | American Indian History | 3-4 |
| AMER IND/ HDFS 522 | American Indian Families | 3 |
| AMER IND/C\&E SOC/ SOC 578 | Poverty and Place | 3 |


| Anthropology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| ANTHRO/ <br> AMER IND 314 | Indians of North America | 3 |
| ANTHRO 321 | The Emergence of Human Culture | 3 |
| ANTHRO 330 | Topics in Ethnology | 3-4 |
| ANTHRO/ <br> RELIG ST 343 | Anthropology of Religion | 3-4 |
| ANTHRO 350 | Political Anthropology | 3-4 |
| ANTHRO/ <br> AMER IND 353 | Indians of the Western Great Lakes | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO/ GEN\&WS 443 | Anthropology by Women | 3 |
| ANTHRO 448 | Anthropology of Law | 3 |
| ANTHRO 477 | Anthropology, Environment, and Development | 3 |
| ANTHRO 545 | Psychological Anthropology | 3 |
| ANTHRO/ <br> ED POL 570 | Anthropology and Education | 3 |

## Asian American Studies

Code Title

| ASIAN AM/SOC 220 | Ethnic Movements in the United <br> States | $3-4$ |
| :--- | :--- | ---: |
| ASIAN AM 240 | Topics in Asian American Studies |  |
| ASIAN AM/HISTORY/ Southeast Asian Refugees of the |  |  |
| LCA 246 | "Cold" War |  |$\quad 3$


| Chicana/o and Latina/o Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| $\begin{aligned} & \text { CHICLA/ } \\ & \text { POLI SCI } 231 \end{aligned}$ | Politics in Multi-Cultural Societies | 3-4 |
| CHICLA/GEN\&WS/ HISTORY 245 | Chicana and Latina History | 3 |
| CHICLA 301 | Chicana/o and Latina/o History | 3 |
| $\begin{aligned} & \text { CHICLA/ } \\ & \text { POLI SCI } 302 \end{aligned}$ | Mexican-American Politics | 3-4 |
| CHICLA 330 | Topics in Chicano/a Studies | 3-4 |
| CHICLA/ GEN\&WS 332 | Latinas: Self Identity and Social Change | 3 |
| CHICLA/HISTORY/ POLI SCI 422 | Latino History and Politics | 3 |
| CHICLA/ HISTORY 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |
| CHICLA/SOC 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| Economics |  |  |
| Code | Title | Credits |
| ECON/FINANCE 300 | Introduction to Finance | 3 |
| ECON 301 | Intermediate Microeconomic Theory | 4 |
| ECON 302 | Intermediate Macroeconomic Theory | 4 |
| ECON/A A E/ <br> REAL EST/ <br> URB R PL 306 | The Real Estate Process | 3 |
| ECON 311 | Intermediate Microeconomic Theory <br> - Advanced Treatment | 3 |
| ECON 312 | Intermediate Macroeconomic Theory - Advanced Treatment | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| ECON 364 | Survey of International Economics | 3-4 |
| ECON 390 | Contemporary Economic Issues | 3 |
| ECON/REAL EST/ URB R PL 420 | Urban and Regional Economics | 3 |
| ECON 441 | Analytical Public Finance | 3-4 |
| ECON 448 | Human Resources and Economic Growth | 3-4 |
| ECON/ENVIR ST/ <br> POLI SCI/ <br> URB R PL 449 | Government and Natural Resources | 3-4 |
| ECON 450 | Wages and the Labor Market | 3-4 |
| ECON 467 | International Industrial Organizations | 3-4 |
| ECON/A A E 474 | Economic Problems of Developing Areas | 3 |
| ECON 475 | Economics of Growth | 3-4 |
| ECON 508 | Wealth and Income | 3 |
| ECON 521 | Game Theory and Economic Analysis | 3-4 |
| ECON 522 | Law and Economics | 3-4 |
| ECON/PHILOS 524 | Philosophy and Economics | 3 |


| ECON/A A E/ <br> F\&W ECOL 531 | Natural Resource Economics | 3 |
| :---: | :---: | :---: |
| ECON/POP HLTH/ <br> PUB AFFR 548 | The Economics of Health Care | 3-4 |
| ECON 623 | Population Economics | 3-4 |
| ECON/REAL EST/ URB R PL 641 | Housing Economics and Policy | 3 |
| ECON/SOC 663 | Population and Society | 3 |
| Gender and Women's Studies |  |  |
| Code | Title | Credits |
| GEN\&WS/C\&E SOC/ SOC 215 | Gender and Work in Rural America | 3 |
| GEN\&WS/CHICLA/ HISTORY 245 | Chicana and Latina History | 3 |
| GEN\&WS 320 | Special Topics in Gender, Women and Society | 1-3 |
| GEN\&WS/ AFROAMER 323 | Gender, Race and Class: Women in U.S. History | 3 |
| GEN\&WS 331 | Topics in Gender/Class/Race/ Ethnicity (Social Sciences) | 3 |
| GEN\&WS/ CHICLA 332 | Latinas: Self Identity and Social Change | 3 |
| GEN\&WS/ <br> AFROAMER 333 | Black Feminisms | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS 342 | Transgender Studies | 3-4 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ HISTORY 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| GEN\&WS/ HISTORY 392 | Women and Gender in Modern Europe | 3-4 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS 427 | Global Feminisms | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS/ ANTHRO 443 | Anthropology by Women | 3 |
| GEN\&WS/SOC 477 | Feminism and Sociological Theory | 3 |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change | 3 |
| GEN\&WS/ PSYCH 522 | Psychology of Women and Gender | 3 |
| GEN\&WS 534 | Gender, Sexuality, and Reproduction: Public Health Perspectives | 3 |
| GEN\&WS/ <br> INTL ST 535 | Women's Global Health and Human Rights | 3 |
| GEN\&WS/ HIST SCI 537 | Childbirth in the United States | 3 |
| GEN\&WS 547 | Theorizing Intersectionality | 3 |


| GEN\&WS/SOC 611 | Gender, Science and Technology | 3 |
| :---: | :---: | :---: |
| Political Science |  |  |
| Code | Title | Credits |
| POLI SCI 205 | Introduction to State Government | 3-4 |
| POLI SCI 206 | Introduction to Political Psychology | 3-4 |
| POLI SCI 207 | Introduction to Afro-American Politics | 3-4 |
| POLI SCI/ <br> LEGAL ST 217 | Law, Politics and Society | 3-4 |
| POLI SCI/ <br> CHICLA 231 | Politics in Multi-Cultural Societies | 3-4 |
| POLI SCI 272 | Introduction to Public Policy | 3-4 |
| POLI SCI/ CHICLA 302 | Mexican-American Politics | 3-4 |
| POLI SCI 304 | The Political Economy of Race in the United States | 3-4 |
| POLI SCI 305 | Elections and Voting Behavior | 3-4 |
| POLI SCI 308 | Public Administration | 3-4 |
| POLI SCI 309 | Civil Liberties in the United States | 3-4 |
| POLI SCI 311 | United States Congress | 3-4 |
| POLI SCI 314 | Criminal Law and Justice | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 405 | State Government and Public Policy | 3-4 |
| POLI SCI 408 | The American Presidency | 3-4 |
| POLI SCI 409 | American Parties and Politics | 3-4 |
| POLI SCI 410 | Citizenship, Democracy, and Difference | 4 |
| POLI SCI 411 <br> \& POLI SCI 412 | The American Constitution : Powers and Structures of Government and The American Constitution: Rights and Civil Liberties | 8 |
| POLI SCI 416 | Community Power and Grass Roots Politics | 3 |
| POLI SCI 417 | The American Judicial System | 3-4 |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |
| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| POLI SCI/ <br> INTLST 431 | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI/ GEN\&WS 469 | Women and Politics | 3-4 |


| POLI SCI 470 | The First Amendment | $3-4$ |
| :--- | :--- | :---: |
| POLI SCI 507 | Health Policy and Health Politics | $3-4$ |
| POLI SCI 510 | Politics of Government Regulation | $3-4$ |
| POLI SCI 514 | Interest Group Politics | $3-4$ |
| POLI SCI 515 | Public Opinion | $3-4$ |
| POLI SCI 516 | Political Communications | $3-4$ |
| POLI SCI 561 | Radical Political Theory | $3-4$ |
| POLI SCI 654 | Politics of Revolution | $3-4$ |

## Psychology

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 311 | Issues in Psychology | $1-4$ |
| PSYCH 403 | Psychology of Personality | 3 |
| PSYCH/SOC 453 | Human Sexuality | 4 |
| PSYCH 405 | Abnormal Psychology | $3-4$ |
| PSYCH 408 | Psychology of Human Emotions | 3 |
| PSYCH 413 | Language, Mind, and Brain | 3 |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH/SOC 456 | Introductory Social Psychology | $3-4$ |
| PSYCH 460 | Child Development | $3-4$ |
| PSYCH 464 | Adult Development and Aging | 3 |
| PSYCH 501 | Depth Topic in Social Science (when | 4 |
| PSYCH 502 | topic is appropriate) | 4 |
| PSYCH 503 | Social Development | 4 |
| PSYCH 508 | Psychology of Human Emotions: | 4 |
| PSYCH 511 | From Biology to Culture | 3 |
| PSYCH 512 | Behavior Pathology: Neuroses | 3 |
| PSYCH/ | Behavior Pathology-Psychoses | 3 |
| GEN\&WS 522 | Psychology of Women and Gender | 3 |
| PSYCH 526 | The Criminal Mind: Forensic and | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | 3 |
| PSYCH 607 | Introduction to Clinical Psychology | 3 |

## Sociology

## Code

| SOC 181 | Honors Introductory Seminar-The <br> Sociological Enterprise | $3-4$ |
| :--- | :--- | ---: |
| SOC/C\&E SOC 210 | Survey of Sociology | $3-4$ |
| SOC/C\&E SOC 211 | The Sociological Enterprise | 3 |
| SOC/C\&E SOC/ | Gender and Work in Rural America |  |
| GEN\&WS 215 |  | 3 |
| SOC/ASIAN AM 220 | Ethnic Movements in the United | $3-4$ |
|  | States | $3-4$ |
| SOC 250 | Organizations and Society | 3 |
| SOC/C\&E SOC/ | Contemporary Population Problems |  |
| POP HLTH 380 | for Honors | $3-4$ |
| SOC 421 | Processes of Deviant Behavior | $3-4$ |
| SOC 441 | Criminology | $3-4$ |
| SOC 446 | Juvenile Delinquency | 4 |
| SOC/PSYCH 453 | Human Sexuality | $3-4$ |


| SOC/C\&E SOC 475 | Classical Sociological Theory | 3 |
| :---: | :---: | :---: |
| SOC/GEN\&WS 477 | Feminism and Sociological Theory | 3 |
| SOC 496 | Topics in Sociology | 1-3 |
| SOC 531 | Sociology of Medicine | 3 |
| SOC/C\&E SOC 532 | Health Care Issues for Individuals, Families and Society | 3 |
| SOC/C\&E SOC 533 | Public Health in Rural \& Urban Communities | 3 |
| SOC 535 | Talk and Social Interaction | 3 |
| SOC/C\&E SOC/ <br> ENVIR ST 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| SOC 543 | Collective Behavior | 3 |
| SOC/C\&E SOC 573 | Community Organization and Change | 3 |
| SOC 575 | Sociological Perspectives on the Life Course and Aging | 3 |
| SOC/AMER IND/ <br> C\&E SOC 578 | Poverty and Place | 3 |
| SOC/C\&E SOC 610 | Knowledge and Society | 3 |
| SOC/GEN\&WS 611 | Gender, Science and Technology | 3 |
| SOC/C\&E SOC/ URB R PL 617 | Community Development | 3 |
| SOC 621 | Class, State and Ideology: an Introduction to Marxist Social Science | 3 |
| SOC/C\&E SOC 622 | Advanced Topics in Critical Sociology | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC/LAW/ <br> LEGAL ST 641 | Sociology of Law | 3-4 |
| SOC/C\&E SOC/ URB R PL 645 | Modern American Communities | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SOC/HISTORY 670 | Capitalism, Socialism, and Democracy in America Since 1890 | 3-4 |
| SOC 678 | Sociology of Persecution | 3 |

## HUMAN BEHAVIOR \& THE SOCIAL ENVIRONMENT

Code Title
Credits
Complete the following two courses:
SOC WORK 457

Human Behavior and the
Environment (junior year, spring
semester)

Social Work with Ethnic and Racial Groups (junior year, fall semester) ${ }^{2}$

## ELECTIVES IN SOCIAL WELFARE

Complete two intermediate- or advanced-level Social Work (http:// guide.wisc.edu/courses/soc_work) courses. ${ }^{3}$

STATISTICS AND RESEARCH

| Code <br> Statistics | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following statistics courses: |  |  |
| STAT 301 | Introduction to Statistical Methods 4 | 3 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences ${ }^{5}$ | 3 |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| PSYCH 210 | Basic Statistics for Psychology | 3 |
| Code | Title | Credits |
| Research |  |  |
| Select one of the following research courses: |  |  |
| SOC WORK 650 | Methods of Social Work Research | 3 |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | 3-4 |
| PSYCH 225 | Research Methods | 4 |

1 Courses must be selected from these approved lists.
2 Meets ethnic studies requirement.
3 No more than 3 credits of SOC WORK 699 Directed Study may be used toward fulfillment of this requirement.
4 STAT 301 is recommended by the School of Social Work. This course also fulfills 3 credits of quantitative reasoning $B(r)$, math and natural science ( N ) toward the L\&S breadth requirements.
5
STAT 371 Introductory Applied Statistics for the Life Sciences fulfills 3 credits quantitative reasoning $B(r)$ and natural science $(N)$ toward L\&S breadth requirements.

Social welfare majors are encouraged to gain social service experience through volunteer work. See the social work advisors or contact the Morgridge Center for Public Service (http://www.morgridge.wisc.edu), 263-2432, for information on volunteering.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all SOC WORK courses and courses counting toward the major
2.000 GPA on 15 upper-level major credits taken in residence ${ }^{1}$

15 credits in SOC WORK, taken on campus
${ }^{1}$ SOC WORK courses that are designated as Intermediate or Advanced and PSYCH 225 and SOC/C\&E SOC 357 count as upper level in this major

## HONORS IN THE MAJOR

Students may apply for admission to Honors in the Social Welfare Major in consultation with the Social Welfare undergraduate advisor before beginning the Senior Honors Thesis. Students must make arrangements with a faculty member to sponsor their research project before admission will be granted.

## 3

REQUIREMENTS
To earn Honors in the Major in Social Welfare, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA for all SOC WORK courses, and all courses accepted in the major
- Complete SOC WORK 650 Methods of Social Work Research
- Complete one SOC WORK elective related to Senior Honors Thesis research topic
- Complete SOC WORK 579 Special Topics in Social Work concurrently with SOC WORK 681 Senior Honors Thesis
- Complete a two-semester Senior Honors Thesis in SOC WORK 681 Senior Honors Thesis and SOC WORK 682 Senior Honors Thesis, for a total of 6 credits, with a grade of B or better
- Present thesis results at a department colloquium.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Identify foundational aspects of the US social welfare system and the history of the social work profession.
2. Recognize human differences and how social welfare systems interact with these differences to shape opportunities and outcomes for individuals, groups, and communities.
3. Demonstrate an ability to critically evaluate research with respect to its relevance, quality, and utility for addressing social welfare issues.
4. Synthesize and communicate knowledge relevant to social welfare issues.
5. Practice self-awareness of one's values, beliefs, and biases regarding the causes and consequences of social welfare issues.
6. Connect awareness of self, systems and social welfare knowledge to promote human dignity and justice.

## ADVISING AND CAREERS

## ADVISING

Students interested in either the social welfare major or bachelor of social work meet with the social work advisors to discuss degree requirements; career opportunities; complete the major declaration; and confer on student issues and concerns. Advisors are an excellent resource for information about campus and community services. Students should see an advisor at least once each semester to review academic progress. Advising appointments are made through the school's website (https://socwork.wisc.edu/appointments) or by calling 608-263-3660. Social work faculty members are available for advice about coursework, research, and the social work profession in general.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors: Lawrence M. Berger, MSW, Ph.D.; Aaron Brower, MSW, Ph.D.; Maria Cancian Ph.D.; Jan Steven Greenberg, MSSW, Ph.D.; Betty J. Kramer, MSSW, Ph.D.; Katherine Magnuson, Ph.D.; Marsha Mailick, Ph.D.; Daniel R. Meyer, MSW, Ph.D.; Stephanie A. Robert, MSW, Ph.D.; Tracy Schroepfer, MSW, Ph.D., Kristen Shook Slack, A.M., Ph.D.

Associate Professors: Marah A. Curtis, MSW, Ph.D.; Tally Moses, MSW, Ph.D.

Assistant Professors: Lauren Bishop-Fitzpatrick, Ph.D.; Pajarita Charles, MPA, MSW, Ph.D.; Lara Gerassi, MSW, Ph.D.; Alejandra Ros Pilarz, Ph.D.; Yang Sao Xiong, Ph.D.

Clinical Associate Professor: Audrey Conn, MSSW, APSW; Ellen Smith, MSSW

Clinical Assistant Professors: Laura Dresser, MSW, Ph.D.; Amanda Ngola, MSW, LCSW; Lynette Studer, MSSW, Ph.D.; Angela Willits, MSW, LCSW

## SOCIAL WELFARE, B.S.

The School of Social Work offers two undergraduate programs: the bachelor of arts (B.A.) or bachelor of science (B.S.) degree with a major in social welfare; and the bachelor of social work (BSW) degree. Those who are interested in the professional social work degree (BSW) begin by declaring the social welfare major, applying to the BSW program in their junior year and, if accepted, changing their major to the BSW for their senior year.

## HOW TO GET IN

Regardless of program of interest, students begin their course of study by taking SOC WORK 205 Introduction to the Field of Social Work and SOC WORK 206 Introduction to Social Policy in either the freshman or sophomore year. Students can declare the social welfare major as early as the freshman year as long as they are enrolled in SOC WORK 205 and/or SOC WORK 206 and meet the L\&S requirement of a minimum cumulative GPA of 2.0. More typically, students declare the major in the sophomore year while in or having competed SOC WORK 205 and/or SOC WORK 206. To declare the major, students should make an appointment and meet with one of the two social work academic advisors at the School of Social Work.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR SOCIAL WELFARE POLICY AND SERVICES

| Code | Title | Credits |
| :--- | :--- | ---: |
| Complete the following two courses: |  |  |
| SOC WORK 205 | Introduction to the Field of Social <br> Work | 4 |
| SOC WORK 206 | Introduction to Social Policy | 4 |

## SOCIAL SCIENCE CONCENTRATION

Select two intermediate- or advanced-level courses (I or A) from one of the following social science departments. ${ }^{1}$
Note: Completion of an elementary-level course may be a prerequisite to being able to take an I or A course.

## Afro-American Studies

| Afro-American Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| AFROAMER/ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER/ED POL 567 | History of African American Education | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 |
| AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| AFROAMER 673 | Selected Topics in Afro-American Society | 3 |

## American Indian Studies

| Code | Title | Credits |
| :--- | :--- | ---: |
| AMER IND/ | Indians of North America | 3 |
| ANTHRO 314 |  | 3 |
| AMER IND/ <br> ANTHRO 353 | Indians of the Western Great Lakes |  |
| AMER IND/LSC 444 | Native American Environmental <br> Issues and the Media | 3 |
| AMER IND 450 | Issues in American Indian Studies | 3 |
| AMER IND/ American Indian History <br> HISTORY 490  <br> AMER IND/ American Indian Families <br> HDFS 522  | $3-4$ |  |

AMER IND/C\&E SOC/ Poverty and Place SOC 578

| Anthropology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| ANTHRO/ <br> AMER IND 314 | Indians of North America | 3 |
| ANTHRO 321 | The Emergence of Human Culture | 3 |
| ANTHRO 330 | Topics in Ethnology | 3-4 |
| ANTHRO/ RELIG ST 343 | Anthropology of Religion | 3-4 |
| ANTHRO 350 | Political Anthropology | 3-4 |
| ANTHRO/ <br> AMER IND 353 | Indians of the Western Great Lakes | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO/ GEN\&WS 443 | Anthropology by Women | 3 |
| ANTHRO 448 | Anthropology of Law | 3 |
| ANTHRO 477 | Anthropology, Environment, and Development | 3 |
| ANTHRO 545 | Psychological Anthropology | 3 |
| ANTHRO/ <br> ED POL 570 | Anthropology and Education | 3 |

## Asian American Studies

| Code | Title | Credits |
| :--- | :--- | ---: |
| ASIAN AM/SOC 220 | Ethnic Movements in the United <br> States | $3-4$ |
| ASIAN AM 240 | Topics in Asian American Studies | 3 |
| ASIAN AM/HISTORY/ Southeast Asian Refugees of the  <br> LCA 246 "Cold" War <br> ASIAN AM/ Chinese Migrations since 1500 | 4 |  |
| E A STDS/ |  | $3-4$ |
| HISTORY 276 | Mutual Perceptions of Racial <br> ASIAN AM/ <br> AFROAMER 443 | Minorities |


| Chicana/0 and Latina/o Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| CHICLA/ <br> POLI SCI 231 | Politics in Multi-Cultural Societies | 3-4 |
| CHICLA/GEN\&WS/ HISTORY 245 | Chicana and Latina History | 3 |
| CHICLA 301 | Chicana/o and Latina/o History | 3 |
| CHICLA/ <br> POLI SCI 302 | Mexican-American Politics | 3-4 |
| CHICLA 330 | Topics in Chicano/a Studies | 3-4 |
| CHICLA/ <br> GEN\&WS 332 | Latinas: Self Identity and Social Change | 3 |
| CHICLA/HISTORY/ POLI SCI 422 | Latino History and Politics | 3 |
| CHICLA/ HISTORY 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |

3 CHICLA/SOC 470 Sociodemographic Analysis of Mexican Migration

## Economics

| Code | Title | Credits |
| :--- | :--- | ---: |
| ECON/FINANCE 300 | Introduction to Finance | 3 |
| ECON 301 | Intermediate Microeconomic Theory | 4 |
| ECON 302 | Intermediate Macroeconomic |  |
| Theory | 4 |  |
| ECON/A A E/ | The Real Estate Process | 3 |
| REAL EST/ |  | 3 |
| URB R PL 306 | Intermediate Microeconomic Theory | 3 |
| ECON 311 | - Advanced Treatment | 3 |
| ECON 312 | Intermediate Macroeconomic |  |
| ECON/A A E/ | Theory - Advanced Treatment | $3-4$ |


| ENVIR ST 343 | Environmental Economics | $3-4$ |
| :--- | :--- | :--- |
| ECON 364 |  | $3-4$ |

ECON 390 Contemporary Economic Issues 3

ECON/REAL EST/ Urban and Regional Economics 3
URB R PL 420
ECON $441 \quad$ Analytical Public Finance $\quad 3-4$

| ECON 448 | Human Resources and Economic <br> Growth | $3-4$ |
| :--- | :--- | :--- |
| ECON/ENVIR ST/ | Government and Natural Resources | $3-4$ |


| ECON/ENVIR ST/ Government and Natural Resources | 3-4 |
| :--- | :--- | :--- |
| POLI SCI/ |  |

URB R PL 449

| ECON 450 | Wages and the Labor Market | $3-4$ |
| :--- | :--- | :---: |
| ECON 467 | International Industrial | $3-4$ |
| ECON/A A E 474 | Organizations | 3 |


|  | Areas | $3-4$ |
| :--- | :--- | ---: |
| ECON 475 | Economics of Growth | 3 |
| ECON 508 | Wealth and Income | $3-4$ |

.
ECON 522 Law and Economics 3-4

ECON/PHILOS 524 Philosophy and Economics 3
ECON/A A E/ Natural Resource Economics 3
F\&W ECOL 531
ECON/POP HLTH/ The Economics of Health Care 3-4
PUB AFFR 548
ECON 623 Population Economics 3-4

ECON/REAL EST/ Housing Economics and Policy 3
URB R PL 641
ECON/SOC 663 Population and Society 3

## Gender and Women's Studies

Code Title Credits

GEN\&WS/C\&E SOC/ Gender and Work in Rural America 3
SOC 215
GEN\&WS/CHICLA/ Chicana and Latina History 3
HISTORY 245
GEN\&WS 320 $\begin{aligned} & \text { Special Topics in Gender, Women } \\ & \text { and Society }\end{aligned} \quad$ 1-3

| GEN\&WS/ <br> AFROAMER 323 | Gender, Race and Class: Women in U.S. History | 3 |
| :---: | :---: | :---: |
| GEN\&WS 331 | Topics in Gender/Class/Race/ <br> Ethnicity (Social Sciences) | 3 |
| GEN\&WS/ <br> CHICLA 332 | Latinas: Self Identity and Social Change | 3 |
| GEN\&WS/ <br> AFROAMER 333 | Black Feminisms | 3 |
| GEN\&WS 340 | Topics in LGBTQ Sexuality | 3 |
| GEN\&WS 342 | Transgender Studies | 3-4 |
| GEN\&WS/ HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| GEN\&WS/ HISTORY 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| GEN\&WS/ HISTORY 392 | Women and Gender in Modern Europe | 3-4 |
| GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| GEN\&WS 424 | Women's International Human Rights | 3 |
| GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| GEN\&WS 427 | Global Feminisms | 3 |
| GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| GEN\&WS/ <br> ANTHRO 443 | Anthropology by Women | 3 |
| GEN\&WS/SOC 477 | Feminism and Sociological Theory | 3 |
| GEN\&WS/ HISTORY 519 | Sexuality, Modernity and Social Change | 3 |
| GEN\&WS/ PSYCH 522 | Psychology of Women and Gender | 3 |
| GEN\&WS 534 | Gender, Sexuality, and Reproduction: Public Health Perspectives | 3 |
| GEN\&WS/ <br> INTL ST 535 | Women's Global Health and Human Rights | 3 |
| GEN\&WS/ HIST SCI 537 | Childbirth in the United States | 3 |
| GEN\&WS 547 | Theorizing Intersectionality | 3 |
| GEN\&WS/SOC 611 | Gender, Science and Technology | 3 |
| Political | Science |  |
| Code | Title | Credits |
| POLI SCI 205 | Introduction to State Government | 3-4 |
| POLI SCI 206 | Introduction to Political Psychology | 3-4 |
| POLI SCI 207 | Introduction to Afro-American Politics | 3-4 |
| POLI SCI/ LEGALST 217 | Law, Politics and Society | 3-4 |
| POLI SCI/ <br> CHICLA 231 | Politics in Multi-Cultural Societies | 3-4 |
| POLI SCI 272 | Introduction to Public Policy | 3-4 |
| POLI SCI/ <br> CHICLA 302 | Mexican-American Politics | 3-4 |
| POLI SCI 304 | The Political Economy of Race in the United States | 3-4 |


| POLI SCI 305 | Elections and Voting Behavior | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 308 | Public Administration | 3-4 |
| POLI SCI 309 | Civil Liberties in the United States | 3-4 |
| POLI SCI 311 | United States Congress | 3-4 |
| POLI SCI 314 | Criminal Law and Justice | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 405 | State Government and Public Policy | 3-4 |
| POLI SCI 408 | The American Presidency | 3-4 |
| POLI SCI 409 | American Parties and Politics | 3-4 |
| POLI SCI 410 | Citizenship, Democracy, and Difference | 4 |
| POLI SCI 411 <br> \& POLI SCI 412 | The American Constitution : Powers and Structures of Government and The American Constitution: Rights and Civil Liberties | 8 |
| POLI SCI 416 | Community Power and Grass Roots Politics | 3 |
| POLI SCI 417 | The American Judicial System | 3-4 |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |
| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI/ GEN\&WS 469 | Women and Politics | 3-4 |
| POLI SCI 470 | The First Amendment | 3-4 |
| POLI SCI 507 | Health Policy and Health Politics | 3-4 |
| POLI SCI 510 | Politics of Government Regulation | 3-4 |
| POLI SCI 514 | Interest Group Politics | 3-4 |
| POLI SCI 515 | Public Opinion | 3-4 |
| POLI SCI 516 | Political Communications | 3-4 |
| POLI SCI 561 | Radical Political Theory | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |

## Psychology

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 311 | Issues in Psychology | $1-4$ |
| PSYCH 403 | Psychology of Personality | 3 |
| PSYCH/SOC 453 | Human Sexuality | 4 |
| PSYCH 405 | Abnormal Psychology | $3-4$ |
| PSYCH 408 | Psychology of Human Emotions | 3 |
| PSYCH 413 | Language, Mind, and Brain | 3 |


| PSYCH 414 | Cognitive Psychology | 3 |
| :---: | :---: | :---: |
| PSYCH/SOC 456 | Introductory Social Psychology | 3-4 |
| PSYCH 460 | Child Development | 3-4 |
| PSYCH 464 | Adult Development and Aging | 3 |
| PSYCH 501 | Depth Topic in Social Science (when topic is appropriate) | 4 |
| PSYCH 502 | Cognitive Development | 4 |
| PSYCH 503 | Social Development | 4 |
| PSYCH 508 | Psychology of Human Emotions: From Biology to Culture | 4 |
| PSYCH 511 | Behavior Pathology: Neuroses | 3 |
| PSYCH 512 | Behavior Pathology-Psychoses | 3 |
| PSYCH/ GEN\&WS 522 | Psychology of Women and Gender | 3 |
| PSYCH 526 | The Criminal Mind: Forensic and Psychobiological Perspectives | 4 |
| PSYCH 428 | Introduction to Cultural Psychology | 3-4 |
| PSYCH 607 | Introduction to Clinical Psychology | 3 |
| Sociology |  |  |
| Code | Title | Credits |
| SOC 181 | Honors Introductory Seminar-The Sociological Enterprise | 3-4 |
| SOC/C\&E SOC 210 | Survey of Sociology | 3-4 |
| SOC/C\&E SOC 211 | The Sociological Enterprise | 3 |
| SOC/C\&E SOC/ GEN\&WS 215 | Gender and Work in Rural America | 3 |
| SOC/ASIAN AM 220 | Ethnic Movements in the United States | 3-4 |
| SOC 250 | Organizations and Society | 3-4 |
| SOC/C\&E SOC/ <br> POP HLTH 380 | Contemporary Population Problems for Honors | 3 |
| SOC 421 | Processes of Deviant Behavior | 3-4 |
| SOC 441 | Criminology | 3-4 |
| SOC 446 | Juvenile Delinquency | 3-4 |
| SOC/PSYCH 453 | Human Sexuality | 4 |
| SOC/PSYCH 456 | Introductory Social Psychology | 3-4 |
| SOC/C\&E SOC 475 | Classical Sociological Theory | 3 |
| SOC/GEN\&WS 477 | Feminism and Sociological Theory | 3 |
| SOC 496 | Topics in Sociology | 1-3 |
| SOC 531 | Sociology of Medicine | 3 |
| SOC/C\&E SOC 532 | Health Care Issues for Individuals, Families and Society | 3 |

SOC/C\&E SOC 533 | Public Health in Rural \& Urban |
| :--- | :--- |
| Communities |

| SOC 535 | Talk and Social Interaction | 3 |
| :--- | :--- | ---: |
| SOC/C\&E SOC/ | Sociology of International <br> ENVIR ST 540 | Development, Environment, and <br> Sustainability |
| SOC/C\&E SOC 541 | Environmental Stewardship and <br> Social Justice | 3 |
| SOC 543 | Collective Behavior | 3 |
| SOC/C\&E SOC 573 | Community Organization and <br> Change | 3 |


| SOC 575 | Sociological Perspectives on the Life Course and Aging | 3 |
| :---: | :---: | :---: |
| SOC/AMER IND/ <br> C\&E SOC 578 | Poverty and Place | 3 |
| SOC/C\&E SOC 610 | Knowledge and Society | 3 |
| SOC/GEN\&WS 611 | Gender, Science and Technology | 3 |
| SOC/C\&E SOC/ URB R PL 617 | Community Development | 3 |
| SOC 621 | Class, State and Ideology: an Introduction to Marxist Social Science | 3 |
| SOC/C\&E SOC 622 | Advanced Topics in Critical Sociology | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC/LAW/ <br> LEGAL ST 641 | Sociology of Law | 3-4 |
| SOC/C\&E SOC/ URB R PL 645 | Modern American Communities | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SOC/HISTORY 670 | Capitalism, Socialism, and Democracy in America Since 1890 | 3-4 |
| SOC 678 | Sociology of Persecution | 3 |
| HUMAN BEHAVIOR \& THE SOCIAL ENVIRONMENT |  |  |
| Code | Title | Credits |
| Complete the following two courses: |  |  |
| SOC WORK 457 | Human Behavior and the Environment (junior year, spring semester) | 3 |
| SOC WORK 640 | Social Work with Ethnic and Racial Groups (junior year, fall semester) ${ }^{2}$ | 3 |
| ELECTIVES IN SOCIAL WELFARE |  |  |
| Complete two intermediate- or advanced-level Social Work (http:// guide.wisc.edu/courses/soc_work) courses. ${ }^{3}$ |  |  |
| STATISTICS AND RESEARCH |  |  |
| Code | Title | Credits |
| Statistics |  |  |
| Select one of the following statistics courses: |  |  |
| STAT 301 | Introduction to Statistical Methods 4 | 3 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences ${ }^{5}$ | 3 |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| PSYCH 210 | Basic Statistics for Psychology | 3 |


| Code | Title | Credits |
| :--- | :--- | ---: |
| Research |  |  |
| Select one of the following research courses: | 3 |  |
| SOC WORK 650 | Methods of Social Work Research | $3-4$ |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | 4 |

1 Courses must be selected from these approved lists.
2 Meets ethnic studies requirement.
3 No more than 3 credits of SOC WORK 699 Directed Study may be used toward fulfillment of this requirement.
4 STAT 301 is recommended by the School of Social Work. This course also fulfills 3 credits of quantitative reasoning $\mathrm{B}(\mathrm{r})$, math and natural science ( N ) toward the L\&S breadth requirements.
5
STAT 371 Introductory Applied Statistics for the Life Sciences fulfills 3 credits quantitative reasoning $B(r)$ and natural science $(\mathrm{N})$ toward L\&S breadth requirements.

Social welfare majors are encouraged to gain social service experience through volunteer work. See the social work advisors or contact the Morgridge Center for Public Service (http://www.morgridge.wisc.edu), 263-2432, for information on volunteering.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all SOC WORK courses and courses counting toward the major
2.000 GPA on 15 upper-level major credits taken in residence ${ }^{1}$

15 credits in SOC WORK, taken on campus
${ }^{1}$ SOC WORK courses that are designated as Intermediate or Advanced and PSYCH 225 and SOC/C\&E SOC 357 count as upper level in this major

## HONORS IN THE MAJOR

Students may apply for admission to Honors in the Social Welfare Major in consultation with the Social Welfare undergraduate advisor before beginning the Senior Honors Thesis. Students must make arrangements with a faculty member to sponsor their research project before admission will be granted.

## HONORS IN THE SOCIAL WELFARE MAJOR REQUIREMENTS

To earn Honors in the Major in Social Welfare, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA for all SOC WORK courses, and all courses accepted in the major
- Complete SOC WORK 650 Methods of Social Work Research
- Complete one SOC WORK elective related to Senior Honors Thesis research topic
- Complete SOC WORK 579 Special Topics in Social Work concurrently with SOC WORK 681 Senior Honors Thesis
- Complete a two-semester Senior Honors Thesis in SOC WORK 681 Senior Honors Thesis and SOC WORK 682 Senior Honors Thesis, for a total of 6 credits, with a grade of B or better
- Present thesis results at a department colloquium.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college |
| :--- | :--- |
| or department advisor for information on specific credit |  |
| requirements. |  |

## LEARNING OUTCOMES

1. Identify foundational aspects of the US social welfare system and the history of the social work profession.
2. Recognize human differences and how social welfare systems interact with these differences to shape opportunities and outcomes for individuals, groups, and communities.
3. Demonstrate an ability to critically evaluate research with respect to its relevance, quality, and utility for addressing social welfare issues.
4. Synthesize and communicate knowledge relevant to social welfare issues.
5. Practice self-awareness of one's values, beliefs, and biases regarding the causes and consequences of social welfare issues.
6. Connect awareness of self, systems and social welfare knowledge to promote human dignity and justice.

## ADVISING AND CAREERS

## ADVISING

Students interested in either the social welfare major or bachelor of social work meet with the social work advisors to discuss degree requirements; career opportunities; complete the major declaration; and confer on student issues and concerns. Advisors are an excellent resource for information about campus and community services. Students should see an advisor at least once each semester to review academic progress. Advising appointments are made through the school's website (https://socwork.wisc.edu/appointments) or by calling 608-263-3660. Social work faculty members are available for advice about coursework, research, and the social work profession in general.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and
liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/lsci)


## PEOPLE

Professors: Lawrence M. Berger, MSW, Ph.D.; Aaron Brower, MSW, Ph.D.; Maria Cancian Ph.D.; Jan Steven Greenberg, MSSW, Ph.D.; Betty J.
Kramer, MSSW, Ph.D.; Katherine Magnuson, Ph.D.; Marsha Mailick, Ph.D.; Daniel R. Meyer, MSW, Ph.D.; Stephanie A. Robert, MSW, Ph.D.; Tracy Schroepfer, MSW, Ph.D., Kristen Shook Slack, A.M., Ph.D.

Associate Professors: Marah A. Curtis, MSW, Ph.D.; Tally Moses, MSW, Ph.D.

Assistant Professors: Lauren Bishop-Fitzpatrick, Ph.D.; Pajarita Charles, MPA, MSW, Ph.D.; Lara Gerassi, MSW, Ph.D.; Alejandra Ros Pilarz, Ph.D.; Yang Sao Xiong, Ph.D.

Clinical Associate Professor: Audrey Conn, MSSW, APSW; Ellen Smith, MSSW

Clinical Assistant Professors: Laura Dresser, MSW, Ph.D.; Amanda Ngola, MSW, LCSW; Lynette Studer, MSSW, Ph.D.; Angela Willits, MSW, LCSW

## SOCIAL WORK, BSW

Social work's special contribution rests on an established body of knowledge, values and skills pertinent to understanding human relationships and the interaction between people as individuals, in families, groups, organizations, and communities.

Undergraduates in the School of Social Work receive a liberal arts education in the social and behavioral sciences and their application to human problems that prepares them to be informed citizens involved in human services or social welfare problems and policies. Students take courses in a variety of social sciences to enable them to view social welfare in its broad social, economic, and political contexts.

Social work courses offer a theoretical understanding of social problems and an introduction to practice methods used by social workers. The curriculum covers such areas as aging, family and child welfare, poverty, mental health, developmental disabilities, alcohol and drug abuse, diversity, race and ethnicity, criminal justice, oppression and social, economic and environmental justice, and at-risk populations.

## MISSION

The mission of the UW-Madison School of Social Work is to enhance human well-being and promote human rights and social and economic justice for people who are disadvantaged to achieve an equitable, healthy, and productive society. The school aims to:

- Create, advance, strengthen, and integrate interdisciplinary knowledge for students and the profession through research, scholarship, teaching and practice.
- Educate students to become highly skilled, culturally competent and ethical practitioners who will provide effective leadership for the profession of social work within the State of Wisconsin, nationally, and internationally.
- Promote change at levels ranging from the individual to national and international policy, including empowering communities and populations that are disadvantaged and developing humane service delivery systems.
- Create and disseminate knowledge regarding the prevention and amelioration of social problems.


## UNDERGRADUATE DEGREE PROGRAMS

The School of Social Work offers a bachelor of social work (BSW) degree or a bachelor of arts (B.A.) or bachelor of science (B.S.) degree with a major in social welfare. The BSW and the social welfare major prepare students for further academic study or for employment in selected human service arenas. The BSW prepares students as beginning-level professional social workers. The social welfare major offers an overview of current social problems.

## CERTIFICATE PROGRAMS

BSW students and social welfare majors often choose the following certificate programs: American Indian studies, business, criminal justice, gender and women's studies, gerontology, global cultures, global health, LGBT studies, and religious studies.

## GRADUATE SCHOOL

BSW students completing professional foundation courses with a grade of B or better are eligible for advanced standing in the master's program. For more information see the School of Social Work website FAQs on "Admissions: Advanced Standing \& Exemptions (https:// socwork.wisc.edu/fulltimemsw-faq)."

## HOW TO GET IN

Students enter the School of Social Work for either Social Welfare or Social Work begin by declaring the social welfare major. Later, if a student applies to and is accepted into the bachelor of social work program (see admissions requirements below) the major is changed to social work.

In either their freshman or sophomore years, students begin their program of study by taking SOC WORK 205 Introduction to the Field of Social Work SOC WORK 205 Introduction to the Field of Social Work and SOC WORK 206 Introduction to Social Policy in fall and spring semesters. When they are enrolled in or have taken SOC WORK 205 and/ or SOC WORK 206 SOC WORK 206 , students declare the social welfare major. In the spring of the junior year, students apply for admission to the BSW program for their senior year.

## ADMISSION TO THE BSW PROGRAM

In the spring of the junior year, students who meet the following eligibility criteria apply for admission to the BSW program:

- SOC WORK 205 Introduction to the Field of Social Work and SOC WORK 206 Introduction to Social Policy completed;
- Statistics completed (or concurrent enrollment);
- Second-semester junior status (minimum of 71 credits completed); and
- Minimum of 2.5 overall GPA from all colleges attended.

Admission to the bachelor of social work (BSW) program is based on assessment of the applicant's background, preparation and experience for practice in the field of social work. Approximately $30-35$ students are admitted to the bachelor of social work program each year. Application for admission includes:

- A personal statement on reasons for undergraduate studies in social work including any life experiences that have led the student to pursue a social work degree;
- A summary describing social work or social work-related paid or volunteer experiences, research or community projects, multicultural experiences, and/or work abroad;
- A letter of recommendation; and
- An official transcript (s) from each college attended.

After acceptance, the student completes the Social Work Practice course sequence (fall and spring semesters).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

Education

General - Breadth-Humanities/Literature/Arts: 6 credits

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SOCIAL WORK (BSW)

Because the School of Social Work is a professional school within the College of Letters \& Science (L\&S), the college confers the BSW degree. As part of the BSW degree, students also complete the standard requirements of either the bachelor of arts (B.A.) or bachelor of science (B.S.).

## COMPLETE EITHER THE BACHELOR OF ARTS OR BACHELOR OF SCIENCE REQUIREMENTS: BACHELOR OF ARTS REQUIREMENTS

Mathematics: Fulfilled with completion of University General Education requirements Quantitative Reasoning A and Quantitative Reasoning B coursework.

Foreign Language: Complete the fourth unit of a foreign language; or complete the third unit of a foreign language and the second unit of an additional foreign language. (A unit is one year of high school work or one semester/term of college work.)

L\&S Breadth:
Humanities: 12 credits;

- must include 6 credits in literature

Social Sciences: 12 credits
Natural Sciences: 12 credits:

- must include one $3+$ credit course in the biological sciences
- must include one $3+$ credit course in the physical sciences


## Liberal Arts and Science coursework: 108 credits

Depth of Intermediate/Advanced work: 60 intermediate or advanced credits

Major. Declare and complete at least one (1) major
Total Credits: 120 credits

## UW-Madison Experience:

30 credits in residence, overall
30 credits in residence after the 86th credit

## Minimum GPAs:

2.000 in all coursework at UW-Madison
2.000 in intermediate/advanced liberal arts and science coursework at UW-Madison

## BACHELOR OF SCIENCE REQUIREMENTS

Mathematics: Two (2) 3+ credits of intermediate/advanced-level MATH (http://guide.wisc.edu/courses/math), COMP SCI (http://guide.wisc.edu/ courses/comp_sci), STAT (http://guide.wisc.edu/courses/stat)

Only one (1) course in Computer Science (COMP SCI) and only one (1) course in Statistics (STAT) may be counted toward the B.S. mathematics requirement.

Foreign Language: Complete the third unit of a foreign language. (A unit is one year of high school work or one semester/term of college work.)

## L\&S Breadth

Humanities: 12 credits

- must include 6 credits in literature

Social Sciences: 12 credits

Natural Sciences: 12 credits: must include 6 credits in biological science must include 6 credits in physical science

Liberal Arts and Science Coursework: 108 credits
Depth of Intermediate/Advanced Work: 60 intermediate or advanced credits

Major: Declare and complete at least one (1) major
Total Credits: 120 credits

## UW-Madison Experience:

30 credits in residence, overall
30 credits in residence after the 86th credit

## Minimum GPAs:

2.000 in all coursework at UW-Madison
2.000 in intermediate/advanced liberal arts and science coursework at UW-Madison

REQUIREMENTS FOR THE MAJOR:
SOCIAL WELFARE POLICY AND SERVICES

| Code | Title | Credits |
| :--- | :--- | ---: |
| Complete the following two courses: |  |  |
| SOC WORK 205 | Introduction to the Field of Social <br> Work | 4 |
| SOC WORK 206 | Introduction to Social Policy | 4 |

## SOCIAL SCIENCE CONCENTRATION

Select two intermediate- or advanced-level courses (I or A) from one of the following social science departments:

| Afro-American Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History (when topic is appropriate) | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| AFROAMER/ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |


| AFROAMER/ | Race, American Medicine and <br> Public Health | 3 |
| :--- | :--- | ---: |
| HIST SCI/ | MED HIST 523 | History of African American |
| AFROAMER/ | Education |  |
| ED POL 567 | Colloquium in Afro-American <br> AFROAMER 631 | History |
| AFROAMER 671 | Selected Topics in Afro-American <br> History (when topic is appropriate) | 3 |
| AFROAMER 673 | Selected Topics in Afro-American <br> Society (when topic is appropriate) | 3 |


| American Indian Studies |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AMER IND/ANTHRO $314$ | Indians of North America | 3 |
| AMER IND/ANTHRO $353$ | Indians of the Western Great Lakes | 3 |
| AMER IND/LSC 444 | Native American Environmental Issues and the Media | 3 |
| AMER IND 450 | Issues in American Indian Studies (when topic is appropriate) | 3 |
| AMER IND/HISTORY $490$ | American Indian History | 3-4 |
| AMER IND/HDFS 522 | American Indian Families | 3 |
| AMER IND/SOC 578 | Poverty and Place | 3 |

## Anthropology

| Code | Title | Credits |
| :---: | :---: | :---: |
| ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| ANTHRO/AMER IND 314 | Indians of North America | 3 |
| ANTHRO 321 | The Emergence of Human Culture | 3 |
| ANTHRO 330 | Topics in Ethnology (when topic is appropriate) | 3-4 |
| ANTHRO/RELIG ST $343$ | Anthropology of Religion | 3-4 |
| ANTHRO 350 | Political Anthropology | 3-4 |
| ANTHRO/AMER IND 353 | Indians of the Western Great Lakes | 3 |
| ANTHRO 365 | Medical Anthropology | 3 |
| ANTHRO/GEN\&WS 443 | Anthropology by Women | 3 |
| ANTHRO 448 | Anthropology of Law | 3 |
| ANTHRO 477 | Anthropology, Environment, and Development | 3 |
| ANTHRO 545 | Psychological Anthropology | 3 |
| ANTHRO/ <br> ED POL 570 | Anthropology and Education | 3 |
| Asian American Studies |  |  |
| Code | Title | Credits |
| ASIAN AM/SOC 220 | Ethnic Movements in the United States | 3-4 |
| ASIAN AM 240 | Topics in Asian American Studies (when topic is appropriate) | 3 |


| ASIAN AM/HISTORY 276 | Chinese Migrations since 1500 | 3-4 | ECON 521 | Game Theory and Economic Analysis | 3-4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASIAN AM/ | Mutual Perceptions of Racial | 3 | ECON 522 | Law and Economics | 3-4 |
| AFROAMER 443 | Minorities |  | ECON/PHILOS 524 | Philosophy and Economics | 3 |
| Chicana/o | and Latina/o Studies |  | ECON/A A E/ <br> F\&W ECOL 531 | Natural Resource Economics | 3 |
| Code |  | Credits | ECON/POP HLTH/ | The Economics of Health Care | 3-4 |
| CHICLA/POLI SCI 231 | Politics in Multi-Cultural Societies | 3-4 | PUB AFFR 548 | The Economics of Health Care |  |
| CHICLA/GEN\&WS/ | Chicana and Latina History | 3 | ECON 623 | Population Economics | 3-4 |
| HISTORY 245 |  |  | ECON/URB R PL 641 | Housing Economics and Policy | 3 |
| CHICLA 301 | Chicana/o and Latina/o History | 3 | ECON/SOC 663 | Population and Society | 3 |
| $\begin{aligned} & \text { CHICLA/ } \\ & \text { POLI SCI } 302 \end{aligned}$ | Mexican-American Politics | 3-4 | Gender and Women's Studies |  |  |
| CHICLA 330 | Topics in Chicano/a Studies (when topic is appropriate) | 3-4 | GEN\&WS/SOC 215 | Gender and Work in Rural America | 3 |
| CHICLA/GEN\&WS 332 | Latinas: Self Identity and Social Change | 3 | GEN\&WS/CHICLA/ HISTORY 245 | Chicana and Latina History | 3 |
| CHICLA/HISTORY/ POLI SCI 422 | Latino History and Politics | 3 | GEN\&WS 320 | Special Topics in Gender, Women and Society (when topic is appropriate) | 1-3 |
| CHICLA/HISTORY $435$ | Colony, Nation, and Minority: The Puerto Ricans' World | 3 | GEN\&WS/ <br> AFROAMER 323 | Gender, Race and Class: Women in U.S. History | 3 |
| CHICLA/SOC 470 Economic | Sociodemographic Analysis of Mexican Migration | 3 | GEN\&WS 331 | Topics in Gender/Class/Race/ Ethnicity (Social Sciences) (when topic is appropriate) | 3 |
| Code | Title | Credits | GEN\&WS/CHICLA$332$ | Latinas: Self Identity and Social Change | 3 |
| ECON/FINANCE 300 | Introduction to Finance | 3 |  |  |  |
| ECON 301 | Intermediate Microeconomic Theory | 4 | GEN\&WS/ <br> AFROAMER 333 | Black Feminisms | 3 |
| ECON 302 | Intermediate Macroeconomic Theory | 4 | GEN\&WS 340 | Topics in LGBTQ Sexuality (when topic is appropriate) | 3 |
| ECON/A A E/ <br> REALEST/ | The Real Estate Process | 3 | GEN\&WS 342 | Transgender Studies | 3-4 |
| URB R PL 306 |  |  | GEN\&WS/HISTORY 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| ECON 311 | Intermediate Microeconomic Theory <br> - Advanced Treatment | 3 | GEN\&WS/HISTORY $354$ | Women and Gender in the U.S. Since 1870 | 3-4 |
| ECON 312 | Intermediate Macroeconomic <br> Theory - Advanced Treatment | 3 | GEN\&WS/ HISTORY 392 | Women and Gender in Modern Europe | 3-4 |
| ECON/A A E/ENVIR ST 343 | Environmental Economics | 3-4 | GEN\&WS 420 | Women in Cross-Societal Perspective | 3 |
| ECON 364 | Survey of International Economics | 3-4 | GEN\&WS 424 | Women's International Human Rights |  |
| ECON 390 | Contemporary Economic Issues (when topic is appropriate) | 3 |  |  | 3 |
| ECON/URB R PL 420 | Urban and Regional Economics | 3 | GEN\&WS 426 | Women and Grassroots Politics Across the Globe | 3 |
| ECON 441 | Analytical Public Finance | 3-4 | GEN\&WS 427 | Global Feminisms | 3 |
| ECON 448 | Human Resources and Economic Growth | 3-4 | GEN\&WS 441 | Contemporary Feminist Theories | 3 |
| ECON/POLI SCI 449 | Government and Natural Resources | 3-4 | GEN\&WS/ANTHRO 443 | Anthropology by Women | 3 |
| ECON 450 | Wages and the Labor Market | 3-4 | GEN\&WS/SOC 477 | Feminism and Sociological Theory | 3 |
| ECON 467 | International Industrial Organizations | 3-4 | GEN\&WS/HISTORY $519$ | Sexuality, Modernity and Social Change | 3 |
| ECON/A A E/ECON 474 | Economic Problems of Developing Areas | 3 | GEN\&WS/PSYCH 522 | Psychology of Women and Gender | 3 |
| ECON 475 | Economics of Growth | 3-4 | GEN\&WS 534 | Gender, Sexuality, and Reproduction: Public Health Perspectives | 3 |
| ECON 508 | Wealth and Income | 3 |  |  |  |


| GEN\&WS/INTL ST | Women's Global Health and Human <br> Rights | 3 |
| :--- | :--- | ---: |
| GEN\&WS/ | Childbirth in the United States | 3 |
| HIST SCI 537 | Theorizing Intersectionality | 3 |
| GEN\&WS 547 | Gender, Science and Technology | 3 |


| Political Science |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| POLI SCI 205 | Introduction to State Government | $3-4$ |
| POLI SCI 206 | Introduction to Political Psychology | $3-4$ |
| POLI SCI 207 | Introduction to Afro-American | $3-4$ |
|  | Politics |  |
| POLI SCI/ | Law, Politics and Society |  |
| LEGAL ST 217 |  | $3-4$ |
| POLI SCI/ | Politics in Multi-Cultural Societies | $3-4$ |


| CHICLA 231 |  |
| :--- | :--- | :--- |
| POLI SCI 272 Introduction to Public Policy |  |

POLI SCI/ Mexican-American Politics 3-4

| CHICLA 302 |  |  |
| :--- | :--- | :--- |
| POLI SCI 304 | The Political Economy of Race in |  |


|  | the United States |  |
| :--- | :--- | :--- |
| POLI SCI 305 | Elections and Voting Behavior | $3-4$ |

POLI SCI 308 Public Administration 3-4
POLI SCI 309 Civil Liberties in the United States 3-4
POLI SCI 311 United States Congress 3-4
POLI SCI 314 Criminal Law and Justice 3-4
POLI SCI $354 \quad$ International Institutions and World 3-4
$\begin{array}{lll} & \text { Order } \\ \text { POLI SCI } 348 & \text { Analysis of International Relations }\end{array}$
POLI SCI $350 \quad$ International Political Economy 3-4
POLI SCI 351 Politics of the World Economy 3-4

| POLI SCI 353 | The Third World in the International <br> System | $3-4$ |
| :--- | :--- | :--- |

POLI SCI 356 Principles of International Law 3-4
POLI SCI 405 State Government and Public Policy 3-4
POLI SCI 408 The American Presidency 3-4
POLI SCI 409 American Parties and Politics 3-4

| POLI SCI 410 | Citizenship, Democracy, and <br>  <br>  <br> Difference | 4 |
| :--- | :--- | :--- |
| POUI SCI 411 | The American Constitution : Powers |  |


| \& POLI SCI 412 | The American Constitution : Powers <br> and Structures of Government <br> and The American Constitution: |
| :--- | :--- | :--- |
|  | Rights and Civil Liberties |
| POLI SCI 416 | Community Power and Grass Roots |


|  | Politics |  |
| :--- | :--- | ---: |
| POLI SCI 417 | The American Judicial System | $3-4$ |

POLI SCI/CHICLA/ Latino History and Politics 3
HISTORY 422

| POLI SCI/ | Gender and Politics in Comparative | 3-4 |
| :--- | :--- | :--- |
| GEN\&WS 429 | Perspective |  |

POLI SCI/ Contentious Politics 3-4

INTL ST 431
POLI SCI 432 Comparative Legal Institutions 3-4

| POLI SCI/ | The Politics of Human Rights | $3-4$ |
| :--- | :--- | :---: |
| INTL ST 434 |  |  |
| POLI SCI/ | The Comparative Study of Genocide |  |
| INTL ST 439 | Women and Politics | $3-4$ |
| POLI SCI/ |  | $3-4$ |
| GEN\&WS 469 | The First Amendment | $3-4$ |
| POLI SCI 470 | Health Policy and Health Politics | $3-4$ |
| POLI SCI 507 | Politics of Government Regulation | $3-4$ |
| POLI SCI 510 | Interest Group Politics | $3-4$ |
| POLI SCI 514 | Public Opinion | $3-4$ |
| POLI SCI 515 | Political Communications | $3-4$ |
| POLI SCI 516 | Radical Political Theory | $3-4$ |
| POLI SCI 561 | Politics of Revolution | $3-4$ |

## Psychology

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSYCH 311 | Issues in Psychology | $1-4$ |
| PSYCH/SOC 453 | Human Sexuality | 4 |
| PSYCH 405 | Abnormal Psychology | $3-4$ |
| PSYCH 408 | Psychology of Human Emotions | 3 |
| PSYCH 413 | Language, Mind, and Brain | 3 |
| PSYCH 414 | Cognitive Psychology | 3 |
| PSYCH 428 | Introduction to Cultural Psychology | $3-4$ |
| PSYCH/SOC 456 | Introductory Social Psychology | $3-4$ |
| PSYCH 460 | Child Development | $3-4$ |
| PSYCH 464 | Adult Development and Aging | 3 |
| PSYCH 501 | Depth Topic in Social Science (when | 4 |
|  | topic is appropriate) | 4 |
| PSYCH 502 | Cognitive Development | 4 |
| PSYCH 503 | Social Development | 4 |
| PSYCH 403 | Psychology of Personality | 3 |
| PSYCH 508 | Psychology of Human Emotions: | 4 |
| PSYCH 511 | From Biology to Culture |  |
| PSYCH 512 | Behavior Pathology: Neuroses | 3 |
| PSYCH/ | Behavior Pathology-Psychoses | 3 |
| GEN\&WS 522 | Psychology of Women and Gender | 3 |
| PSYCH 526 | The Criminal Mind: Forensic and | 4 |
| PSYCH 607 | Psychobiological Perspectives | Introduction to Clinical Psychology |

## Sociology

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC 181 | Honors Introductory Seminar-The <br> Sociological Enterprise | $3-4$ |
| SOC/C\&E SOC 210 | Survey of Sociology | $3-4$ |
| SOC/C\&E SOC 211 | The Sociological Enterprise | 3 |
| SOC/C\&E SOC/ | Gender and Work in Rural America | 3 |
| GEN\&WS 215 |  | $3-4$ |
| SOC/ASIAN AM 220 | Ethnic Movements in the United |  |
|  | States | $3-4$ |
| SOC 250 | Organizations and Society | 4 |


| $\begin{aligned} & \text { SOC/POP HLTH/C\&E } \\ & \text { SOC } 380 \end{aligned}$ | Contemporary Population Problems for Honors | 3 |
| :---: | :---: | :---: |
| SOC 421 | Processes of Deviant Behavior | 3-4 |
| SOC 441 | Criminology | 3-4 |
| SOC 446 | Juvenile Delinquency | 3-4 |
| SOC/C\&E SOC 475 | Classical Sociological Theory | 3 |
| SOC/GEN\&WS 477 | Feminism and Sociological Theory | 3 |
| SOC 496 | Topics in Sociology (when topic is appropriate) | 1-3 |
| SOC/PSYCH 456 | Introductory Social Psychology | 3-4 |
| SOC 531 | Sociology of Medicine | 3 |
| SOC/C\&E SOC 532 | Health Care Issues for Individuals, Families and Society | 3 |
| SOC/C\&E SOC 533 | Public Health in Rural \& Urban Communities | 3 |
| SOC 535 | Talk and Social Interaction | 3 |
| SOC/C\&E SOC/ENVIR <br> ST 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| SOC 543 | Collective Behavior | 3 |
| SOC/C\&E SOC 573 | Community Organization and Change | 3 |
| SOC 575 | Sociological Perspectives on the Life Course and Aging | 3 |
| SOC/AMER IND/C\&E SOC 578 | Poverty and Place | 3 |
| SOC/C\&E SOC 610 | Knowledge and Society | 3 |
| SOC/GEN\&WS 611 | Gender, Science and Technology | 3 |
| SOC/C\&E SOC/URB R PL 617 | Community Development | 3 |
| SOC 621 | Class, State and Ideology: an Introduction to Marxist Social Science | 3 |
| SOC/C\&E SOC 622 | Advanced Topics in Critical Sociology (when topic is appropriate) | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC/LAW/LEGAL ST 641 | Sociology of Law | 3-4 |
| SOC/URB R PL 645 | Modern American Communities | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SOC/HISTORY 670 | Capitalism, Socialism, and Democracy in America Since 1890 | 3-4 |

SOC 678
Sociology of Persecution

## HUMAN BEHAVIOR \& THE SOCIAL ENVIRONMENT

| Code | Title | Credits |
| :--- | :--- | ---: |
| Complete the following two courses: |  |  |
| SOC WORK 457 | Human Behavior and the <br> Environment | 3 |
| SOC WORK 640 | Social Work with Ethnic and Racial <br> Groups | 3 |

## SOCIAL WORK PRACTICE SEQUENCE

BSW students take two semesters (16 hours per week-256 hours/ semester) of field education during their senior year (SOC WORK 400 Field Practice and Integrative Seminar I fall semester, SOC WORK 401 Field Practice and Integrative Seminar II spring semester). SOC WORK 441 Generalist Practice with Individuals, Families and Groups, SOC WORK 442 Generalist Practice with Communities and Organizations and SOC WORK 612 Psychopathology in Generalist Social Work Practice are taken concurrently with Field.

A Field Forum is held in spring semester where students learn more about the field program, field units and expectations and opportunities for field placement. The forum provides students with the opportunity to meet the instructors who teach the field units. Following the Field Forum students indicate their field-unit preferences. The director of field education makes final unit placement decisions and field instructors make final agencyplacement decisions

The types of agencies working with the field education program are varied. Field units are organized around a social problem area or a field of practice. Each unit has a range of field placement agencies and settings appropriate to its theme. The emphasis for undergraduate placements is on applying the knowledge and skills of generalist social work practice with systems of all sizes. The focus is on learning and applying analytic and interventive skills within an ethically based, problem-focused approach.

Social work students should be advised that the Wisconsin Caregiver Law requires a Wisconsin background check (Caregiver Check and Wisconsin Criminal History) for all potential field-education students prior to the field placement. More information regarding this process is available at Field Education (http://www.socwork.wisc.edu/fielded) on the social work website.

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| SOC WORK 400 (A) | 5 SOC WORK 401 (A) | 5 |
| SOC WORK 441 (I) | 3 SOC WORK 612 | 2 |
| SOC WORK 442 | $1-2$ | 7 |

## Total Credits 16-17

BSW students are expected to maintain a cumulative 3.0 in the major and a minimum grade of BC in SOC WORK 400 Field Practice and Integrative Seminar I and SOC WORK 401 Field Practice and Integrative Seminar II.

For more information about field units, the agencies they work with, and field course expectations see the Field Education Handbook (http:// www.socwork.wisc.edu/files/field/FieldHandbook.pdf). Field unit availability may vary from year to year.

## Social Work Practice in Community Agencies

This unit provides opportunities to work with human service agencies and community programs. The practice perspective is generalist social work in direct and indirect services to individuals, families, groups, organizations, and communities. The primary purpose of the field placement and seminar is to provide generalist practice opportunities for the development, integration and application of key competencies that are met through measureable practice behaviors. Theory and concepts learned in the classroom are integrated with practice opportunities, fostering the implementation of evidenced-informed practice. Participating Agencies: Bridge Lake Point Waunona, Goodman, Vera Court neighborhood centers; Center for Families; Dane County Court Appointed Special Advocates [CASA]; Disability Rights-Wisconsin; Second Harvest Food Bank; UW Medical Foundation; Youth Services of Southern Wisconsin (Briarpatch); YWCA (Girls Inc., House-ability, Third Street programs), Community Care Resources, Center for Families.

## Social Work Practice in Community Mental Health Agencies

This unit has been developed for generalist practice year students (BSW and first year MSW students) wanting to learn generalist social work practice in settings providing services to people with serious and persistent mental illness who are eighteen years of age and older. The placement settings include private non-profit mental health agencies, primarily providing comprehensive community support services. Participating Agencies: Most of the placements occur in programs of the Journey Mental Health Center's Community Support Programs (CSP's) including: Blacksmith House, Cornerstone, Gateway, Community Treatment Alternatives, Yahara House (day services program) and the Emergency Services Unit. Additional placements occur at: SOAR Case Management Services, Chrysalis, Badger Prairie Health Care Center, Tellurian UCAN's Transitional Housing Program, William S. Middleton Memorial Veterans Hospital, and Mendota Mental Health Institute's PACT (Program of Assertive Community Treatment), an outpatient program.

## Social Work Practice in County Human Services (Dane Co. or Rural Settings)

This is a county (public) human/social service agency unit with practice including both direct and indirect services with clients, participants and communities. Students are involved in child welfare, child protective services, juvenile delinquency, foster care, institutional reintegration and community social work. Field placement activities include individual and family counseling, child and family assessment, case management, juvenile court services, foster care services, institutional reintegration, group work, neighborhood and community services and overall program planning. Students in this unit may have field placement settings in voluntary community agencies that work collaboratively with the county human services department. Students gain a solid understanding of the place of a county human service agency in the human services/child and family welfare system. Placements provide opportunities to learn, develop and demonstrate competencies through practice behaviors in all or most of the required social work competency areas. Field placements available through this unit are primarily located in Dane and surrounding counties. Depending on resource needs, this unit may include Title IV-E students. Participating Agencies: Division of Children, Youth and Families, Dane County Human Services, in the following specializations: Access and Initial assessment, Ongoing Services, Child Protective Services, Foster Care, Independent Living, Juvenile Delinquency, Institutional Reintegration, Neighborhood Intervention Program, and Joining Forces for Families (community social work). Placements may also be arranged in voluntary community agencies that have collaborative relationships with county human services.

## Social Work Practice in Intellectual Disabilities

This unit has been developed for generalist practice year students who are interested in doing advocacy and promoting inclusive communities, especially with persons differing abilities. Since the objectives of the 400 -level foundation year are primarily to teach and provide experiences in generalist social work practice, you will learn skills and knowledge applicable to a wide variety of social work settings. There is also the opportunity to work with two Madison based programs doing international projects. Through work with individuals, families, groups, and communities there will be a focus on issues related to human rights, access to services, communication challenges, and community acceptance and inclusion. The integrative seminar will utilize group work, faculty, student, and guest presentations, multimedia and experiential activities. Placement agencies include: Family Support and Resource Center, Waisman Center, Options in Community Living, Bridges Birth to Three programs.

## Social Work Practice in Juvenile and Criminal Justice

The focus of this unit is direct social work practice in juvenile and adult criminal justice community and institutional settings. The unit focuses on helping students conceptualize client typologies related to social responses and interventions including: pre-sentence decisions, probation and parole supervision, institutional interventions, group homes, juvenile community treatment, policy and planning administration. Interventions related to conceptualization of client subtypes, demography of crime and delinquency and violent crime are some of the major content areas for study. Participating Agencies: RC Correctional Services for Women, Attic Correctional Services, Dane County Deferred Prosecution, Dane County Family Violence Unit, Dane County Juvenile Detention and Court Services, Dane County Victim/Witness Unit, Domestic Violence Intervention Services, Operation Fresh Start, VA Hospital, Youth Services of Southern Wisconsin, Madison YWCA, Juvenile Group Homes for male and female delinquent youth, Mendota Mental Health Institute, Sand Ridge Secure Treatment Facility, U.S. Probation Office, Wisconsin Adult Correctional Institutions, Wisconsin Public Defender's Office.

## Social Work Practice with Older Adults

This field unit provides field placements in a variety of agency, community, health care and institutional settings that primarily serve older adults. All of the field placements deal with issues of aging, community, mental health, policy, and institutions. The primary purpose of the field placement is to provide an opportunity for guided practical experience in social work settings so that students may acquire the knowledge, values, and skills essential for professional gerontological social work practice. This field unit provides opportunities for integrating theoretical content and knowledge with the practice experience. The practice perspective of the aging and mental health unit is generalist practice, which includes a problem-focused generalist approach with a special emphasis on:

1. direct service to older adults and their families; and
2. resource development and coordination.

Participating Agencies: Agrace Hospice, Alzheimers Association; Attic Angel Place; Badger Prairie Health Care Center; Care Wisconsin; Catholic Charities; Dane County Human Services Guardianship \& Protective Placement; East Madison Monona Coalition of the Aging; Fitchburg Senior Center; the Geriatric Research Education and Clinical Center (GRECC) at the Veterans Administration Hospital; Jewish Social Service; North Eastside Senior Coalition; Retired Senior Volunteer Program; South Madison Coalition; St. Mary's Adult Day Center; St. Mary's Care Center; Oak Park Retirement Community; UW Health Geriatrics Clinic.

## Social Work Practice in Public and Private Child Welfare

This field unit is a public human/social service agency unit with practice including both direct and indirect services with clients. Students are involved in child welfare and child protective services, juvenile delinquency, foster care and community social work. Placement activities include child protective services initial assessment, family assessment, case planning, individual and family counseling, case management, juvenile court services, foster care services, neighborhood and community services and overall program planning. Students gain a solid understanding of the place of a public social service agency in the human services/child and child welfare system. Placements provide skills in case assessment and planning, case management, counseling, court services, group work and community resource networking. Participating Agencies: Field Placements locations for the field unit include: County Human Service/Social Service offices in Columbia, Dane, Green, Iowa, Jefferson, Rock and Sauk Counties and include the following specializations: Foster Care, Child Welfare, Child Protective Services, Access, Initial Assessments, and Ongoing Services.

## STATISTICS AND RESEARCH

| Code | Title | Credits |
| :---: | :---: | :---: |
| Statistics |  |  |
| Select one of the following statistics courses: |  | 3 |
| STAT 301 | Introduction to Statistical Methods $(I)^{1}$ |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences (r-N-I) ${ }^{2}$ |  |
| SOC/ <br> C\&E SOC 360 | Statistics for Sociologists I (I) |  |
| PSYCH 210 | Basic Statistics for Psychology (E) |  |
| Research |  |  |
| Select one of the following research courses: ${ }^{3}$ |  | 3-4 |
| SOC WORK 650 | Methods of Social Work Research (A) |  |
| SOC/ <br> C\&E SOC 357 | Methods of Sociological Inquiry (I) |  |
| PSYCH 225 | Research Methods (I) |  |
| Total Credits |  | 6-7 |

1
STAT 301 is recommended by the School of Social Work. This course also fulfills 3 credits of quantitative reasoning $B(r)$, math and natural science (N) toward the Letters \& Science breadth requirements.
2 STAT 371 Introductory Applied Statistics for the Life Sciences fulfills 3 credits quantitative reasoning $B(r)$ and natural science $(N)$ toward L\&S breadth requirements.
3
SOC WORK 650 is recommended for BSW students. Double majors in sociology or psychology may take SOC/C\&E SOC 357 or PSYCH 225 for this requirement.

## ELECTIVE

Complete one intermediate- or advanced-level Social Work (http:// guide.wisc.edu/courses/soc_work) course.

## INDEPENDENT WORK

Students with an interest in a particular area of study may develop a plan of independent work with the assistance of an interested faculty member. They may obtain information about instructors and their areas of interest
from the School of Social Work website. Consent of instructor is required for the following course offerings in independent work:

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC WORK 681 | Senior Honors Thesis | 3 |
| SOC WORK 682 | Senior Honors Thesis | 3 |
| SOC WORK 691 | Senior Thesis | 2 |
| SOC WORK 692 | Senior Thesis | 2 |
| SOC WORK 699 | Directed Study | $1-3$ |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in all SOC WORK courses and courses counting toward the major

15 upper-level major credits, taken in residence ${ }^{1}$
15 credits in SOC WORK, taken on campus
${ }^{1}$ PSYCH 225, SOC/C\&E SOC 357, and all SOC WORK courses designated as Intermediate or Advanced count as upper level in this major

## CERTIFICATE PROGRAMS

BSW students and social welfare majors often choose the following certificate programs: American Indian studies, business, criminal justice, gender and women's studies, gerontology, global cultures, global health, LGBT studies, and religious studies. More details about certificates are available in this Guide.

## GRADUATE SCHOOL

BSW students completing professional foundation courses with a grade of B or better are eligible for advanced standing in the master's program. For more information see the School of Social Work website FAQs at Admissions: Advanced Standing \& Exemptions (https:// socwork.wisc.edu/fulltimemsw-faq).

## HONORS IN THE MAJOR

Students may apply for admission to Honors in the Bachelor of Social Work in consultation with the Social Work undergraduate advisor before beginning the Senior Honors Thesis. Students must make arrangements with a faculty member to sponsor their research project before admission will be granted.

## HONORS IN THE BACHELOR OF SOCIAL WORK REQUIREMENTS

To earn Honors in the Major in Social Welfare, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn a 3.400 GPA for all SOC WORK courses, and all courses accepted in the major
- Complete SOC WORK 650 Methods of Social Work Research
- Complete one SOC WORK elective related to Senior Honors Thesis research topic
- Complete SOC WORK 579 Special Topics in Social Work concurrently with SOC WORK 681 Senior Honors Thesis
- Complete a two-semester Senior Honors Thesis in SOC WORK 681 Senior Honors Thesis and SOC WORK 682 Senior Honors Thesis , for a total of 6 credits, with a grade of $B$ or better
- Present thesis results at a department colloquium.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| Wndergraduate students must maintain the minimum |  |
| Wrade point average specified by the school, college, or |  |

## LEARNING OUTCOMES

1. Engage diversity and difference in practice.
2. Advance human rights and social, economic and environmental justice.
3. Engage in practice-informed research and research informed practice.
4. Engage in policy practice.
5. Engage with individuals, families, groups, organizations, and communities.
6. Assess individuals, families, groups, organizations, and communities.
7. Intervene with individuals, families, groups, organizations, and communities.
8. Evaluate practice with individuals, families, groups, organizations, and communities.
9. Demonstrate ethical and professional behavior.

## ADVISING AND CAREERS

## ADVISING

Students interested in either the social welfare major or bachelor of social work meet with the social work advisors to discuss degree requirements; career opportunities; complete the major declaration; and confer on student issues and concerns. Advisors are an excellent resource for information about campus and community services. Students should see an advisor at least once each semester to review academic progress. Advising appointments are made through the school's website (https://socwork.wisc.edu/appointments) or by calling 263-3660. Social work faculty members are available for advice about course work, research, and the social work profession in general.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors: Lawrence M. Berger, MSW, Ph.D.; Aaron Brower, MSW, Ph.D.; Maria Cancian Ph.D.; Jan Steven Greenberg, MSSW, Ph.D.; Betty J. Kramer, MSSW, Ph.D.; Katherine Magnuson, Ph.D.; Marsha Mailick, Ph.D.; Daniel R. Meyer, MSW, Ph.D.; Stephanie A. Robert, MSW, Ph.D.; Tracy Schroepfer, MSW, Ph.D., Kristen Shook Slack, A.M., Ph.D.

Associate Professors: Marah A. Curtis, MSW, Ph.D.; Tally Moses, MSW, Ph.D.

Assistant Professors: Lauren Bishop-Fitzpatrick, Ph.D.; Pajarita Charles, MPA, MSW, Ph.D.; Lara Gerassi, MSW, Ph.D.; Alejandra Ros Pilarz, Ph.D.; Yang Sao Xiong, Ph.D.

Clinical Associate Professor. Audrey Conn, MSSW, APSW; Ellen Smith, MSSW

Clinical Assistant Professors: Laura Dresser, MSW, Ph.D.; Amanda Ngola, MSW, LCSW; Lynette Studer, MSSW, Ph.D.; Angela Willits, MSW, LCSW

## ACCREDITATION

## Accreditation

Council on Social Work Education (https://www.cswe.org/Accreditation)
Accreditation status: Accredited. Next accreditation review: 2021.

## Certification/Licensure

## SOCIOLOGY

Sociology applies the methods of science to explain social behavior. The interactions of individuals in families, groups, or organizations, and the institutions, social class, or shared beliefs of a common culture are all subjects for sociological research. There are many career opportunities
open to people who complete a major in sociology, including business, counseling and social service, public policy, law, and criminal justice.

Students interested in sociology should meet with the undergraduate advisor before they register for the second semester of the sophomore year. The undergraduate office's resource center holds detailed information about the major, the department, research interests of sociology faculty, career opportunities, and student work. Declaration of the major during the sophomore year will give students access to required sociology courses for fall of the junior year.

## CRIMINAL JUSTICE CERTIFICATE

Sociology majors wishing to earn a certificate in criminal justice may do so with a minimum of additional course requirements and permission of the Criminal Justice advisor. See Criminal Justice (p. 511) section in this Guide.

## ENROLLMENT

Required courses for the sociology major and for the CAR option may have temporary course controls that send non-declared students "Course Requisites Not Met" enrollment error messages. Certain 100-numbered courses each semester are restricted to freshmen and sophomores until freshmen have enrolled. Check the Course Guide for notes each semester.

Transfer students whose equivalent courses have been posted to their records as "electives," numbered XXX, may use those courses as prerequisites if the department approves their equivalencies to similar UW-Madison courses. What is needed is a conversation with the undergraduate advisor either in the office or at SOAR.

## HONORS PROGRAM

A variety of courses in sociology offer honors credit, and may be used toward Honors in the Liberal Arts in the College of Letters \& Science. These include the special honors introductory seminar, Sociology 181, Sociology 380 Contemporary Population Problems, other special honors sections of 100 - and 200 -level courses, and courses that provide honors by arrangement with the instructor. Sociology also has courses that award automatic honors, including SOC/C\&E SOC 361 Statistics for Sociologists II, SOC 362 Statistics for Sociologists III and SOC/ C\&E SOC 693 Practicum in Analysis and Research, and certain other upper-division courses designated by semester in the Course Guide. Sociology also makes special offerings of upper-level courses available to sophomores in the honors program for one semester at a time.

## PREREQUISITES, L\&S BREADTH, AND COURSE LEVELS

Sociology course numbers over 300 indicate subject matter rather than level of difficulty. Unless indicated otherwise, prerequisites at the upper level are junior standing and an introductory course in sociology or consent of instructor.

Most courses in sociology count toward the social studies breadth requirement. Courses SOC/GEN\&WS 200 Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies, SOC/GEOG/HISTORY/ LCA/POLI SCI 244 Introduction to Southeast Asia: Vietnam to the Philippines, SOC/GEOG/HISTORY/LCA/POLI SCI 252 The Civilizations of India-Modern Period, and SOC/AFRICAN/AFROAMER/ANTHRO/GEOG/ HISTORY/POLI SCI 277 Africa: An Introductory Survey count toward
breadth requirements in either humanities or social studies. The following do not count toward any breadth requirement:

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | $3-4$ |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| SOC/C\&E SOC 361 | Statistics for Sociologists II | 3 |
| SOC 362 | Statistics for Sociologists III | 3 |
| SOC 496 | Topics in Sociology | $1-3$ |
| SOC/C\&E SOC 693 | Practicum in Analysis and Research | 3 |
| SOC/LEGAL ST 694 | Criminal Justice Field Observation | $2-3$ |

## DEGREES/MAJORS/CERTIFICATES

- Integrated Studies in Science, Engineering, and Society, Certificate (p. 1252)
- Sociology, B.A. (p. 1255)
- Sociology, B.S. (p. 1262)


## PEOPLE

Professors Carlson, Emirbayer, Ermakoff, Ferree, Ford, Freeland, Fujimura, Gerber, Goldberg, Grodsky, Herd, Logan, Massoglia, Maynard, Montgomery, Oliver, Raymo, Rogers, Schaeffer, Schwartz, Seidman, Wright

Associate Professors Elwert, Fletcher, Grant, Lim, Nobles
Assistant Professors Conti, Engelman, Goffman

> INTEGRATED STUDIES IN SCIENCE, ENGINEERING, AND SOCIETY, CERTIFICATE

The certificate in Integrated Studies in Science, Engineering, and Society Undergraduate (ISSuES) offers undergraduate students an opportunity to explore the social sciences and humanities in a way that emphasizes the relationship between science, technology, medicine, engineering, and society. From energy to communications technologies to gene editing to automation, the interplay between researchers, developers, policy makers and the public is constantly shaping and reshaping our world. The ISSuES certificate allows undergraduate students to complement their majors with a set of courses aimed at helping them understand how society shapes science and how science shapes society.

Offered by the Holtz Center for Science \& Technology Studies, ISSuES was designed to help STEM-field majors fulfill their liberal arts requirements, but is highly flexible and is available to all undergraduate students interested in exploring the complex interplay between science, technology, medicine, engineering, and society. For more information, see the program website (http://sts.wisc.edu).

## HOW TO GET IN

The certificate in integrated studies in science, engineering and society is offered to all undergraduate students. To be considered for admission
to the certificate program, students must be in good academic standing. Students should begin the application process by the end of sophomore year, but no later than the end of their junior year.

The first step in applying to the program is to consult with the ISSuES certificate advisor. To make an appointment, please send an email to sts@ssc.wisc.edu.

## REQUIREMENTS

## 15 CREDITS, TO INCLUDE: ${ }^{1}$

| Code | Title | Credits |
| :---: | :---: | :---: |
| STS 201 | Where Science Meets Society | 3 |
| 9 credits from one focus area: |  | 9 |
| Ethics: |  |  |
| ED PSYCH 301 | How People Learn |  |
| ENVIR ST 112 | Environmental Studies: The Social Perspective |  |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies |  |
| HIST SCI/ MED HIST 133 | Biology and Society, 1950 - Today |  |
| HIST SCI 201 | The Origins of Scientific Thought |  |
| HIST SCI 202 | The Making of Modern Science |  |
| HIST SCI 203 | Science in the Twentieth Century: A Historical Overview |  |
| HIST SCI/ <br> MED HIST 212 | Bodies, Diseases, and Healers: <br> An Introduction to the History of Medicine |  |
| HIST SCI 222 | Technology and Social Change in History |  |
| HIST SCI/ AFROAMER/ MED HIST 275 | Science, Medicine, and Race: A History |  |
| HIST SCI/ MED HIST/ RELIG ST 331 | Science, Medicine and Religion |  |
| HIST SCI 337 | History of Technology |  |
| HIST SCI 339 | Technology and Its Critics Since World War II |  |
| HIST SCI/ HISTORY/ MED HIST 394 | Science in America |  |
| HIST SCI/ <br> MED HIST/ <br> POP HLTH 553 | International Health and Global Society |  |
| HIST SCI/ MED HIST 668 | Topics in History of Medicine |  |
| HISTORY/ <br> ENVIR ST/ <br> GEOG 460 | American Environmental History |  |
| MED HIST/ <br> HIST SCI/ <br> HISTORY 507 | Health, Disease and Healing I |  |
| MED HIST/ <br> PHILOS 515 | Public Health Ethics |  |


| MED HIST 610 | Regenerative Medicine Ethics and <br> Society <br> Independent Study in Medical <br> MED HIST 699 |
| :--- | :--- |
| History |  |


| ART HIST/DS/ | Dimensions of Material Culture |
| :--- | :--- |
| HISTORY 464 |  |$l$| Proseminar in American |
| :--- | :--- |
| Architecture |


| HIST SCI 222 | Technology and Social Change in History |  |
| :---: | :---: | :---: |
| HIST SCI/ AFROAMER/ MED HIST 275 | Science, Medicine, and Race: A History |  |
| HIST SCI 337 | History of Technology |  |
| HIST SCI/ AFROAMER/ MED HIST 523 | Race, American Medicine and Public Health |  |
| MED HIST/ HIST SCI/ HISTORY 507 | Health, Disease and Healing I |  |
| MED HIST/ <br> HIST SCI 509 | The Development of Public Health in America |  |
| PHILOS 101 | Introduction to Philosophy |  |
| POP HLTH/ HIST SCI/ MED HIST 553 | International Health and Global Society |  |
| PSYCH/I SYE 349 | Introduction to Human Factors |  |
| ZOOLOGY/ BOTANY/ ENVIR ST 260 | Introductory Ecology |  |
| Capstone-one from: ${ }^{2}$ |  | 3 |
| ART 448 | Special Topics |  |
| ART 534 | Advanced Wood Working |  |
| ART HIST/ AMER IND 359 | American Indian Art History: Contemporary Issues |  |
| ART HIST/DS/ HISTORY 464 | Dimensions of Material Culture |  |
| ART HIST 567 | Proseminar in American Architecture |  |
| DS 642 | Taste |  |
| GEOG 342 | Geography of Wisconsin |  |
| HIST SCI 337 | History of Technology |  |
| HIST SCI/ AFROAMER/ MED HIST 523 | Race, American Medicine and Public Health |  |
| HIST SCI/ MED HIST 668 | Topics in History of Medicine |  |
| LSC 625 | Risk Communication |  |
| MED HIST/ HIST SCI/ HISTORY 507 | Health, Disease and Healing I |  |
| MED HIST/ <br> HIST SCI 509 | The Development of Public Health in America |  |
| MED HIST 699 | Independent Study in Medical History |  |
| M\&ENVTOX/ ENVIR ST/ PLPATH 368 | Environmental Law, Toxic Substances, and Conservation |  |
| PHILOS 341 | Contemporary Moral Issues |  |
| POP HLTH/ HIST SCI/ MED HIST 553 | International Health and Global Society |  |

PSYCH/I SY E 349 Introduction to Human Factors

1 Courses taken with the pass/fail grade option do not apply to the certificate.
2
Courses used for the Focus area cannot also count for Capstone.

## RESIDENCE AND QUALITY OF WORK

2.000 GPA on all courses counting toward the certificate and certificate approved courses

8 credits in the certificate, in residence

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Be exposed to the social sciences and humanities and see their relevance to scientific and technological enterprises.
2. Develop the capacity for interdisciplinary, critical thinking about the relationship between science, technology, engineering, medicine and society.
3. Develop a sense of personal and social responsibility for their engineering, scientific or other professional practice.
4. Strengthen written communication skills.

## ADVISING AND CAREERS

## ADVISING

To obtain advising assistance, students should consult with the ISSuES certificate advisor. To make an appointment, send an email to sts@ssc.wisc.edu.

All UW-Madison undergraduates are encouraged to begin working on their career exploration and preparation soon after arriving on campus. We partner with SuccessWorks at the College of Letters \& Scence. L\&S graduates are in high demand by employers and graduate programs, and the ISSuES certificate provides students with a way to integrate their liberal studies with the skills they are developing in their majors. It is important to us that our students are career ready at the time of graduation, and we are committed to your success. Students who have completed the certificate say that it helped them enhance the portfolio of skills they offered to employers and graduate programs by giving them foundations for understanding and communicating effectively about the ethical, policy, design and other non-technical aspects of science, engineering and medicine.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school
applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## SOCIOLOGY, B.A.

Sociology applies the methods of science to explain social behavior. The interactions of individuals in families, groups, or organizations, and the institutions, social class, or shared beliefs of a common culture are all subjects for sociological research. There are many career opportunities open to people who complete a major in sociology, including business, counseling and social service, public policy, law, and criminal justice.

Students interested in sociology should meet with the undergraduate advisor before they register for the second semester of the sophomore year. The undergraduate office's resource center holds detailed information about the major, the department, research interests of sociology faculty, career opportunities, and student work. Declaration of the major during the sophomore year will give students access to required sociology courses for fall of the junior year.

## CRIMINAL JUSTICE CERTIFICATE

Sociology majors wishing to earn a certificate in criminal justice may do so with a minimum of additional course requirements and permission of the Criminal Justice advisor. See Criminal Justice (p. 511) section in this Guide.

## ENROLLMENT

Required courses for the sociology major and for the CAR option may have temporary course controls that send non-declared students "Course Requisites Not Met" enrollment error messages. Certain 100-numbered courses each semester are restricted to freshmen and sophomores until freshmen have enrolled. Check the Course Guide for notes each semester.

Transfer students whose equivalent courses have been posted to their records as "electives," numbered XXX, may use those courses as prerequisites if the department approves their equivalencies to similar UW-Madison courses. What is needed is a conversation with the undergraduate advisor either in the office or at SOAR.

## HONORS PROGRAM

A variety of courses in sociology offer honors credit, and may be used toward Honors in the Liberal Arts in the College of Letters \& Science. These include the special honors introductory seminar, Sociology 181, Sociology 380 Contemporary Population Problems, other special honors sections of 100- and 200-level courses, and courses that provide
honors by arrangement with the instructor. Sociology also has courses that award automatic honors, including SOC/C\&E SOC 361 Statistics for Sociologists II, SOC 362 Statistics for Sociologists III and SOC/ C\&E SOC 693 Practicum in Analysis and Research, and certain other upper-division courses designated by semester in the Course Guide. Sociology also makes special offerings of upper-level courses available to sophomores in the honors program for one semester at a time.

## PREREQUISITES, L\&S BREADTH, AND COURSE LEVELS

Sociology course numbers over 300 indicate subject matter rather than level of difficulty. Unless indicated otherwise, prerequisites at the upper level are junior standing and an introductory course in sociology or consent of instructor.

Most courses in sociology count toward the social studies breadth requirement. Courses SOC/GEN\&WS 200 Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies, SOC/GEOG/HISTORY/ LCA/POLI SCI 244 Introduction to Southeast Asia: Vietnam to the Philippines, SOC/GEOG/HISTORY/LCA/POLI SCI 252 The Civilizations of India-Modern Period, and SOC/AFRICAN/AFROAMER/ANTHRO/GEOG/ HISTORY/POLI SCI 277 Africa: An Introductory Survey count toward breadth requirements in either humanities or social studies. The following do not count toward any breadth requirement:

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | $3-4$ |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| SOC/C\&E SOC 361 | Statistics for Sociologists II | 3 |
| SOC 362 | Statistics for Sociologists III | 3 |
| SOC 496 | Topics in Sociology | $1-3$ |
| SOC/C\&E SOC 693 | Practicum in Analysis and Research | 3 |
| SOC/LEGAL ST 694 | Criminal Justice Field Observation | $2-3$ |

## HOW TO GET IN

Sociology has no grade point minimum or prerequisite classes for declaring the major. However, students must have an in-person meeting with the undergraduate advisor for a review of the major requirements and assessment of the progress toward graduation. Sociology majors pursuing the Concentration in analysis and Research are admitted after earning a 3.0 grade point average in SOC/C\&E SOC 360 Statistics for Sociologists I and SOC/C\&E SOC 357 Methods of Sociological Inquiry.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as
needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics
 -3

Foreign
Language

L\&S Breadth

Liberal Arts
and Science
Coursework
Depth of Intermediate/
Advanced
work
Major Declare and complete at least one (1) major
Total Credits
UW-Madison

Experience 30 credits in residence after the 90th credit
120 credits

Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

108 credits

60 intermediate or advanced credits

Minimum GPAs
2.000 in all coursework at UW-Madison 2.000 in intermediate/advanced coursework at UWMadison

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE SOCIOLOGY MAJOR

A minimum of 30 credits in SOC courses is required for the basic major. Students are strongly encouraged to complete the Foundation courses as early as possible; these courses are prerequisites for most upper-level SOC courses.

## FOUNDATION (CORE)

| Code | Title Cr | Credits |
| :---: | :---: | :---: |
| Introduction to SOC (1 course) |  | 3-4 |
| $\begin{aligned} & \text { SOC/ } \\ & \text { C\&E SOC } 210 \end{aligned}$ | Survey of Sociology |  |
| $\begin{aligned} & \text { SOC/ } \\ & \text { C\&E SOC } 211 \end{aligned}$ | The Sociological Enterprise |  |
| SOC 181 | Honors Introductory Seminar-The Sociological Enterprise |  |
| Research Methods ${ }^{1}$ |  |  |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry (Research Methods) | 3-4 |
| Statistics ${ }^{2}$ |  |  |
| SOC/C\&E SOC 360 <br> or GEN BUS 303 <br> or ECON 310 <br> or GEOG 360 <br> or MATH/ <br> STAT 310 <br> or PSYCH 210 <br> or STAT 301 <br> or STAT 371 | Statistics for Sociologists I <br> Business Statistics <br> Statistics: Measurement in Economics <br> Quantitative Methods in Geographical Analysis <br> Introduction to Probability and Mathematical <br> Statistics II <br> Basic Statistics for Psychology <br> Introduction to Statistical Methods <br> Introductory Applied Statistics for the Life Sciences | 3-4 <br> sis |
| Classical Theory |  |  |
| SOC/C\&E SOC 475 | Classical Sociological Theory | 3 |

1 Students may take methods and statistics in the same semester. If students take methods and statistics in different semesters, we recommend taking methods before statistics as an entry point to the methods and materials of the field.

2 Statistics courses taken outside of the SOC subject do not count for 30-credits required in the major, nor are they upper level in the major.

## DISTRIBUTION

4 courses from at least 2 of these areas:

| Methods/Statistics |  | Credits |
| :--- | :--- | ---: |
| Code | Title | 3 |
| SOC 351 | Introduction to Survey Methods for <br> Social Research | 3 |
| SOC/C\&E SOC 361 | Statistics for Sociologists II | 3 |
| SOC 362 | Statistics for Sociologists III | $3-4$ |
| SOC/C\&E SOC 365 | Data Management for Social <br> Science Research | 3 |
| SOC 375 | Introduction to Mathematical <br> Sociology | 3 |
| SOC 461 | Mathematical Models of Social <br> Systems | $1-6$ |

## Theory

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC 462 | Study Abroad in Additional Theory | $1-6$ |
| SOC 476 | Contemporary Sociological Theory | 3 |
| SOC/GEN\&WS 477 | Feminism and Sociological Theory | 3 |

Deviant Behavior

| Code | Title | Credits |
| :--- | :---: | ---: |
| SOC 421 | Processes of Deviant Behavior | $3-4$ |
| SOC/SOC WORK | 422 | Social Issues in Aging |
| SOC 441 | Criminology | 3 |
| SOC 446 | Juvenile Delinquency | $3-4$ |
| SOC 463 | Study Abroad in Deviant Behavior | $3-4$ |


| Social Psychology |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| SOC/PSYCH 453 | Human Sexuality | 4 |
| SOC/PSYCH 456 | Introductory Social Psychology | $3-4$ |
| SOC 464 | Study Abroad in Social Psychology | $1-6$ |
| SOC 531 | Sociology of Medicine | 3 |
| SOC/C\&E SOC 532 | Health Care Issues for Individuals, <br> Families and Society | 3 |
| SOC/C\&E SOC 533 | Public Health in Rural \& Urban <br> Communities | 3 |
| SOC 535 | Talk and Social Interaction | 3 |
| SOC 543 | Collective Behavior | 3 |
| SOC/C\&E SOC 573 | Community Organization and <br> Change | 3 |
| SOC 575 | Sociological Perspectives on the <br> Life Course and Aging | 3 |
| SOC/AMER IND/ | Poverty and Place | 3 |
| C\&E SOC 578 |  | 3 |

## Social Organization

Code
Title
Credits
SOC/LEGAL ST 415 The Legal Profession

| SOC 465 | Study Abroad in Social Organization | 1-6 |
| :---: | :---: | :---: |
| SOC/CHICLA 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| SOC/C\&E SOC 610 | Knowledge and Society | 3 |
| SOC/GEN\&WS 611 | Gender, Science and Technology | 3 |
| SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| SOC/C\&E SOC/ URB R PL 617 | Community Development | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC 621 | Class, State and Ideology: an Introduction to Marxist Social Science | 3 |
| SOC/C\&E SOC 622 | Advanced Topics in Critical Sociology | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 624 | Political Sociology | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| SOC/LCA/ <br> RELIG ST 634 | Social Structure of India | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC/LAW/ LEGAL ST 641 | Sociology of Law | 3-4 |
| SOC 643 | Sociology of Occupations and Professions | 3 |
| SOC/C\&E SOC/ URB R PL 645 | Modern American Communities | 3 |
| SOC 646 | Race and Ethnic Relations | 3 |
| SOC 647 | Sociology of Sport | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
| SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic Sociology | 3 |
| SOC/HISTORY 670 | Capitalism, Socialism, and Democracy in America Since 1890 | 3-4 |
| SOC 678 | Sociology of Persecution | 3 |

## Demography and Ecology

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC/C\&E SOC/ | Contemporary Population Problems | 3 |
| POP HLTH 380 | for Honors |  |
| SOC 460 | Study Abroad in Demography and <br> Ecology | $1-6$ |
| SOC 575 | Sociological Perspectives on the <br> Life Course and Aging | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| SOC 674 | Demographic Techniques I | 3 |


| Community and Environmental Sociology |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| SOC/C\&E SOC 533 | Public Health in Rural \& Urban Communities | 3 |
| SOC/C\&E SOC/ <br> ENVIR ST 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| SOC/C\&E SOC 573 | Community Organization and Change | 3 |
| SOC 575 | Sociological Perspectives on the Life Course and Aging | 3 |
| SOC/AMER IND/ C\&E SOC 578 | Poverty and Place | 3 |
| SOC/C\&E SOC/ URB R PL 617 | Community Development | 3 |
| SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |

## ELECTIVES

Additional SOC courses to achieve the required 30 credits for the major. ${ }^{4}$
4 A maximum one introductory course (SOC 181, SOC/C\&E SOC 210, SOC/C\&E SOC 211) may count toward the 30 required for the major.

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all SOC courses and courses that count toward the major
- 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{5}$
- 15 credits in SOC, taken on the UW-Madison campus

5
SOC courses numbered 300-699 are upper level, except for: C\&E SOC/SOC 357, C\&E SOC/SOC 360, LEGAL ST/SOC 415, PSYCH/ SOC 453, and SOC 497.

## THESIS OF DISTINCTION

This distinction is available to students who write a thesis but who do not earn Honors in the Major. A thesis of distinction requires a senior thesis of high caliber, but no specific cumulative grade point average is required.

Students may declare the Concentration in Analysis and Research ("CAR"). Speak to the major advisor about this option.

## SOCIOLOGY: CONCENTRATION IN ANALYSIS AND RESEARCH OPTION

- Sociology: Concentration in Analysis and Research (p. 1260)


## HONORS IN THE MAJOR

Students may declare Honors in the Sociology Major in consultation with the Sociology undergraduate advisor.

## HONORS IN THE SOCIOLOGY MAJOR: REQUIREMENTS

To earn Honors in the Major in Sociology, students must satisfy the requirements for the major (above) and the following additional requirements:

[^46]- Earn a 3.300 GPA for all SOC courses, and all courses accepted in the major
- Complete 21 credits, taken for Honors, with individual grades of B or better, to include:

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | 4 |
| SOC/C\&E SOC 475 | Classical Sociological Theory | 3 |
| SOC 681 | Senior Honors Thesis | 3 |
| SOC 682 | Senior Honors Thesis | 3 |

The remaining Honors credits, to reach the 21 credit minimum, must be in courses at or above the 300 level.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below |
| these minimum thresholds will be placed on academic |  |
| trobation. |  |

## LEARNING OUTCOMES

1. (Conduct Research and Analyze Data) Sociology encompasses both qualitative and quantitative research methods. Quantitative methods are used in market research, opinion polling, sales, government, and countless other applications and allow researchers to recognize trends and patterns and produce social statistics. Qualitative research skills provide an in depth understanding of interactions, communications, worksite practices, and social worlds. Advanced sociological research methods require graduate\#level training beyond the scope of our undergraduate major, but we expect that all undergraduate majors will be able to conduct small-scale research using surveys, interviews, experiments, textual analysis or observations in which they formulate a research question, collect data, analyze results, and draw conclusions.
2. (Critically Evaluate Published Research) Sociology graduates will be able to read and evaluate published research as it appears in academic journals and popular or policy publications. They will be able to identify the research methods used, assess the quality of the sample, assess the quality of measurements and procedures, evaluate the links between the data and the interpretations, identify possible threats to the validity of the results, and provide an overall assessment of the trustworthiness of the research results. They will be able to read and evaluate a set of
research articles on the same broad issue and be able to draw summarize the research findings across multiple issue.
3. (Communicate Skillfully) Because the sociology major involves a large amount of reading, writing, and discussion, majors learn how to convey ideas effectively in writing, presentations, and everyday conferences and meetings. Sociology majors write papers and make oral presentations that build arguments and assess evidence in a clear and effective manner.
4. (Critical Thinking about Society and Social Processes) Sociological inquiry involves learning to look beyond the surface of issues to discover the "why" and "how" of social order and structure. Sociology majors develop strong analytical skills and learn to solve problems and identify opportunities. They are able to consider the underlying social mechanisms that may be creating a situation, identify evidence that may adjudicate between alternate explanations for phenomena, and develop proposed policies or action plans in light of theory and data.
5. (See Things from a Global Perspective) Sociologists learn about different cultures, groups, and societies. They examine both variation and universality across places and through history. They are aware of the diversity of backgrounds and experiences among residents of the United States. They understand the ways events and processes in one country are linked to those in other countries.
6. (Prepare for Graduate School and the Job Market) An undergraduate major in sociology provides an excellent foundation for work and graduate study in a wide range of fields including law, business, social work, medicine, policy research, public health, public administration and, of course, sociology. With the aid of faculty and staff, students use their social research skills to identify opportunities for employment or further study, assess their qualifications for these opportunities, and identify strategies for gaining the necessary knowledge and experience to improve their qualifications. Students are encouraged to develop and maintain portfolios of their written work and educational experiences to aid them in preparing applications.

## ADVISING AND CAREERS

## ADVISING

This university is a very big place. Even the most well-prepared new students will have moments when they say to themselves, "Uh oh. What have I got myself into going to such a big school? Choosing courses at SOAR was stressful, fun, or both, but after SOAR am I on my own?" The answer is no. Every student has at least one assigned advisor. Over the course of their time at the university, students may have several assigned advisors. That is a good thing; L\&S advisors are highly networked, and they always communicate with each other about shared students.

When students read their DARS reports-documents that were developed to help them find their way to a timely graduation, they can feel overwhelmed; it looks like they need 500 credits to graduate. How can they get all those requirements done? Do sociology (or Spanish, or English) majors really have to take biology courses?

In the sociology department, we take advising very seriously. We encourage our majors to see the advisor at least once every semester. The advisor will help you summarize the DARS and map your completed coursework onto the goals and timeline for graduation, including the sociology major and L\&S requirements. The sociology advisor will have departmental or college news about guest speakers, new faculty, new
courses, internships, and scholarships. This advisor will also be able to assist in preparation for, and applications to graduate school, and be able to connect students with faculty, whose information about various sociology programs is always the most current. The sociology advisor will also see freshmen and sophomores exploring the major in sociology.

## CAREERS

Sociology majors do very well in the job market. The critical, analytic, and quantitative skills they have mastered in the major, along with their commitments to social justice and their understanding of organizations make them desirable job candidates. Every year the department invites sociology alumni to campus for career panels or "speed mentoring." Current sociology majors get to talk to people only slightly older than themselves who have successfully made the transitions from undergraduate to professional.

Sociology also has an advisor devoted exclusively to careers. This advisor teaches a 1-credit course where students learn the arts of resume building and resume writing, applying for and getting internships, and in which they practice self-reflection activities which lead to insights about what they really want to do after college, and where they learn how to make connections between their academic work and their work in the "real world." This advisor is also available for one-on-one advising.

Our career advisor also partners with the L\&S Career Services office to help you leverage the academic skills learned in your major and liberal arts degree, explore and try out different career paths, participate in internships, prepare for the job search and/or graduate school applications, and network with professionals in the field (alumni and employers). See SuccessWorks for more information.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.ls.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Carlson, Emirbayer, Ermakoff, Ferree, Ford, Freeland, Fujimura, Gerber, Goldberg, Grodsky, Herd, Logan, Massoglia, Maynard, Montgomery, Oliver, Raymo, Rogers, Schaeffer, Schwartz, Seidman, Wright

## WISCONSIN EXPERIENCE

## THE WISCONSIN EXPERIENCE: ESSENTIAL LEARNING IN THE COLLEGE OF LETTERS \& SCIENCE

The three elements of learning described below-tools, breadth, and depth-work together to create a broad and rich education in the liberal arts and sciences, and promote attainment of core areas of essential learning: knowledge of human cultures and the natural and physical world, intellectual and practical skills, personal and social responsibility, and integrative and applied learning. These and countless other experiences comprise the Letters \& Science approach to helping students obtain a distinctive Wisconsin Experience.

Additional information about the Wisconsin Experience can be found through the Office of Admissions and Recruitment/Why UW link (https:// www.admissions.wisc.edu/why/wisconsin_experience.php).

> SOCIOLOGY: CONCENTRATION IN ANALYSIS AND RESEARCH

## REQUIREMENTS

## SOCIOLOGY MAJOR, CONCENTRATION IN RESEARCH \& ANALYSIS (CAR)

 WHAT IS "CAR"?The Concentration in Analysis and Research-an elective option within the undergraduate sociology major-is designed for students who do well and are interested in research methods and statistics. CAR prepares students for entry-level jobs in applied social research and/or for graduate study. Key features of the concentration include advanced statistics courses, training in social science computing, and research. By selecting appropriate electives and internships, students may focus their training on demography, survey research, marketing and communications, criminal justice, health care, education, social services, natural resources, organizations, or personnel and human resources.

## Requirements for the CAR Option

Concentration in Analysis and Research (CAR)—Option noted on transcript.

Faculty director. Professor James Raymo, 2446 Social Science; 608-262-2783; jraymo@ssc.wisc.edu

To be admitted to the CAR program, students must have a minimum GPA of 3.000 (B) in Methods and Statistics. To complete the CAR program, students must complete the following 36 credits of SOC courses, meet the requirements and earn a minimum GPA of 3.000 in those courses unique to the CAR option.

All students are required to take four foundation core courses (Introduction, Research, Statistics, and Theory) and additional CAR

Distribution courses in Statistics, Research, Computing, and Practicum that build on prior sociological and social scientific knowledge from the foundation core courses.

Students are strongly encouraged to complete the four required foundation core courses as early as possible. These foundation courses are prerequisites for most upper-level courses and the option has several sequenced courses, some of which are taught only once a year.

## REQUIREMENTS

36 credits

## FOUNDATION (CORE)

| Code | Title | Credits |
| :--- | :--- | ---: |
| Introduction to SOC (1 course) | $3-4$ |  |
| SOC/ | Survey of Sociology |  |
| C\&E SOC 210 |  |  |
| SOC/ | The Sociological Enterprise |  |
| C\&E SOC 211 | Honors Introductory Seminar-The <br> SOC 181 | Sociological Enterprise |

## Research Methods ${ }^{1}$

| SOC/C\&E SOC 357 | Methods of Sociological Inquiry <br> (Research Methods) | $3-4$ |
| :--- | :--- | :--- |
| Statistics $^{2}$ |  |  |

## Statistics ${ }^{2}$

Select one of the following: 3-4

| ECON 310 | Statistics: Measurement in <br> Economics |
| :--- | :--- |
| GEN BUS 303 | Business Statistics |
| GEOG 360 | Quantitative Methods in <br> Geographical Analysis |
| MATH/STAT 310 | Introduction to Probability and |
| Mathematical Statistics II |  |$\quad$| Introduction to Psychology |  |
| :--- | :--- |
| PSYCH 202 | Statistics for Sociologists I |
| SOC/ | Introduction to Statistical Methods |
| C\&E SOC 360 | Introductory Applied Statistics for <br> the Life Sciences |
| STAT 301 |  |
| STAT 371 | Classical Sociological Theory |
| Classical Theory |  |
| SOC/C\&E SOC 475 |  |

1 Students may take methods and statistics in the same semester. If students take methods and statistics in different semesters, we recommend taking methods before statistics as an entry point to the methods and materials of the field.
Statistics courses taken outside of the SOC subject do not count for 30 -credits required in the major, nor are they upper level in the major.

## CAR DISTRIBUTION

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | 3 |  |
| ECON 410 | Introductory Econometrics |  |
| POLI SCI 552 | Multivariable Statistical Inference <br> for Political Research |  |
| SOC/ | Statistics for Sociologists II |  |
| C\&E SOC 361 |  |  |


| STAT 302 | Accelerated Introduction to Statistical Methods |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { SOC } 362 \\ & \text { or STAT } 312 \end{aligned}$ | Statistics for Sociologists III Introduction to Theory and Methods of Mathematical Statistics II | 3 |
| SOC/C\&E SOC 365 | Data Management for Social Science Research | 3-4 |
| Research Electives (2 courses) |  | 6 |
| SOC 375 | Introduction to Mathematical Sociology |  |
| SOC 376 | Mathematical Models of Social Systems |  |
| SOC 535 | Talk and Social Interaction |  |
| SOC 575 | Sociological Perspectives on the Life Course and Aging |  |
| SOC/AMER IND/ C\&E SOC 578 | Poverty and Place |  |
| SOC 633 | Social Stratification |  |
| SOC 674 | Demographic Techniques I |  |
| $\begin{aligned} & \text { SOC/ } \\ & \text { C\&E SOC } 676 \end{aligned}$ | Applied Demography: Planning and Policy |  |
| COMP SCI/ <br> INFO SYS 371 | Technology of Computer-Based Business Systems |  |
| MATH 415 | Applied Dynamical Systems, Chaos and Modeling |  |
| MATH/I SY E/ OTM/STAT 632 | Introduction to Stochastic Processes |  |
| POLI SCI 305 | Elections and Voting Behavior |  |
| POLI SCI 515 | Public Opinion |  |
| PSYCH 225 | Research Methods |  |
| STAT 349 | Introduction to Time Series |  |
| STAT 351 | Introductory Nonparametric Statistics |  |
| STAT 411 | An Introduction to Sample Survey Theory and Methods |  |
| STAT 421 | Applied Categorical Data Analysis |  |
| STAT/B M I 642 | Statistical Methods for Epidemiology |  |
| INFO SYS/ COMP SCI 371 | Technology of Computer-Based Business Systems |  |
| MARKETNG 310 | Marketing Research |  |
| OTM 410 | Operations Research I |  |
| OTM 411 | Operations Research II |  |
| SOC/C\&E SOC 693 | Practicum in Analysis and Research | 3 |
| Total Credits |  | -19 |

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all SOC courses and courses that count toward the major
- 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{5}$
- 15 credits in SOC, taken on the UW-Madison campus

4 A maximum one introductory course (SOC 181, SOC/C\&E SOC 210, SOC/C\&E SOC 211) may count toward the 30 required for the major.

5 SOC courses numbered 300-699 are upper level, except for: C\&E SOC/SOC 357, C\&E SOC/SOC 360, LEGAL ST/SOC 415, PSYCH/ SOC 453, and SOC 497.

## THESIS OF DISTINCTION

This distinction is available to students who write a thesis but who do not earn Honors in the Major. A thesis of distinction requires a senior thesis of high caliber, but no specific cumulative grade point average is required.

Students may declare the Concentration in Analysis and Research ("CAR"). Speak to the major advisor about this option.

## SOCIOLOGY, B.S.

Sociology applies the methods of science to explain social behavior. The interactions of individuals in families, groups, or organizations, and the institutions, social class, or shared beliefs of a common culture are all subjects for sociological research. There are many career opportunities open to people who complete a major in sociology, including business, counseling and social service, public policy, law, and criminal justice.

Students interested in sociology should meet with the undergraduate advisor before they register for the second semester of the sophomore year. The undergraduate office's resource center holds detailed information about the major, the department, research interests of sociology faculty, career opportunities, and student work. Declaration of the major during the sophomore year will give students access to required sociology courses for fall of the junior year.

## CRIMINAL JUSTICE CERTIFICATE

Sociology majors wishing to earn a certificate in criminal justice may do so with a minimum of additional course requirements and permission of the Criminal Justice advisor. See Criminal Justice (p. 511) section in this Guide.

## ENROLLMENT

Required courses for the sociology major and for the CAR option may have temporary course controls that send non-declared students "Course Requisites Not Met" enrollment error messages. Certain 100-numbered courses each semester are restricted to freshmen and sophomores until freshmen have enrolled. Check the Course Guide for notes each semester.

Transfer students whose equivalent courses have been posted to their records as "electives," numbered XXX, may use those courses as prerequisites if the department approves their equivalencies to similar UW-Madison courses. What is needed is a conversation with the undergraduate advisor either in the office or at SOAR.

## HONORS PROGRAM

A variety of courses in sociology offer honors credit, and may be used toward Honors in the Liberal Arts in the College of Letters \& Science. These include the special honors introductory seminar, Sociology 181, Sociology 380 Contemporary Population Problems, other special honors sections of 100-and 200-level courses, and courses that provide honors by arrangement with the instructor. Sociology also has courses that award automatic honors, including SOC/C\&E SOC 361 Statistics for Sociologists II, SOC 362 Statistics for Sociologists III and SOC/ C\&E SOC 693 Practicum in Analysis and Research, and certain other upper-division courses designated by semester in the Course Guide.

Sociology also makes special offerings of upper-level courses available to sophomores in the honors program for one semester at a time.

## PREREQUISITES, L\&S BREADTH, AND COURSE LEVELS

Sociology course numbers over 300 indicate subject matter rather than level of difficulty. Unless indicated otherwise, prerequisites at the upper level are junior standing and an introductory course in sociology or consent of instructor.

Most courses in sociology count toward the social studies breadth requirement. Courses SOC/GEN\&WS 200 Introduction to Lesbian, Gay, Bisexual, Transgender and Queer+ Studies, SOC/GEOG/HISTORY/ LCA/POLI SCI 244 Introduction to Southeast Asia: Vietnam to the Philippines, SOC/GEOG/HISTORY/LCA/POLI SCI 252 The Civilizations of India-Modern Period, and SOC/AFRICAN/AFROAMER/ANTHRO/GEOG/ HISTORY/POLI SCI 277 Africa: An Introductory Survey count toward breadth requirements in either humanities or social studies. The following do not count toward any breadth requirement:

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | $3-4$ |
| SOC/C\&E SOC 360 | Statistics for Sociologists I | 4 |
| SOC/C\&E SOC 361 | Statistics for Sociologists II | 3 |
| SOC 362 | Statistics for Sociologists III | 3 |
| SOC 496 | Topics in Sociology | $1-3$ |
| SOC/C\&E SOC 693 | Practicum in Analysis and Research | 3 |
| SOC/LEGAL ST 694 | Criminal Justice Field Observation | $2-3$ |

## HOW TO GET IN

Sociology has no grade point minimum or prerequisite classes for declaring the major. However, students must have an in-person meeting with the undergraduate advisor for a review of the major requirements and assessment of the progress toward graduation. Sociology majors pursuing the Concentration in analysis and Research are admitted after earning a 3.0 grade point average in SOC/C\&E SOC 360 Statistics for Sociologists I and SOC/C\&E SOC 357 Methods of Sociological Inquiry.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE

 BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)
BACHELOR OF SCIENCE DEGREE REQUIREMENTS
Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign
Language $\quad$ Note: A unit is one year of high school work or one
semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts and Science Coursework | 108 credits |
| :---: | :---: |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE SOCIOLOGY MAJOR

A minimum of 30 credits in SOC courses is required for the basic major. Students are strongly encouraged to complete the Foundation courses as early as possible; these courses are prerequisites for most upper-level SOC courses.

## FOUNDATION (CORE)

| Code | Title | Credits |
| :--- | :--- | ---: |
| Introduction to SOC (1 course) | $3-4$ |  |
| SOC/ | Survey of Sociology |  |
| C\&E SOC 210 |  |  |
| SOC/ | The Sociological Enterprise |  |
| C\&E SOC 211 |  |  |
| SOC 181 | Honors Introductory Seminar-The <br> Sociological Enterprise |  |

## Research Methods ${ }^{1}$

| SOC/C\&E SOC 357 | Methods of Sociological Inquiry <br> (Research Methods) | $3-4$ |
| :--- | :--- | :--- |

Statistics ${ }^{2}$
SOC/C\&E SOC 360 Statistics for Sociologists I 3-4
or GEN BUS 303 Business Statistics
or ECON 310 Statistics: Measurement in Economics
or GEOG 360 Quantitative Methods in Geographical Analysis
or MATH/ Introduction to Probability and Mathematical
STAT 310 Statistics II
or PSYCH 210 Basic Statistics for Psychology
or STAT 301 Introduction to Statistical Methods
or STAT 371 Introductory Applied Statistics for the Life Sciences
Classical Theory
SOC/C\&E SOC 475 Classical Sociological Theory 3
1 Students may take methods and statistics in the same semester. If students take methods and statistics in different semesters, we recommend taking methods before statistics as an entry point to the methods and materials of the field.
2 Statistics courses taken outside of the SOC subject do not count for 30 -credits required in the major, nor are they upper level in the major.

## DISTRIBUTION

4 courses from at least 2 of these areas:

| Methods/Statistics |  |  | SOC/LCA/ <br> RELIG ST 614 | Social Structures of Muslim Societies | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Title | Credits |  |  |  |
| SOC 351 | Introduction to Survey Methods for Social Research | 3 | SOC/C\&E SOC/ URB R PL 617 | Community Development | 3 |
| SOC/C\&E SOC 361 | Statistics for Sociologists II | 3 | SOC 620 | Comparative Racial Inequality | 3 |
| SOC 362 | Statistics for Sociologists III | 3 | SOC 621 | Class, State and Ideology: an | 3 |
| SOC/C\&E SOC 365 | Data Management for Social Science Research | 3-4 |  | Introduction to Marxist Social Science |  |
| SOC 375 | Introduction to Mathematical Sociology | 3 | SOC/C\&E SOC 622 | Advanced Topics in Critical Sociology | 3 |
| SOC 376 | Mathematical Models of Social Systems | 3 | SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
|  |  |  | SOC 624 | Political Sociology | 3 |
| SOC 461 | Study Abroad in Additional Methods and Statistics | 1-6 | SOC 626 | Social Movements | 3 |
|  |  |  | SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| Theory |  | Credits | SOC 632 | Sociology of Organizations | 3-4 |
| Code | Title |  | SOC 633 | Sociology of Organizations | 3-4 |
| SOC 462 | Study Abroad in Additional Theory | 1-6 | SOC 633 | Social Stratification | 3 |
| SOC 476 | Contemporary Sociological Theory | 3 | SOC/LCA/ <br> RELIG ST 634 | Social Structure of India | 3 |
| SOC/GEN\&WS 477 | Feminism and Sociological Theory | 3 | SOC 640 | Sociology of the Family | 3 |
| Deviant Behavior |  | Credits | SOC/LAW/ | Sociology of Law | 3-4 |
| Code | Title |  | LEGAL ST 641 |  |  |
| SOC 421 | Processes of Deviant Behavior | 3-4 | SOC 643 | Sociology of Occupations and | 3 |
| SOC/SOC WORK 422 | Social Issues in Aging | 3 |  |  |  |
| SOC 441 | Criminology | 3-4 | SOC/C\&E SOC/ | Modern American Communities | 3 |
| SOC 446 | Juvenile Delinquency | 3-4 | URBR | Race and Ethnic Relations |  |
| SOC 463 | Study Abroad in Deviant Behavior | 1-6 | SOC 646 | Soce and Ethnic Relations | 3 |
| Social Psychology |  |  | SOC/ED POL 648 | Sociology of Education | 3 |
| Code | Title | Credits | SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
| SOC/PSYCH 453 | Human Sexuality | 4 | SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |
| SOC/PSYCH 456 | Introductory Social Psychology | 3-4 | SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SOC 464 | Study Abroad in Social Psychology | 1-6 | SOC/C\&E SOC 655 | Microfoundations of Economic | 3 |
| SOC 531 | Sociology of Medicine | 3 |  | Sociology |  |
| SOC/C\&E SOC 532 | Health Care Issues for Individuals, Families and Society | 3 | SOC/HISTORY 670 | Capitalism, Socialism, and Democracy in America Since 1890 | 3-4 |
| SOC/C\&E SOC 533 | Public Health in Rural \& Urban | 3 | SOC 678 | Sociology of Persecution | 3 |
|  | Communities |  | Demography and Ecology |  |  |
| SOC 535 | Talk and Social Interaction | 3 |  |  |  |
| SOC 543 | Collective Behavior | 3 | Code |  |  |
| SOC/C\&E SOC 573 | Community Organization and Change | 3 | $\begin{aligned} & \text { SOC/C\&E SOC/ } \\ & \text { POP HLTH } 380 \end{aligned}$ | Contemporary Population Problems for Honors | 3 |
| SOC 575 | Sociological Perspectives on the Life Course and Aging | 3 | SOC 460 | Study Abroad in Demography and Ecology | 1-6 |
| SOC/AMER IND/ C\&E SOC 578 | Poverty and Place | 3 | SOC 575 | Sociological Perspectives on the Life Course and Aging | 3 |
|  |  |  | SOC/ECON 663 | Population and Society | 3 |
| Social Organization |  |  | SOC 674 | Demographic Techniques I | 3 |
| Code | Title | Credits | Community and Environmental Sociology |  |  |
| SOC/LEGAL ST 415 | The Legal Profession | 3-4 |  |  |  |
| SOC 465 | Study Abroad in Social Organization | 1-6 | SOC/C\&E SOC 533 | Public Health in Rural \& Urban Communities |  |
| SOC/CHICLA 470 | Sociodemographic Analysis of Mexican Migration | 3 |  |  | 3 |
| SOC/C\&E SOC 610 | Knowledge and Society | 3 | SOC/C\&E SOC/ <br> ENVIR ST 540 | Sociology of International <br> Development, Environment, and | 3 |
| SOC/GEN\&WS 611 | Gender, Science and Technology | 3 |  | Sustainability |  |


| SOC/C\&E SOC 541 | Environmental Stewardship and <br> Social Justice | 3 |
| :--- | :--- | :---: |
| SOC/C\&E SOC 573 | Community Organization and <br> Change | 3 |
| SOC 575 | Sociological Perspectives on the <br> Life Course and Aging | 3 |
| SOC/AMER IND/ <br> C\&E SOC 578 | Poverty and Place | 3 |
| SOC/C\&E SOC/ <br> URB R PL 617 <br> SOC/C\&E SOC 650 | Community Development | 3 |

## ELECTIVES

Additional SOC courses to achieve the required 30 credits for the major. ${ }^{4}$
4 A maximum one introductory course (SOC 181, SOC/C\&E SOC 210, SOC/C\&E SOC 211) may count toward the 30 required for the major.

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all SOC courses and courses that count toward the major
- 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{5}$
- 15 credits in SOC, taken on the UW-Madison campus

5
SOC courses numbered 300-699 are upper level, except for: C\&E SOC/SOC 357, C\&E SOC/SOC 360, LEGAL ST/SOC 415, PSYCH/ SOC 453, and SOC 497.

## THESIS OF DISTINCTION

This distinction is available to students who write a thesis but who do not earn Honors in the Major. A thesis of distinction requires a senior thesis of high caliber, but no specific cumulative grade point average is required.

Students may declare the Concentration in Analysis and Research ("CAR"). Speak to the major advisor about this option.

## SOCIOLOGY: CONCENTRATION IN ANALYSIS AND RESEARCH OPTION

- Sociology. Concentration in Analysis and Research (p. 1260)


## HONORS IN THE MAJOR

Students may declare Honors in the Sociology Major in consultation with the Sociology undergraduate advisor.

## HONORS IN THE SOCIOLOGY MAJOR: REQUIREMENTS

To earn Honors in the Major in Sociology, students must satisfy the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall unversity GPA
- Earn a 3.300 GPA for all SOC courses, and all courses accepted in the major
- Complete 21 credits, taken for Honors, with individual grades of B or better, to include:

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry | 4 |
| SOC/C\&E SOC 475 | Classical Sociological Theory | 3 |


| SOC 681 | Senior Honors Thesis | 3 |
| :--- | :--- | :--- |
| SOC 682 | Senior Honors Thesis | 3 |

The remaining Honors credits, to reach the 21 credit minimum, must be in courses at or above the 300 level.

## UNIVERSITY DEGREE REQUIREMENTS

$\left.\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\ \text { students must earn a minimum of } 120 \text { degree credits. } \\ \text { The requirements for some programs may exceed } 120 \\ \text { degree credits. Students should consult with their college }\end{array} \\ \text { or department advisor for information on specific credit } \\ \text { requirements. }\end{array}\right\}$

## LEARNING OUTCOMES

1. (Conduct Research and Analyze Data) Sociology encompasses both qualitative and quantitative research methods. Quantitative methods are used in market research, opinion polling, sales, government, and countless other applications and allow researchers to recognize trends and patterns and produce social statistics. Qualitative research skills provide an in depth understanding of interactions, communications, worksite practices, and social worlds. Advanced sociological research methods require graduate\#level training beyond the scope of our undergraduate major, but we expect that all undergraduate majors will be able to conduct small-scale research using surveys, interviews, experiments, textual analysis or observations in which they formulate a research question, collect data, analyze results, and draw conclusions.
2. (Critically Evaluate Published Research) Sociology graduates will be able to read and evaluate published research as it appears in academic journals and popular or policy publications. They will be able to identify the research methods used, assess the quality of the sample, assess the quality of measurements and procedures, evaluate the links between the data and the interpretations, identify possible threats to the validity of the results, and provide an overall assessment of the trustworthiness of the research results. They will be able to read and evaluate a set of research articles on the same broad issue and be able to draw summarize the research findings across multiple issue.
3. (Communicate Skillfully) Because the sociology major involves a large amount of reading, writing, and discussion, majors learn how to convey ideas effectively in writing, presentations, and everyday conferences and meetings. Sociology majors write papers and make oral presentations that build arguments and assess evidence in a clear and effective manner.
4. (Critical Thinking about Society and Social Processes) Sociological inquiry involves learning to look beyond the surface of issues to discover the "why" and "how" of social order and structure. Sociology majors develop strong analytical skills and learn to solve problems and identify opportunities. They are able to consider the underlying social mechanisms that may be creating a situation, identify evidence that may adjudicate between alternate explanations for phenomena, and develop proposed policies or action plans in light of theory and data.
5. (See Things from a Global Perspective) Sociologists learn about different cultures, groups, and societies. They examine both variation and universality across places and through history. They are aware of the diversity of backgrounds and experiences among residents of the United States. They understand the ways events and processes in one country are linked to those in other countries.
6. (Prepare for Graduate School and the Job Market) An undergraduate major in sociology provides an excellent foundation for work and graduate study in a wide range of fields including law, business, social work, medicine, policy research, public health, public administration and, of course, sociology. With the aid of faculty and staff, students use their social research skills to identify opportunities for employment or further study, assess their qualifications for these opportunities, and identify strategies for gaining the necessary knowledge and experience to improve their qualifications. Students are encouraged to develop and maintain portfolios of their written work and educational experiences to aid them in preparing applications.

## ADVISING AND CAREERS

## ADVISING

This university is a very big place. Even the most well-prepared new students will have moments when they say to themselves, "Uh oh. What have I got myself into going to such a big school? Choosing courses at SOAR was stressful, fun, or both, but after SOAR am I on my own?" The answer is no. Every student has at least one assigned advisor. Over the course of their time at the university, students may have several assigned advisors. That is a good thing; L\&S advisors are highly networked, and they always communicate with each other about shared students.

When students read their DARS reports-documents that were developed to help them find their way to a timely graduation, they can feel overwhelmed; it looks like they need 500 credits to graduate. How can they get all those requirements done? Do sociology (or Spanish, or English) majors really have to take biology courses?

In the sociology department, we take advising very seriously. We encourage our majors to see the advisor at least once every semester. The advisor will help you summarize the DARS and map your completed coursework onto the goals and timeline for graduation, including the sociology major and L\&S requirements. The sociology advisor will have departmental or college news about guest speakers, new faculty, new courses, internships, and scholarships. This advisor will also be able to assist in preparation for, and applications to graduate school, and be able to connect students with faculty, whose information about various sociology programs is always the most current. The sociology advisor will also see freshmen and sophomores exploring the major in sociology.
commitments to social justice and their understanding of organizations make them desirable job candidates. Every year the department invites sociology alumni to campus for career panels or "speed mentoring." Current sociology majors get to talk to people only slightly older than themselves who have successfully made the transitions from undergraduate to professional.

Sociology also has an advisor devoted exclusively to careers. This advisor teaches a 1-credit course where students learn the arts of resume building and resume writing, applying for and getting internships, and in which they practice self-reflection activities which lead to insights about what they really want to do after college, and where they learn how to make connections between their academic work and their work in the "real world." This advisor is also available for one-on-one advising.

Our career advisor also partners with the L\&S Career Services office to help you leverage the academic skills learned in your major and liberal arts degree, explore and try out different career paths, participate in internships, prepare for the job search and/or graduate school applications, and network with professionals in the field (alumni and employers). See SuccessWorks for more information.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Carlson, Emirbayer, Ermakoff, Ferree, Ford, Freeland, Fujimura, Gerber, Goldberg, Grodsky, Herd, Logan, Massoglia, Maynard, Montgomery, Oliver, Raymo, Rogers, Schaeffer, Schwartz, Seidman, Wright

Associate Professors Elwert, Fletcher, Grant, Lim, Nobles
Assistant Professors Conti, Engelman, Goffman

## CAREERS

Sociology majors do very well in the job market. The critical, analytic, and quantitative skills they have mastered in the major, along with their

## WISCONSIN EXPERIENCE

## THE WISCONSIN EXPERIENCE: ESSENTIAL LEARNING IN THE COLLEGE OF LETTERS \& SCIENCE

The three elements of learning described below-tools, breadth, and depth-work together to create a broad and rich education in the liberal arts and sciences, and promote attainment of core areas of essential learning: knowledge of human cultures and the natural and physical world, intellectual and practical skills, personal and social responsibility, and integrative and applied learning. These and countless other experiences comprise the Letters \& Science approach to helping students obtain a distinctive Wisconsin Experience.

Additional information about the Wisconsin Experience can be found through the Office of Admissions and Recruitment/Why UW link (https:// www.admissions.wisc.edu/why/wisconsin_experience.php).

## SOCIOLOGY: CONCENTRATION IN ANALYSIS AND RESEARCH

## REQUIREMENTS

## SOCIOLOGY MAJOR, CONCENTRATION IN RESEARCH \& ANALYSIS (CAR)

## WHAT IS "CAR"?

The Concentration in Analysis and Research-an elective option within the undergraduate sociology major-is designed for students who do well and are interested in research methods and statistics. CAR prepares students for entry-level jobs in applied social research and/or for graduate study. Key features of the concentration include advanced statistics courses, training in social science computing, and research. By selecting appropriate electives and internships, students may focus their training on demography, survey research, marketing and communications, criminal justice, health care, education, social services, natural resources, organizations, or personnel and human resources.

## Requirements for the CAR Option

Concentration in Analysis and Research (CAR)-Option noted on transcript.

Faculty director: Professor James Raymo, 2446 Social Science; 608-262-2783; jraymo@ssc.wisc.edu

To be admitted to the CAR program, students must have a minimum GPA of 3.000 (B) in Methods and Statistics. To complete the CAR program, students must complete the following 36 credits of SOC courses, meet the requirements and earn a minimum GPA of 3.000 in those courses unique to the CAR option.

All students are required to take four foundation core courses (Introduction, Research, Statistics, and Theory) and additional CAR Distribution courses in Statistics, Research, Computing, and Practicum that build on prior sociological and social scientific knowledge from the foundation core courses.

Students are strongly encouraged to complete the four required foundation core courses as early as possible. These foundation courses are prerequisites for most upper-level courses and the option has several sequenced courses, some of which are taught only once a year.

## REQUIREMENTS

36 credits

| FOUNDATION (CORE) |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Introduction to SOC (1 course) |  | 3-4 |
| SOC/ <br> C\&E SOC 210 | Survey of Sociology |  |
| SOC/ <br> C\&E SOC 211 | The Sociological Enterprise |  |
| SOC 181 | Honors Introductory Seminar-The Sociological Enterprise |  |
| Research Methods ${ }^{1}$ |  |  |
| SOC/C\&E SOC 357 | Methods of Sociological Inquiry (Research Methods) | 3-4 |

Statistics ${ }^{2}$
Select one of the following: 3-4

| ECON 310 | Statistics: Measurement in <br> Economics |
| :--- | :--- |
| GEN BUS 303 | Business Statistics |
| GEOG 360 | Quantitative Methods in <br> Geographical Analysis |
| MATH/STAT 310 | Introduction to Probability and <br> Mathematical Statistics II |
| PSYCH 202 | Introduction to Psychology |
| SOC/ | Statistics for Sociologists I |
| C\&E SOC 360 | Introduction to Statistical Methods |
| STAT 301 | Introductory Applied Statistics for |
| STAT 371 | the Life Sciences |

## Classical Theory

SOC/C\&E SOC 475 Classical Sociological Theory 3
1
Students may take methods and statistics in the same semester. If students take methods and statistics in different semesters, we recommend taking methods before statistics as an entry point to the methods and materials of the field.
2 Statistics courses taken outside of the SOC subject do not count for 30 -credits required in the major, nor are they upper level in the major.

## CAR DISTRIBUTION

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | 3 |  |
| ECON 410 | Introductory Econometrics |  |
| POLI SCI 552 | Multivariable Statistical Inference <br> for Political Research |  |
| SOC/ | Statistics for Sociologists II |  |
| C\&E SOC 361 | Accelerated Introduction to <br> STAT 302 | Statistical Methods |
| SOC 362 | Statistics for Sociologists III | 3 |


| or STAT 312 | Introduction to Theory and Methods of Mathematical Statistics II | THESIS OF DISTINCTION <br> This distinction is available to students who write a thesis but who do not |
| :---: | :---: | :---: |
| SOC/C\&E SOC 365 | Data Management for Social Science Research | earn Honors in the Major. A thesis of distinction requires a senior thesis of high caliber, but no specific cumulative grade point average is required. |
| Research Electives (2 courses) |  | Students may declare the Concentration in Analysis and Research ("CAR"). Speak to the major advisor about this option. |
| SOC 375 | Introduction to Mathematical Sociology |  |
| SOC 376 | Mathematical Models of Social Systems | SPANMSEAND PORTUGUESE |
| SOC 535 | Talk and Social Interaction |  |
| SOC 575 | Sociological Perspectives on the Life Course and Aging | The Department of Spanish and Portuguese offers an integrated curriculum in introductory and specialized instruction in Spanish and |
| SOC/AMER IND/ C\&E SOC 578 | Poverty and Place | Portuguese languages, literatures, and linguistics for undergraduates to fulfill major, college, and campus requirements as well as for those seeking fluency and a solid language preparation for other opportunities. |
| SOC 633 | Social Stratification | The objectives and goals of the undergraduate majors include the skills |
| SOC 674 | Demographic Techniques I | of advanced proficiency in oral communication and written expression, |
| $\begin{aligned} & \text { SOC/ } \\ & \text { C\&E SOC } 676 \end{aligned}$ | Applied Demography: Planning and Policy | an understanding of Hispanic and Luso-Brazilian cultures, general familiarity with aspects of Hispanic and Luso-Brazilian literatures, and an |
| COMP SCI/ <br> INFO SYS 371 | Technology of Computer-Based Business Systems | understanding of aspects of Ibero-Romance linguistics. |
| MATH 415 | Applied Dynamical Systems, Chaos and Modeling | DEGREES/MAJORS/CERTIFICATES |
| MATH/I SY E/ | Introduction to Stochastic | - Portuguese, B.A. (p. 1269) |
| OTM/STAT 632 | Processes | - Portuguese, B.S. (p. 1271) |
| POLI SCI 305 | Elections and Voting Behavior | - Spanish Studies for Business Students, Certificate (p. 1274) |
| POLI SCI 515 | Public Opinion | - Spanish, B.A. (p. 1276) |
| PSYCH 225 | Research Methods | - Spanish, B.S. (p. 1279) |
| STAT 349 | Introduction to Time Series |  |
| STAT 351 | Introductory Nonparametric Statistics | PEOPLE |
| STAT 411 | An Introduction to Sample Survey Theory and Methods | Professors Beilin, Bilbija, Close, Corfis, De Ferrari, Egea, Frantzen, Hildner, Hutchinson, Madureira, Medina, Podestá, Sanchez, Sapega |
| STAT 421 | Applied Categorical Data Analysis |  |
| STAT/B M I 642 | Statistical Methods for Epidemiology | Associate Professors Alcalá-Galán, Ancos-García, Goldgel-Carballo, Hernández, Pellegrini, Rao, Stafford, Tejedo Herrera |
| INFO SYS/ COMP SCI 371 | Technology of Computer-Based Business Systems | Assistant Professors Armstrong, Cerezo Paredes, Comparone |
| MARKETNG 310 | Marketing Research | Senior Lecturer Mercado |
| OTM 410 | Operations Research I | Lecturers Fondow, Rodríguez-Guridi |
| OTM 411 | Operations Research II | Lecturers Fondow |
| SOC/C\&E SOC 693 | Practicum in Analysis and Research 3 | Faculty Associates Kaaikiola Strohbusch, Pujol |
| Total Credits | 18-19 | Associate Faculty Associate Neumayer |
| RESIDENCE AND QUALITY OF WORK |  | Assistant Faculty Associate Rengel |
| - 2.000 GPA in all SOC courses and courses that count toward the major |  | Department Administrator Simpson |
| - 2.000 GPA on 15 upper-level major credits, taken in residence ${ }^{5}$ |  | Program Associate Tanner |
| - 15 credits in SOC, taken on the UW-Madison campus |  | Financial Specialist Tainter |
| 4 A maximum one introductory course (SOC 181, SOC/C\&E SOC 210, SOC/C\&E SOC 211) may count toward the 30 required for the major. |  | Graduate Coordinator Fanis |
| 5 <br> SOC courses nu <br> C\&E SOC/SOC <br> SOC 453, and S | bered 300-699 are upper level, except for. 7, C\&E SOC/SOC 360, LEGAL ST/SOC 415, PSYCH/ C 497. | Undergraduate Advisor Thompson |

## PORTUGUESE, B.A.

Here are some of the many reasons to learn Portuguese.

- Close to 250 million people speak Portuguese. Brazil alone has a population of 205 million.
- Portuguese is the sixth most widely spoken language in the world, before German (10th), French (11th) and Italian (15th).
- Portuguese is spoken in 11 countries on four continents. Portuguese is the official language of Portugal, Brazil, Angola, Cape Verde, Guinea-Bissau, Mozambique, São Tomé and Príncipe, East Timor, and is also widely spoken in Equatorial Guinea, Macau (China), and Goa (India).
- Portuguese is a working and/or official language of important international organizations, such as the African Union, the Community of Portuguese Language Countries, the European Union, Mercosul, the Organization of American States, and the Organization of Ibero-American States.
- An estimated 1.3 million native Portuguese-speakers live in the United States.
- To study Portuguese is an asset in today's global economy. For example, Brazil's economy is among the largest in the world.
- The Portuguese novelist José Saramago won the 1998 Nobel Prize for Literature. The music, festivities, culture, and art of the Portuguese-speaking countries are appreciated all over the world.
- Portuguese shares some grammar rules, sentence structure, and similar vocabulary words with other Romance languages. If you already speak French, Spanish or Italian, Portuguese is an easy and fun language to learn.
- You will certainly enjoy our Portuguese classes that are studentfocused and culturally engaging! \. Our 101-102 textbook will soon be available as an interactive open-access e-book.
- Last but not least, Brazil is the only country that has won the World Soccer Cup Championship five times.


## HOW TO GET IN

Students may declare at any time prior to attaining senior standing (86 credits) in consultation with the Portuguese undergraduate advisor. More information about declaring can be found at advising (https:// spanport.wisc.edu/undergraduate/advising).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as
needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics
Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.

Liberal Arts
and Science
Coursework
Depth of Intermediate/
Advanced
work
Major Declare and complete at least one (1) major
Total Credits

## UW-Madison

Experience

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

108 credits

60 intermediate or advanced credits

L\&S Breadth
Foreign Language

120 credits
30 credits in residence, overall
30 credits in residence after the 90th credit

| Minimum | 2.000 in all coursework at UW-Madison |
| :--- | :--- |
| GPAs | 2.000 in intermediate/advanced coursework at UW- |
|  | Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| 26 PORTUG credits beyond PORTUG 201 to include: ${ }^{1}$ |  |  |
| Survey of Portuguese Literature |  |  |
| Select one of the following: |  | 3 |
| PORTUG 411 | Survey of Portuguese Literature before 1825 |  |
| PORTUG 412 | Survey of Brazilian Literature before 1890 |  |
| PORTUG 467 | Survey of Portuguese Literature since 1825 |  |
| PORTUG 468 | Survey of Brazilian Literature since 1890 |  |
| Additional Portuguese Literature |  |  |
| Select one of the following: |  | 3 |
| PORTUG 411 | Survey of Portuguese Literature before 1825 |  |
| PORTUG 412 | Survey of Brazilian Literature before 1890 |  |
| PORTUG/ GEN\&WS 450 | Brazillian Women Writers |  |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature |  |
| PORTUG 467 | Survey of Portuguese Literature since 1825 |  |
| PORTUG 468 | Survey of Brazilian Literature since 1890 |  |
| PORTUG 640 | Topics in Luso-Brazilian Literature |  |
| Portuguese Culture/Civilization |  |  |
| Select one of the following: |  | 3 |
| PORTUG 361 | Portuguese Civilization |  |
| PORTUG 362 | Brazilian Civilization |  |
| PORTUG 364 | Historical and Cultural Traditions of Brazil |  |
| PORTUG/ GEN\&WS 460 | Carmen Miranda |  |

PORTUG 642 Topics in Luso-Brazilian Culture
Composition and Conversation
Select two of the following: 6

| PORTUG 225 | Third Year Conversation and <br> Composition |
| :---: | :--- |
| PORTUG 226 | Third Year Conversation and <br> Composition |
| PORTUG 311 | Fourth Year Composition and <br> Conversation |

PORTUG 312 Fourth Year Composition and Conversation
Elective Courses in PORTUG
Select two additional PORTUG courses numbered 302 or 6 higher.
Select additional PORTUG courses beyond PORTUG 2015
to bring total credits to $26 .{ }^{1}$
Second Romance Language
Two units of another Romance language (French, Italian, or Spanish) taken either in high school or in college. ${ }^{2}$
Total Credits

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in PORTUG and major courses
2.000 GPA on 15 upper-level major credits in residence ${ }^{3}$

15 credits in PORTUG, taken at UW-Madison
1 May not include PORTUG 301 Intensive Portuguese which is the equivalent of PORTUG 101 First Semester Portuguese and PORTUG 102 Second Semester Portuguese.
2 Coursework in Spanish is recommended.
3 PORTUG courses with the Advanced level designation are considered Upper Level in the major

## HONORS IN THE MAJOR

Students may declare Honors in the Portuguese Major in consultation with the Portuguese undergraduate advisor.

## HONORS IN THE PORTUGUESE MAJOR REQUIREMENTS

To earn Honors in the Major in Portuguese, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn 3.500 GPA for all PORTUG courses at or above PORTUG 302, and any course that counts for the major
- Complete at least 16 credits, taken for Honors, with individual grades of B or better, to include:
- 10 credits from PORTUG 202 to 680, excluding PORTUG 301
- A two-semester Senior Honors Thesis in PORTUG 681 and PORTUG 682, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Develop communication skills in Portuguese and integrate these skills to exchange and assess ideas effectively and with level-appropriate accuracy in written and spoken Portuguese.
2. Demonstrate understanding of linguistic, pragmatic, sociolinguistic, and stylistic features of written and spoken Portuguese, understand how they influence meaning, and apply these features in level-appropriate ways in writing and speech.
3. Demonstrate knowledge of Lusophone cultures across historical epochs, including awareness of the social, cultural, and linguistic diversity that characterizes the Portuguese-speaking world.
4. Demonstrate familiarity with and apply basic methods of literary and/ or linguistic analysis, which for literary analysis includes interpretation of written texts and other forms of artistic/cultural creation, both in and of themselves and in the context of the particular social, cultural, and historical milieus in which they were created.

## ADVISING AND CAREERS

## ADVISING

Karen Thompson, Undergraduate Advisor
karen.thompson@wisc.edu
608-265-3183
702 Van Hise Hall
1220 Linden Drive
https://spanport.wisc.edu/undergrad-advising/

## CAREERS

International Directions Advisor
1322 Van Hise Hall
1220 Linden Drive
https://languages.wisc.edu/beyond/careers

## SuccessWorks

711 State Street, Suite 300
Madison, WI 53703
https://careers.Is.wisc.edu
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

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- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Beilin, Bilbija, Close, Corfis, De Ferrari, Egea, Frantzen, Hildner, Hutchinson, Madureira, Medina, Podestá, Sanchez, Sapega

Associate Professors Alcalá-Galán, Ancos-García, Goldgel-Carballo, Hernández, Pellegrini, Rao, Stafford, Tejedo Herrera

Assistant Professors Armstrong, Cerezo Paredes, Comparone
Senior Lecturer Mercado
Lecturers Fondow, Rodríguez-Guridi
Faculty Associates Kaaikiola Strohbusch, Pujol
Associate Faculty Associate Neumayer
Assistant Faculty Associate Rengel
Department Administrator Simpson
Program Associate Tanner
Financial Specialist Tainter
Graduate Coordinator Fanis
Undergraduate Advisor Thompson

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- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign
Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth - Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits and Science Coursework

Depth of 60 intermediate or advanced credits Intermediate/
Advanced
work

| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison <br> GPAs |
|  | 2.000 in intermediate/advanced coursework at UW- <br>  Madison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and
degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code Title <br> 26 PORTUG credits beyond PORTUG 201 to include: ${ }^{1}$ |  | Credits |
| :---: | :---: | :---: |
|  |  |  |
| Survey of Portuguese Literature |  |  |
| Select one of the following: |  | 3 |
| PORTUG 411 | Survey of Portuguese Literature before 1825 |  |
| PORTUG 412 | Survey of Brazilian Literature before 1890 |  |
| PORTUG 467 | Survey of Portuguese Literature since 1825 |  |
| PORTUG 468 | Survey of Brazilian Literature since 1890 |  |
| Additional Portuguese Literature |  |  |
| Select one of the following: |  | 3 |
| PORTUG 411 | Survey of Portuguese Literature before 1825 |  |
| PORTUG 412 | Survey of Brazilian Literature before 1890 |  |
| PORTUG/ <br> GEN\&WS 450 | Brazillian Women Writers |  |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature |  |
| PORTUG 467 | Survey of Portuguese Literature since 1825 |  |
| PORTUG 468 | Survey of Brazilian Literature since 1890 |  |
| PORTUG 640 | Topics in Luso-Brazilian Literature |  |
| Portuguese Culture/Civilization |  |  |
| Select one of the following: |  | 3 |
| PORTUG 361 | Portuguese Civilization |  |
| PORTUG 362 | Brazilian Civilization |  |
| PORTUG 364 | Historical and Cultural Traditions of Brazil |  |
| PORTUG/ GEN\&WS 460 | Carmen Miranda |  |
| PORTUG 642 | Topics in Luso-Brazilian Culture |  |
| Composition and Conversation |  |  |
| Select two of the following: |  | 6 |
| PORTUG 225 | Third Year Conversation and Composition |  |
| PORTUG 226 | Third Year Conversation and Composition |  |


| PORTUG 311 | Fourth Year Composition and Conversation |  |
| :---: | :---: | :---: |
| PORTUG 312 | Fourth Year Composition and Conversation |  |
| Elective Courses in PORTUG |  |  |
| Select two additional PORTUG courses numbered 302 or higher. |  | 6 |
| Select additional PORTUG courses beyond PORTUG 201 to bring total credits to 26 . ${ }^{1}$ |  | 5 |
| Second Romance Language |  |  |
| Two units of another Romance language (French, Italian, or Spanish) taken either in high school or in college. ${ }^{2}$ |  |  |
| Total Credits |  | 26 |

## RESIDENCE AND QUALITY OF WORK

2.000 GPA in PORTUG and major courses
2.000 GPA on 15 upper-level major credits in residence ${ }^{3}$

15 credits in PORTUG, taken at UW-Madison
1 May not include PORTUG 301 Intensive Portuguese which is the equivalent of PORTUG 101 First Semester Portuguese and PORTUG 102 Second Semester Portuguese.
2 Coursework in Spanish is recommended.
3 PORTUG courses with the Advanced level designation are considered Upper Level in the major

## HONORS IN THE MAJOR

Students may declare Honors in the Portuguese Major in consultation with the Portuguese undergraduate advisor.

## HONORS IN THE PORTUGUESE MAJOR REQUIREMENTS

To earn Honors in the Major in Portuguese, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Earn 3.500 GPA for all PORTUG courses at or above PORTUG 302, and any course that counts for the major
- Complete at least 16 credits, taken for Honors, with individual grades of $B$ or better, to include:
- 10 credits from PORTUG 202 to 680, excluding PORTUG 301
- A two-semester Senior Honors Thesis in PORTUG 681 and PORTUG 682, for a total of 6 credits.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Work | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Develop communication skills in Portuguese and integrate these skills to exchange and assess ideas effectively and with level-appropriate accuracy in written and spoken Portuguese.
2. Demonstrate understanding of linguistic, pragmatic, sociolinguistic, and stylistic features of written and spoken Portuguese, understand how they influence meaning, and apply these features in level-appropriate ways in writing and speech.
3. Demonstrate knowledge of Lusophone cultures across historical epochs, including awareness of the social, cultural, and linguistic diversity that characterizes the Portuguese-speaking world.
4. Demonstrate familiarity with and apply basic methods of literary and/ or linguistic analysis, which for literary analysis includes interpretation of written texts and other forms of artistic/cultural creation, both in and of themselves and in the context of the particular social, cultural, and historical milieus in which they were created.

## ADVISING AND CAREERS

## ADVISING

Karen Thompson, Undergraduate Advisor
karen.thompson@wisc.edu
608-265-3183
702 Van Hise Hall
1220 Linden Drive
https://spanport.wisc.edu/undergrad-advising/

## CAREERS

International Directions Advisor
1322 Van Hise Hall
1220 Linden Drive
https://languages.wisc.edu/beyond/careers

## SuccessWorks

711 State Street, Suite 300
Madison, WI 53703
https://careers.Is.wisc.edu
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

Professors Beilin, Bilbija, Close, Corfis, De Ferrari, Egea, Frantzen, Hildner, Hutchinson, Madureira, Medina, Podestá, Sanchez, Sapega

Associate Professors Alcalá-Galán, Ancos-García, Goldgel-Carballo, Hernández, Pellegrini, Rao, Stafford, Tejedo Herrera

Assistant Professors Armstrong, Cerezo Paredes, Comparone

Senior Lecturer Mercado

Lecturers Fondow, Rodríguez-Guridi

Faculty Associates Kaaikiola Strohbusch, Pujol

Associate Faculty Associate Neumayer

Assistant Faculty Associate Rengel

Department Administrator Simpson

Program Associate Tanner
Financial Specialist Tainter

Graduate Coordinator Fanis

Undergraduate Advisor Thompson

## SPANISH STUDIES FOR BUSINESS STUDENTS, CERTIFICATE

Did you know that by 2050 the United States could have more Spanish speakers than any other country (http://qz.com/441174/by-2050-united-states-will-have-more-spanish-speakers-than-any-other-country)?

Spanish continues to gain ground as a widely spoken, national and international language, making the ability to communicate effectively in both written and spoken Spanish an invaluable intellectual, social, cultural, and professional resource. Spanish is the official or co-official language of 21 countries, and with more than 400 million speakers worldwide (projected increase to about 530 million by 2050), it is the third most widely spoken language on the planet after Mandarin and English.

## HOW TO GET IN

Students must earn admission to the School of Business to be eligible for the certificate in Spanish studies for business majors. The certificate can be declared in consultation with the Spanish undergraduate advisor.

## REQUIREMENTS

## CERTIFICATE REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| SPANISH/ | Spanish for Business | 3 |
| INTL BUS 329 |  | 3 |
| SPANISH 359 | Spanish Business Area Studies | 3 |
| Select one course from the following: |  |  |
| SPANISH 361 | Spanish Civilization |  |
| SPANISH 363 | Spanish American Civilization | 6 |
| Select additional credits from Spanish 300-499 | 15 |  |

## SPANISH COURSES 300-499

| Code | Title | Credits |
| :---: | :---: | :---: |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 319 | Topics in Spanish Language Practice | 1-3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 321 | The Structure of Modern Spanish | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 323 | Advanced Language Practice with Emphasis on Expository Writing | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 325 | Advanced Conversation | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 331 | Spanish Applied Linguistics | 3 |
| SPANISH/ <br> MEDIEVAL 414 | Literatura de la Edad Media Castellana (ss. XII-XV) | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH/ <br> FRENCH/ITALIAN/ PORTUG 429 | Introduction to the Romance Languages | 3 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 446 | Topics in Spanish Linguistics | 3 |
| SPANISH 451 | Literature of the Eighteenth and Nineteenth Centuries | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |


| SPANISH 460 | Literatura Hispanoamericana | 3 |
| :---: | :---: | :---: |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH/ <br> CHICLA 467 | US Latino Literature | 3 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |
| SPANISH 471 | Topics in Hispanic Literature | 3 |
| SPANISH 472 | Hispanic Screen Studies | 3 |
| SPANISH 473 | Study Abroad in Spanish Language Practice | 1-4 |
| SPANISH 474 | Study Abroad in Spanish Linguistics | 1-4 |
| SPANISH 475 | Study Abroad in Hispanic Literatures | 1-4 |
| SPANISH 476 | Study Abroad in Hispanic Cultures | 1-4 |

## RESIDENCE AND QUALITY OF WORK

Students must maintain a 3.000 cumulative GPA in all courses required for the certificate.

8 SPANISH credits in residence, of which 6 credits must be taken at UWMadison.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Develop communication skills in Spanish; integrate these skills to exchange and assess ideas effectively and with level-appropriate accuracy; and practice pragmatic, linguistic and stylistic norms in a formal, professional register of standard Spanish in a variety of written and oral assignments.
2. Acquire specialized vocabulary related to business and commerce; analyze authentic informational, financial and marketing materials in Spanish; and incorporate the newly-acquired vocabulary and businessrelated knowledge into their speech and writing.
3. Demonstrate knowledge of Hispanic cultures, including awareness of the social, cultural, and linguistic diversity that characterizes the Spanishspeaking world, as well as familiarity with basic methods of literary, cultural and/or linguistic analysis.

## ADVISING AND CAREERS

## ADVISING

Karen Thompson, Undergraduate Advisor
karen.thompson@wisc.edu
608-265-3183
702 Van Hise Hall
1220 Linden Drive
Undergraduate Advising (https://spanport.wisc.edu/undergrad-advising)
CAREERS
myBiz Careers and Internships (https://bus.wisc.edu/bba/mybiz/careersinternships)

## PEOPLE

Professors Beilin, Bilbija, Close, Corfis, De Ferrari, Egea, Frantzen, Hildner, Hutchinson, Madureira, Medina, Podestá, Sanchez, Sapega

Associate Professors Alcalá-Galán, Ancos-García, Goldgel-Carballo, Hernández, Pellegrini, Rao, Stafford, Tejedo Herrera

Assistant Professors Armstrong, Cerezo Paredes, Comparone
Senior Lecturer Mercado
Lecturers Fondow, Rodríguez-Guridi
Faculty Associates Kaaikiola Strohbusch, Pujol
Associate Faculty Associate Neumayer
Assistant Faculty Associate Rengel
Department Administrator Simpson
Program Associate Tanner
Financial Specialist Tainter
Graduate Coordinator Fanis

Undergraduate Advisor Thompson

## SPANISH, B.A.

Did you know that by 2050 the United States could have more Spanish speakers than any other country (http://qz.com/441174/by-2050-united-states-will-have-more-spanish-speakers-than-any-other-country)?

Spanish continues to gain ground as a widely spoken, national and international language, making the ability to communicate effectively in both written and spoken Spanish an invaluable intellectual, social, cultural, and professional resource. Spanish is the official or co-official language of 21 countries, and with more than 400 million speakers worldwide (projected increase to about 530 million by 2050), it is the third most widely spoken language on the planet after Mandarin and English.

What can you do with a Spanish major?

The following are just a few of the many career paths for which proficiency in spoken and written Spanish can be a valuable asset:

- Bilingual and second language education
- Medical, legal, and business professions
- Journalism
- Travel industry
- Translation
- Interpretation
- Non-governmental/nonprofit work
- Library science
- Foreign service


## HOW TO GET IN

Students may declare at any time prior to attaining senior standing (86 credits) in consultation with the Spanish undergraduate advisor.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree
requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

BACHELOR OF ARTS DEGREE REQUIREMENTS
Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.
Foreign

Language

- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language

Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include one 3+ credit course in the biological sciences; must include one 3+ credit course in the physical sciences

| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |$\quad$| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

Code<br>Title<br>Introductory Literature \& Culture

| Both required. Concurrent enrollment is permitted. These courses are prerequisites to advanced major courses. |  |  |
| :---: | :---: | :---: |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| Language Practice |  | 3 |
| SPANISH 311 | Advanced Language Practice |  |
| Linguistics |  |  |
| Select one of the following: |  | 3 |

SPANISH 320 Spanish Phonetics
SPANISH 321 The Structure of Modern Spanish
SPANISH 331 Spanish Applied Linguistics
Culture/Civilization
Select one of the following: 3

| SPANISH 361 | Spanish Civilization |
| :--- | :--- |
| SPANISH 363 | Spanish American Civilization |
| SPANISH 468 | Topics in Hispanic Culture |
| SPANISH/ | Topics in Hispanic Cultures in the |
| CHICLA 469 | U.S. |
| SPANISH 476 | Study Abroad in Hispanic Cultures |

Literature 3

Select one of the following:
\(\left.$$
\begin{array}{cl}\text { SPANISH } 322 & \begin{array}{l}\text { Survey of Early Hispanic Literature }\end{array} \\
\text { SPANISH } 324 & \begin{array}{l}\text { Survey of Modern Spanish } \\
\text { Literature }\end{array} \\
\text { SPANISH } 326 & \begin{array}{l}\text { Survey of Spanish American } \\
\text { Literature }\end{array}
$$ <br>

Additional Literatue, Culture/Civilization and/or Linguistics\end{array}\right]\)| Select 9 additional credits in literature and/or culture/ |
| :--- |
| civilization and/or linguistics. (See below for courses that |
| fulfill this requirement). |
| Required Electives |
| Select 6 additional credits in SPANISH courses at or above | the 300 level.

Students may also choose to take up to 4 credits in LATIN, FRENCH, ITALIAN, or PORTUG, beginning with:

| LATIN 103 | Elementary Latin |
| :---: | :--- |
| FRENCH 201 | French for Speakers of Other <br> Romance Languages |
| ITALIAN 201 | Italian for Speakers of Other <br> Romance Languages |
| PORTUG 301 | Intensive Portuguese |

1 Coursework in PORTUG is recommended.

## ADVANCED COURSEWORK

At least 3 credits in SPANISH numbered 400 or higher are required.

## FACULTY ENGAGEMENT

At least 6 credits in SPANISH courses at or above the 300 level must be taken while physically present on the UW-Madison campus.

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in SPANISH and major courses
- 2.000 GPA on at least 15 credits of upper-level work in the major, taken in residence ${ }^{2}$
- 15 credits in SPANISH, taken on the UW-Madison campus

2 SPANISH 220 and above are considered upper level in the major

## SPANISH LITERATURE, CULTURE/CIVILIZATION, AND LINGUISTICS COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 321 | The Structure of Modern Spanish | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| SPANISH 331 | Spanish Applied Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH/ MEDIEVAL 414 | Literatura de la Edad Media Castellana (ss. XII-XV) | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH/ FRENCH/ITALIAN/ PORTUG 429 | Introduction to the Romance Languages | 3 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 446 | Topics in Spanish Linguistics | 3 |
| SPANISH 451 | Literature of the Eighteenth and Nineteenth Centuries | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |
| SPANISH 471 | Topics in Hispanic Literature | 3 |
| SPANISH 472 | Hispanic Screen Studies | 3 |
| SPANISH 474 | Study Abroad in Spanish Linguistics | 1-4 |
| SPANISH 475 | Study Abroad in Hispanic Literatures | 1-4 |

1 Coursework in PORTUG is recommended.
SPANISH 220 and above are considered upper level in the major

## HONORS IN THE MAJOR

Students may declare Honors in the Spanish Major in consultation with the Spanish undergraduate advisor.

## HONORS IN THE SPANISH MAJOR: REQURIEMENTS

To earn Honors in the Major in Spanish, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.500 GPA for all SPANISH courses 300 level and higher
- Complete the following coursework, taken for Honors, with individual grades of B or better.
- 6 credits, SPANISH 327 to SPANISH 680
- 3 credits, SPANISH 300 to SPANISH 680
- A two-semester Senior Honors Thesis in SPANISH 681 and SPANISH 682 for at least 6 credits. ${ }^{1}$

1 In certain circumstances (particularly when the student is an Honors candidate in two or more departments), 6 credits in literature, linguistics, or cultural studies at the 500 or 600 level, excluding SPANISH 681, SPANISH 682, SPANISH 691, SPANISH 692, and SPANISH 699, may be substituted for the Honors Thesis, upon recommendation by the Spanish undergraduate advisor.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Develop communication skills in Spanish and integrate these skills to exchange and assess ideas effectively and with level-appropriate accuracy in written and spoken Spanish.
2. Demonstrate understanding of linguistic, pragmatic, sociolinguistic, and stylistic features of written and spoken Spanish, understand how
they influence meaning, and apply these features in level-appropriate ways in writing and speech.
3. Demonstrate knowledge of Hispanic cultures across historical epochs, including awareness of the social, cultural, and linguistic diversity that characterizes the Spanish-speaking world.
4. Demonstrate familiarity with and apply basic methods of literary and/ or linguistic analysis, which for literary analysis includes interpretation of written texts and other forms of artistic/cultural creation, both in and of themselves and in the context of the particular social, cultural, and historical milieus in which they were created.

## ADVISING AND CAREERS

## ADVISING

Karen Thompson, Undergraduate Advisor
karen.thompson@wisc.edu
608-265-3183
702 Van Hise Hall
1220 Linden Drive
https://spanport.wisc.edu/undergrad-advising/

## CAREERS

International Directions Advisor
1322 Van Hise Hall
1220 Linden Drive
https://languages.wisc.edu/beyond/careers

## SuccessWorks

711 State Street, Suite 300
Madison, WI 53703
https://careers.ls.wisc.edu
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.ls.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Beilin, Bilbija, Close, Corfis, De Ferrari, Egea, Frantzen, Hildner, Hutchinson, Madureira, Medina, Podestá, Sanchez, Sapega

Associate Professors Alcalá-Galán, Ancos-García, Goldgel-Carballo, Hernández, Pellegrini, Rao, Stafford, Tejedo Herrera

Assistant Professors Armstrong, Cerezo Paredes, Comparone
Senior Lecturer Mercado
Lecturers Fondow, Rodríguez-Guridi
Faculty Associates Kaaikiola Strohbusch, Pujol
Associate Faculty Associate Neumayer
Assistant Faculty Associate Rengel
Department Administrator Simpson
Program Associate Tanner

Financial Specialist Tainter
Graduate Coordinator Fanis
Undergraduate Advisor Thompson

## SPANISH, B.S.

Did you know that by 2050 the United States could have more Spanish speakers than any other country (http://qz.com/441174/by-2050-united-states-will-have-more-spanish-speakers-than-any-other-country)?

Spanish continues to gain ground as a widely spoken, national and international language, making the ability to communicate effectively in both written and spoken Spanish an invaluable intellectual, social, cultural, and professional resource. Spanish is the official or co-official language of 21 countries, and with more than 400 million speakers worldwide (projected increase to about 530 million by 2050), it is the third most widely spoken language on the planet after Mandarin and English.

## What can you do with a Spanish major?

The following are just a few of the many career paths for which proficiency in spoken and written Spanish can be a valuable asset:

- Bilingual and second language education
- Medical, legal, and business professions
- Journalism
- Travel industry
- Translation
- Interpretation
- Non-governmental/nonprofit work
- Library science
- Foreign service


## HOW TO GET IN

Students may declare at any time prior to attaining senior standing (86 credits) in consultation with the Spanish undergraduate advisor.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)
Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign Complete the third unit of a foreign language
Language Note: A unit is one year of high school work or one semester/term of college work.

- Humanities, 12 credits: 6 of the 12 credits must be in literature
- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

| Liberal Arts and Science Coursework | 108 credits |
| :---: | :---: |
| Depth of Intermediate/ Advanced work | 60 intermediate or advanced credits |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison Experience | 30 credits in residence, overall <br> 30 credits in residence after the 90th credit |
| Minimum GPAs | 2.000 in all coursework at UW-Madison <br> 2.000 in intermediate/advanced coursework at UWMadison |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :--- | :--- | ---: |
| Introductory Literature \& Culture |  |  |
| Both required. Concurrent enrollment is permitted. <br> These courses are prerequisites to advanced major <br> courses. |  |  |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| Language Practice |  | 3 |
| SPANISH 311 | Advanced Language Practice |  |
| Linguistics |  | 3 |
| Select one of the following: |  |  |
| SPANISH 320 | Spanish Phonetics |  |
| SPANISH 321 | The Structure of Modern Spanish |  |
| SPANISH 331 | Spanish Applied Linguistics |  |
| Culture/Civilization |  | 3 |
| Select one of the following: |  |  |
| SPANISH 361 | Spanish Civilization |  |
| SPANISH 363 | Spanish American Civilization |  |


| SPANISH 468 | Topics in Hispanic Culture |  |
| :---: | :---: | :---: |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. |  |
| SPANISH 476 | Study Abroad in Hispanic Cultures |  |
| Literature |  | 3 |
| Select one of the following: |  |  |
| SPANISH 322 | Survey of Early Hispanic Literature |  |
| SPANISH 324 | Survey of Modern Spanish Literature |  |
| SPANISH 326 | Survey of Spanish American Literature |  |
| Additional Literatue, Culture/Civilization and/or Linguistics |  |  |
| Select 9 additiona civilization and/or fulfill this require | edits in literature and/or culture/ guistics. (See below for courses that t). | 9 |
| Required Electives |  |  |
| Select 6 additiona the 300 level. | edits in SPANISH courses at or above | 6 |
| Students may also choose to take up to 4 credits in LATIN, FRENCH, ITALIAN, or PORTUG, beginning with: |  |  |
| LATIN 103 | Elementary Latin |  |
| FRENCH 201 | French for Speakers of Other Romance Languages |  |
| ITALIAN 201 | Italian for Speakers of Other Romance Languages |  |
| PORTUG 301 | Intensive Portuguese |  |
| and/or more advanced offerings ${ }^{1}$ |  |  |
| Total Credits |  | 33 |

## ADVANCED COURSEWORK

At least 3 credits in SPANISH numbered 400 or higher are required.

## FACULTY ENGAGEMENT

At least 6 credits in SPANISH courses at or above the 300 level must be taken while physically present on the UW-Madison campus.

## RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in SPANISH and major courses
- 2.000 GPA on at least 15 credits of upper-level work in the major, taken in residence ${ }^{2}$
- 15 credits in SPANISH, taken on the UW-Madison campus

2 SPANISH 220 and above are considered upper level in the major

## SPANISH LITERATURE, CULTURE/CIVILIZATION, AND LINGUISTICS COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 321 | The Structure of Modern Spanish | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 324 | Survey of Modern Spanish <br> Literature | 3 |
| SPANISH 326 | Survey of Spanish American <br> Literature | 3 |


| SPANISH 327 | Introduction to Spanish Linguistics | 3 |
| :---: | :---: | :---: |
| SPANISH 331 | Spanish Applied Linguistics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH/ <br> MEDIEVAL 414 | Literatura de la Edad Media Castellana (ss. XII-XV) | 3 |
| SPANISH 417 | Literatura del Siglo de Oro | 3-4 |
| SPANISH/ <br> FRENCH/ITALIAN/ PORTUG 429 | Introduction to the Romance Languages | 3 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 446 | Topics in Spanish Linguistics | 3 |
| SPANISH 451 | Literature of the Eighteenth and Nineteenth Centuries | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |
| SPANISH 471 | Topics in Hispanic Literature | 3 |
| SPANISH 472 | Hispanic Screen Studies | 3 |
| SPANISH 474 | Study Abroad in Spanish Linguistics | 1-4 |
| SPANISH 475 | Study Abroad in Hispanic Literatures | 1-4 |
| SPANISH 476 | Study Abroad in Hispanic Cultures | 1-4 |

1 Coursework in PORTUG is recommended.
2 SPANISH 220 and above are considered upper level in the major

## HONORS IN THE MAJOR

Students may declare Honors in the Spanish Major in consultation with the Spanish undergraduate advisor.

## HONORS IN THE SPANISH MAJOR: REQURIEMENTS

To earn Honors in the Major in Spanish, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.500 GPA for all SPANISH courses 300 level and higher
- Complete the following coursework, taken for Honors, with individual grades of B or better:
- 6 credits, SPANISH 327 to SPANISH 680
- 3 credits, SPANISH 300 to SPANISH 680
- A two-semester Senior Honors Thesis in SPANISH 681 and SPANISH 682 for at least 6 credits. ${ }^{1}$

1
In certain circumstances (particularly when the student is an Honors candidate in two or more departments), 6 credits in literature, linguistics, or cultural studies at the 500 or 600 level, excluding SPANISH 681, SPANISH 682, SPANISH 691, SPANISH 692, and SPANISH 699, may be substituted for the Honors Thesis, upon recommendation by the Spanish undergraduate advisor.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Develop communication skills in Spanish and integrate these skills to exchange and assess ideas effectively and with level-appropriate accuracy in written and spoken Spanish.
2. Demonstrate understanding of linguistic, pragmatic, sociolinguistic, and stylistic features of written and spoken Spanish, understand how they influence meaning, and apply these features in level-appropriate ways in writing and speech.
3. Demonstrate knowledge of Hispanic cultures across historical epochs, including awareness of the social, cultural, and linguistic diversity that characterizes the Spanish-speaking world.
4. Demonstrate familiarity with and apply basic methods of literary and/ or linguistic analysis, which for literary analysis includes interpretation of written texts and other forms of artistic/cultural creation, both in and of themselves and in the context of the particular social, cultural, and historical milieus in which they were created.

## ADVISING AND CAREERS

## ADVISING

Karen Thompson, Undergraduate Advisor
karen.thompson@wisc.edu
608-265-3183
702 Van Hise Hall
1220 Linden Drive
https://spanport.wisc.edu/undergrad-advising/

## CAREERS

## International Directions Advisor

1322 Van Hise Hall
1220 Linden Drive
https://languages.wisc.edu/beyond/careers

## SuccessWorks

711 State Street, Suite 300
Madison, WI 53703
https://careers.ls.wisc.edu
SuccessWorks@ls.wisc.edu

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

Professors Beilin, Bilbija, Close, Corfis, De Ferrari, Egea, Frantzen, Hildner, Hutchinson, Madureira, Medina, Podestá, Sanchez, Sapega

Associate Professors Alcalá-Galán, Ancos-García, Goldgel-Carballo, Hernández, Pellegrini, Rao, Stafford, Tejedo Herrera

Assistant Professors Armstrong, Cerezo Paredes, Comparone
Senior Lecturer Mercado
Lecturers Fondow, Rodríguez-Guridi
Faculty Associates Kaaikiola Strohbusch, Pujol
Associate Faculty Associate Neumayer
Assistant Faculty Associate Rengel
Department Administrator Simpson
Program Associate Tanner
Financial Specialist Tainter

## STATISTICS

Modern statistics is an exciting subject that affects most aspects of modern living. It has been developed to deal rationally and objectively with the uncertainty that accompanies variation in phenomena as highly complex as the interplay of the many factors that affect our environment. It derives vitality in coping with practical problems arising in all fields of scientific activity, including the social, business, biological, agricultural, medical, natural, and engineering sciences. Investigators' efforts to learn about a specific phenomenon, be it the response of a patient to a certain medical treatment or the effectiveness of a particular instructional program on a student's learning, are impacted by the presence of natural variation. The field of statistics is concerned with valid and efficient ways to learn more about these phenomena in the presence of such variation. It is an inductive science in which information is extracted from sample data in order to draw inferences. This process most often involves planning experiments or designing studies to ensure that valid answers to questions are obtained from the sample.

## DEGREES/MAJORS/CERTIFICATES

- Statistics, B.A. (p. 1283)
- Statistics, B.S. (p. 1287)


## PEOPLE

## FACULTY

Ané, Chappell, Clayton, Kang, Keles, Larget, Loh, Newton, Qian, Raskutti, Rohe, Shao, Tsui, Wahba, S. Wang, Y. Wang (chair), Yandell, Yuan, C. Zhang, Z. Zhang, A. Zhang, Zhu

## EMERITUS

Bates, Draper, Johnson, Nordheim, Wardrop, and Doksum (retired)

## TEACHING STAFF

Bean, Fischer, Gillett, Keuler, Li, Xia, Yang

## ADMINISTRATIVE STAFF

Brinkerhoff (curricular coordinator), Runyan (department administrator)

## IT STAFF

Beebe, Brabender, Cammilleri (director)

## STUDENT SERVICES COORDINATORS

Barnish, Nguyen

## STATISTICS, B.A.

Modern statistics is an exciting subject that affects most aspects of modern living. It has been developed to deal rationally and objectively with the uncertainty that accompanies variation in phenomena as highly complex as the interplay of the many factors that affect our environment. It derives vitality in coping with practical problems arising in all fields of
scientific activity, including the social, business, biological, agricultural, medical, natural, and engineering sciences. Investigators' efforts to learn about a specific phenomenon, be it the response of a patient to a certain medical treatment or the effectiveness of a particular instructional program on a student's learning, are impacted by the presence of natural variation. The field of statistics is concerned with valid and efficient ways to learn more about these phenomena in the presence of such variation. It is an inductive science in which information is extracted from sample data in order to draw inferences. This process most often involves planning experiments or designing studies to ensure that valid answers to questions are obtained from the sample.

## HOW TO GET IN

To declare the statistics major, student should set up an appointment with a statistics major advisor prior to attaining senior standing (86 credits).

Prospective majors are strongly recommended to have completed the following classes before declaring the major.

- MATH 221 Calculus and Analytic Geometry 1
- MATH 222 Calculus and Analytic Geometry 2
- MATH 234 Calculus--Functions of Several Variables
- STAT 302 Accelerated Introduction to Statistical Methods


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4- or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics Fulfilled with completion of University General Education requirements Quantitative Reasoning a (QR A) and Quantitative Reasoning b (QR B) coursework. Please note that some majors may require students to complete additional math coursework beyond the B.A. mathematics requirement.

| Foreign | - Complete the fourth unit of a foreign language; OR |
| :--- | :--- |
| Language | - Complete the third unit of a foreign language and the |
|  | second unit of an additional foreign language |

Note: A unit is one year of high school work or one semester/term of college work.

| L\&S Breadth | Humanities, 12 credits: 6 of the 12 credits must be in |
| :--- | :--- |
|  | literature |
|  | - Social Sciences, 12 credits |
|  | Natural Sciences, 12 credits: must include one $3+$ |
|  | credit course in the biological sciences; must include |
|  | one $3+$ credit course in the physical sciences |


| Liberal Arts <br> and Science <br> Coursework | 108 credits |
| :--- | :--- |
| Depth of <br> Intermediate/ | 60 intermediate or advanced credits |
| Advanced |  |
| work |  |
| Major | Declare and complete at least one (1) major |
| Total Credits | 120 credits |
| UW-Madison 30 credits in residence, overall <br> Experience 30 credits in residence after the 90th credit <br> Minimum 2.000 in all coursework at UW-Madison <br> GPAs 2.000 in intermediate/advanced coursework at UW- <br>  Madison |  |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)


## - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism) <br> - Music (Bachelor of Music) <br> - Social Work (Bachelor of Social Work)

REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| Math |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 (must be completed with grade of C or higher) ${ }^{1}$ | 5 |
| MATH 222 | Calculus and Analytic Geometry 2 (must be completed with grade of C or higher) ${ }^{1}$ | 4 |
| MATH 234 | Calculus--Functions of Several Variables (must be completed with grade of C or higher) ${ }^{1}$ | 4 |
| MATH 340 | Elementary Matrix and Linear Algebra ${ }^{1}$ | 3 |
| or MATH 341 | Linear Algebra |  |
| Computer Programming |  |  |
| Select one of the follow | owing: ${ }^{2}$ | 3 |
| COMP SCI 200 | Programming I |  |
| COMP SCI 300 | Programming II |  |
| COMP SCI 301 | Introduction to Data Programming |  |
| COMP SCI 400 | Programming III |  |
| COMP SCI 412 | Introduction to Numerical Methods |  |
| COMP SCI/I SY E/ <br> MATH/STAT 525 | Linear Programming Methods |  |


| Statistics Courses | 25 |  |
| :--- | :--- | :---: |
| Introductory Statistics and Basic Statistical Language |  |  |
| STAT 302 | Accelerated Introduction to <br>  <br>  <br> Statistical Methods | 3 |
| STAT 327 | Learning a Statistical Language <br> (Introductory Data Analysis with R) | 1 |
| Linear Statistical Models | Applied Regression Analysis | 3 |
| STAT 333 | Statistical Experimental Design | 3 |

Mathematical Statistics
Probability (one course): 3
STAT/MATH 309 Introduction to Probability and Mathematical Statistics I
STAT 311 Introduction to Theory and Methods of Mathematical Statistics I
MATH/STAT 431 Introduction to the Theory of Probability
Inference:

| STAT/MATH 310 | Introduction to Probability and <br> Mathematical Statistics II |  |
| :--- | :--- | :---: |
| 3 | 3 |  |
| Statistics Electives |  | 9 |

STAT 349 Introduction to Time Series
STAT 351 Introductory Nonparametric
Statistics

| STAT 411 | An Introduction to Sample Survey <br> Theory and Methods |
| :--- | :--- |
| STAT 421 | Applied Categorical Data Analysis |
| STAT 456 | Applied Multivariate Analysis |
| STAT 461 | Financial Statistics |
| STAT/ | Introduction to Computational |
| COMP SCI 471 | Statistics |
| STAT 479 | Special Topics in Statistics ${ }^{4}$ |
| STAT 575 | Statistical Methods for Spatial Data |
| STAT/B M I 641 | Statistical Methods for Clinical |
|  | Trials |
| STAT 679 | Special Topics in Statistics |
| STAT 699 | Directed Study ${ }^{5}$ |
| Concentration |  |

Select either Math Concentration or Applied 6-12 Concentration

Total Credits
An acceptable equivalent for all four of the required mathematics courses is MATH 275 Topics in Calculus I, MATH 276 Topics in Calculus II, MATH 375 Topics in Multi-Variable Calculus and Linear Algebra, and MATH 376 Topics in Multi-Variable Calculus and Differential Equations. MATH 275 and MATH 276 are acceptable equivalents for MATH 221 Calculus and Analytic Geometry 1 and MATH 222 Calculus and Analytic Geometry 2, respectively. MATH 211 Calculus and MATH 213 Calculus and Introduction to Differential Equations are NOT acceptable equivalents for MATH 221, MATH 222, and MATH 234 Calculus--Functions of Several Variables. (Students who have completed MATH 211 and MATH 213 are encouraged to take the Department of Mathematics' Calculus Exam to determine placement in the MATH 221 -MATH 222-MATH 234 sequence).

Up to 3 credits of STAT 699 Directed Study can count toward these 9 credits. No course identified in Concentration 1 of the major can count towards these 9 credits.

## MATHEMATICS CONCENTRATION

Students intending to pursue graduate study in statistics are strongly advised to take more math classes than the minimum requirements. Linear algebra and real analysis are typically the most important areas of mathematics needed for graduate study in statistics.

Select at least 6 additional credits of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 319 | Techniques in Ordinary Differential | 3 |
|  | Equations |  |


| MATH 421 | The Theory of Single Variable <br> Calculus | 3 |
| :--- | :--- | :---: |
| MATH 443 | Applied Linear Algebra | 3 |
| MATH/COMP SCI/ | Introduction to Combinatorics |  |
| STAT 475 | Numerical Analysis | 3 |
| MATH/ | Analysis I | 3 |
| COMP SCI 514 | Analysis II | 3 |
| MATH 521 | Modern Algebra | 3 |
| MATH 522 | Stochastic Methods for Biology | 3 |
| MATH 605 | Introduction to Measure and | 3 |
| MATH 629 | Integration | 3 |
| MATH/I SY E/OTM/ | Introduction to Stochastic | 3 |
| STAT 632 | Processes |  |

## APPLIED CONCENTRATION

Select at least 12 credits of coursework at the 300 level and higher in an area of application of statistical methods as approved by the student's major advisor. This area of application can represent study areas where statistical methods are applied, such as in the natural and social sciences and engineering. This requirement can often be met by the completion of a major in such a study area.

## L\&S REQUIREMENTS FOR RESIDENCE AND QUALITY OF WORK IN THE MAJOR

1. 2.000 grade point average in all STAT and major courses
2. 2.000 grade point average in 15 credits of upper-level work in the major completed in residence. Courses that count toward this requirement are STAT courses: STAT 302 Accelerated Introduction to Statistical Methods to STAT 699 Directed Study, excluding STAT 324 Introductory Applied Statistics for Engineers, STAT 371 Introductory Applied Statistics for the Life Sciences, STAT 441 Introduction to Biostatistics for Pharmacy, STAT/F\&W ECOL/HORT 571 Statistical Methods for Bioscience I, and STAT/F\&W ECOL/HORT 572 Statistical Methods for Bioscience II.
3. 15 credits in STAT subject, taken on campus

## HONORS IN THE MAJOR

Students may declare Honors in the Statistics Major in consultation with the Statistics major advisor(s). To be admitted to the Honors Program in Statistics, students must have declared statistics, must have a 3.500 overall university GPA, and must have completed STAT 302 Accelerated Introduction to Statistical Methods, STAT/MATH 309 Introduction to Probability and Mathematical Statistics I and STAT 333 Applied Regression Analysis with a GPA of 3.500 or higher.

## HONORS IN THE STATISTICS MAJOR: REQUIREMENTS

To earn Honors in the Major in Statistics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.500 overall university GPA
- Earn a 3.500 GPA for all STAT courses
- Complete one of the following:
- Two courses, taken for Honors, with individual grades of B or better, from Linear Statistical Models, Mathematical Statistics, or Statistics Electives other than STAT 699 Directed Study, or
- Complete an additional course worth 3 credits from the Statistics Electives list (for a total of 12 statistics electives)
- Complete a two-semester Senior Honors Thesis in STAT 681 Senior Honors Thesis and STAT 682 Senior Honors Thesis, for a total of 6 credits, under the supervision of a member of the faculty of the Department of Statistics.


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |

## LEARNING OUTCOMES

1. Frame a scientific question with the appropriate mode of data analysis, to analyze such data correctly, and to summarize and interpret the results in a useful manner. Master a number of key statistical techniques, certainly including significance testing, goodness-of-fit testing, and regression analysis, which are common tools in analyzing data. This will include a careful checking of assumptions that underlie the techniques.
2. Design experiments/studies - in conjunction with scientists proposing the study - that will lead in an efficient manner to the collection of data that can be properly analyzed. Design studies with multiple factors taking variable reduction techniques into account. Interpret and critique designs they encounter in analyzing data.
3. Use tools from mathematical statistics and probability to assess the quality of point estimators, confidence intervals, and hypothesis tests. Demonstrate the skills to connect methods of application to their theoretical underpinnings.
4. Use a statistical language (with emphasis on R ) to manipulate data and perform exploratory data analysis using basic statistical methods. Write structured R programs using conditional expressions, loops, and functions and to use regular expressions to extract data from text and make high-level visualizations.
5. Evaluate critically articles that use statistical argumentation. Assess whether or not the statistical arguments have been developed properly and the conclusions are reliable. If the arguments are not properly developed, they will be able to provide specific evidence for this.

## ADVISING AND CAREERS

## Looking for statistics advising?

Students who are interested in statistics academic advising for the statistics major should contact the advisor group by email: advising@stat.wisc.edu.

## So what can you do with a statistics major after you graduate?

Well-trained statisticians are in strong demand and have excellent employment prospects. Statisticians work in industry and business, in government, and in universities and other research institutions.

In most cases an undergraduate major in statistics can find employment as a quantitative analyst or other "generalist" position. A number of our graduates have been successful following this path. However, in most cases, positions aimed at "professional statisticians" require a master's (or Ph.D.) degree. As a professional statistician, typical employment in industry might be as a statistical consultant to biologists, engineers, and/or other scientists in a research and development branch of a large company.

The single, best place to look for statistics jobs is the American Statistical Association Career Center (http://www.amstat.org/ASA/YourCareer/home.aspx). Consult with a statistics undergraduate advisor about the best fit for you.

Statistical training is seen as very desirable in many other areas (e.g., agricultural, biological, engineering, and social sciences, business, and economics) where the primary activity may not be statistics. In view of this, statistics may often be a strong choice for a second or additional major.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school applications; and network with professionals in the field (alumni and employers).

SuccessWorks can also assist students in career advising, résumé and cover letter writing, networking opportunities, and interview skills, as well as course offerings for undergraduates to begin their career exploration early in their undergraduate career.

- SuccessWorks (https://careers.Is.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-Is-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://Is.wisc.edu/Isci)


## PEOPLE

## FACULTY

Ané, Chappell, Clayton, Kang, Keles, Larget, Loh, Newton, Qian, Raskutti, Rohe, Shao, Tsui, Wahba, S. Wang, Y. Wang (chair), Yandell, Yuan, C. Zhang, Z. Zhang, A. Zhang, Zhu

EMERITUS
Bates, Draper, Johnson, Nordheim, Wardrop, and Doksum (retired)

TEACHING STAFF<br>Bean, Fischer, Gillett, Keuler, Li, Xia, Yang

## ADMINISTRATIVE STAFF

Brinkerhoff (curricular coordinator), Runyan (department administrator)

## IT STAFF

Beebe, Brabender, Cammilleri (director)

## STUDENT SERVICES COORDINATORS

Barnish, Nguyen

## STATISTICS, B.S.

Modern statistics is an exciting subject that affects most aspects of modern living. It has been developed to deal rationally and objectively with the uncertainty that accompanies variation in phenomena as highly complex as the interplay of the many factors that affect our environment. It derives vitality in coping with practical problems arising in all fields of scientific activity, including the social, business, biological, agricultural, medical, natural, and engineering sciences. Investigators' efforts to learn about a specific phenomenon, be it the response of a patient to a certain medical treatment or the effectiveness of a particular instructional program on a student's learning, are impacted by the presence of natural variation. The field of statistics is concerned with valid and efficient ways to learn more about these phenomena in the presence of such variation. It is an inductive science in which information is extracted from sample data in order to draw inferences. This process most often involves planning experiments or designing studies to ensure that valid answers to questions are obtained from the sample.

## HOW TO GET IN

To declare the statistics major, student should set up an appointment with a statistics major advisor prior to attaining senior standing (86 credits).

Prospective majors are strongly recommended to have completed the following classes before declaring the major:

- MATH 221 Calculus and Analytic Geometry 1
- MATH 222 Calculus and Analytic Geometry 2
- MATH 234 Calculus--Functions of Several Variables
- STAT 302 Accelerated Introduction to Statistical Methods


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## COLLEGE OF LETTERS \& SCIENCE BREADTH AND DEGREE REQUIREMENTS: BACHELOR OF SCIENCE (B.S.)

Students pursuing a bachelor of science degree in the College of Letters \& Science must complete all of the requirements below. The College of Letters \& Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum. View a comparison of the degree requirements here. (https://pubs.wisc.edu/home/archives/ug15/images/ babs2009.pdf)

## BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Two (2) 3+ credits of intermediate/advanced level MATH, COMP SCI, STAT
Limit one each: COMP SCI, STAT
Foreign
Language
Complete the third unit of a foreign language Note: A unit is one year of high school work or one semester/term of college work.
L\&S Breadth • Humanities, 12 credits: 6 of the 12 credits must be in literature

- Social Sciences, 12 credits
- Natural Sciences, 12 credits: must include 6 credits in biological science; and must include 6 credits in physical science

Liberal Arts 108 credits
and Science
Coursework

| Depth of |
| :--- |
| Intermediate/ |


| Advanced |
| :--- |


| work |
| :--- | :--- |


| Major | Declare and complete at least one (1) major |
| :--- | :--- |
| Total Credits | 120 credits |
| UW-Madison | 30 credits in residence, overall |
| Experience | 30 credits in residence after the 90th credit |
| Minimum | 2.000 in all coursework at UW-Madison |
| GPAs | 2.000 in intermediate/advanced coursework at UW- | | Madison |
| :--- |

## NON-L\&S STUDENTS PURSUING AN L\&S MAJOR

Non-L\&S students who have permission from their school/college to pursue an additional major within L\&S only need to fulfill the major requirements and do not need to complete the L\&S breadth and degree requirements above. Please note that the following special degree programs are not considered majors so are not available to non-L\&S-degree-seeking candidates:

- Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
- Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
- Music (Bachelor of Music)
- Social Work (Bachelor of Social Work)


## REQUIREMENTS FOR THE MAJOR

| Code | Title | Credits |
| :---: | :---: | :---: |
| Math |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 (must be completed with grade of C or higher) ${ }^{1}$ | 5 |
| MATH 222 | Calculus and Analytic Geometry 2 (must be completed with grade of C or higher) ${ }^{1}$ | 4 |
| MATH 234 | Calculus--Functions of Several Variables (must be completed with grade of C or higher) ${ }^{1}$ | 4 |
| MATH 340 | Elementary Matrix and Linear Algebra ${ }^{1}$ | 3 |
| or MATH 341 | Linear Algebra |  |
| Computer Programming |  |  |
| Select one of the follow | wing: ${ }^{2}$ | 3 |
| COMP SCI 200 | Programming I |  |
| COMP SCI 300 | Programming II |  |
| COMP SCI 301 | Introduction to Data Programming |  |
| COMP SCI 400 | Programming III |  |
| COMP SCI 412 | Introduction to Numerical Methods |  |
| COMP SCI/I SY E/ <br> MATH/STAT 525 | Linear Programming Methods |  |
| Statistics Courses |  | 25 |
| Introductory Statistics and Basic Statistical Language |  |  |
| STAT 302 | Accelerated Introduction to Statistical Methods | 3 |


| STAT 327 | Learning a Statistical Language (Introductory Data Analysis with R) | 1 |
| :---: | :---: | :---: |
| Linear Statistical Models |  |  |
| STAT 333 | Applied Regression Analysis | 3 |
| STAT/M E 424 | Statistical Experimental Design | 3 |
| Mathematical Statistics |  |  |
| Probability (one course): |  | 3 |
| STAT/MATH 309 | Introduction to Probability and Mathematical Statistics I |  |
| STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I |  |
| MATH/STAT 431 | Introduction to the Theory of Probability |  |
| Inference: |  |  |
| STAT/MATH 310 | Introduction to Probability and Mathematical Statistics II ${ }^{3}$ | 3 |
| Statistics Electives |  |  |
| STAT electives to reach minimum credits required: |  | 9 |
| STAT 349 | Introduction to Time Series |  |
| STAT 351 | Introductory Nonparametric Statistics |  |
| STAT 411 | An Introduction to Sample Survey Theory and Methods |  |
| STAT 421 | Applied Categorical Data Analysis |  |
| STAT 456 | Applied Multivariate Analysis |  |
| STAT 461 | Financial Statistics |  |
| STAT/ COMP SCI 471 | Introduction to Computational Statistics |  |
| STAT 479 | Special Topics in Statistics ${ }^{4}$ |  |
| STAT 575 | Statistical Methods for Spatial Data |  |
| STAT/B M I 641 | Statistical Methods for Clinical Trials |  |
| STAT 679 | Special Topics in Statistics |  |
| STAT 699 | Directed Study ${ }^{5}$ |  |
| Concentration |  |  |
| Select either Math Concentration or Applied Concentration |  | 12 |
| Total Credits |  |  |
| An acceptable equivalent for all four of the required mathematics courses is MATH 275 Topics in Calculus I, MATH 276 Topics in Calculus II, MATH 375 Topics in Multi-Variable Calculus and Linear Algebra, and MATH 376 Topics in Multi-Variable Calculus and Differential Equations. MATH 275 and MATH 276 are acceptable equivalents for MATH 221 Calculus and Analytic Geometry 1 and MATH 222 Calculus and Analytic Geometry 2, respectively. MATH 211 Calculus and MATH 213 Calculus and Introduction to Differential Equations are NOT acceptable equivalents for MATH 221, MATH 222, and MATH 234 Calculus--Functions of Several Variables. (Students who have completed MATH 211 and MATH 213 are encouraged to take the Department of Mathematics' Calculus Exam to determine placement in the MATH 221 -MATH 222-MATH 234 sequence). |  |  |
| 2 COMP SCI 300 is beneficial in mos experience equiv science) are reco | highly recommended because it will be future careers. Students who have p lent to COMP SCI 200 (such as AP co mmended to take COMP SCI 300, and |  |

who will pursue a second major in computer science must take COMP SCI 300 and COMP SCI 400 to satisfy the computer science major requirements.

STAT 312 Introduction to Theory and Methods of Mathematical Statistics II will not be accepted in lieu of STAT/MATH 310 Introduction to Probability and Mathematical Statistics II. credit when enrolled for different topics.
Up to 3 credits of STAT 699 Directed Study can count toward these 9 credits. No course identified in Concentration 1 of the major can count towards these 9 credits.

## MATHEMATICS CONCENTRATION

Students intending to pursue graduate study in statistics are strongly advised to take more math classes than the minimum requirements. Linear algebra and real analysis are typically the most important areas of mathematics needed for graduate study in statistics.

Select at least 6 additional credits of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 319 | Techniques in Ordinary Differential <br> Equations | 3 |
| MATH 421 | The Theory of Single Variable <br> Calculus | 3 |
| MATH 443 | Applied Linear Algebra | 3 |
| MATH/COMP SCI/ | Introduction to Combinatorics | 3 |
| STAT 475 | Numerical Analysis | 3 |
| MATH/ | Analysis I | 3 |
| COMP SCI 514 | Analysis II | 3 |
| MATH 521 | Modern Algebra | 3 |
| MATH 522 | Stochastic Methods for Biology | 3 |
| MATH 541 | Introduction to Measure and | 3 |
| MATH 605 | Integration | 3 |
| MATH 629 | Introduction to Stochastic | 3 |
| MATH/I SY E/OTM/ | Processes | 3 |

## APPLIED CONCENTRATION

Select at least 12 credits of coursework at the 300 level and higher in an area of application of statistical methods as approved by the student's major advisor. This area of application can represent study areas where statistical methods are applied, such as in the natural and social sciences and engineering. This requirement can often be met by the completion of a major in such a study area.

## L\&S REQUIREMENTS FOR RESIDENCE AND QUALITY OF WORK IN THE MAJOR

1. 2.000 grade point average in all STAT and major courses
2. 2.000 grade point average in 15 credits of upper-level work in the major completed in residence. Courses that count toward this requirement are STAT courses: STAT 302 Accelerated Introduction to Statistical Methods to STAT 699 Directed Study, excluding STAT 324 Introductory Applied Statistics for Engineers, STAT 371 Introductory Applied Statistics for the Life Sciences, STAT 441 Introduction to Biostatistics for Pharmacy, STAT/F\&W ECOL/HORT 571 Statistical Methods for Bioscience I, and STAT/F\&W ECOL/HORT 572 Statistical Methods for Bioscience II.
3. 15 credits in STAT subject, taken on campus

## HONORS IN THE MAJOR

Students may declare Honors in the Statistics Major in consultation with the Statistics major advisor(s). To be admitted to the Honors Program in Statistics, students must have declared statistics, must have a 3.500 overall university GPA, and must have completed STAT 302 Accelerated Introduction to Statistical Methods, STAT/MATH 309 Introduction to Probability and Mathematical Statistics I and STAT 333 Applied Regression Analysis with a GPA of 3.500 or higher.

## HONORS IN THE STATISTICS MAJOR: REQUIREMENTS

To earn Honors in the Major in Statistics, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.500 overall university GPA
- Earn a 3.500 GPA for all STAT courses
- Complete one of the following:
- Two courses, taken for Honors, with individual grades of B or better, from Linear Statistical Models, Mathematical Statistics, or Statistics Electives other than STAT 699 Directed Study, or
- Complete an additional course worth 3 credits from the Statistics Electives list (for a total of 12 statistics electives)
- Complete a two-semester Senior Honors Thesis in STAT 681 Senior Honors Thesis and STAT 682 Senior Honors Thesis, for a total of 6 credits, under the supervision of a member of the faculty of the Department of Statistics.


## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Frame a scientific question with the appropriate mode of data analysis, to analyze such data correctly, and to summarize and interpret the results in a useful manner. Master a number of key statistical techniques, certainly including significance testing, goodness-of-fit testing, and regression analysis, which are common tools in analyzing data. This will include a careful checking of assumptions that underlie the techniques.
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3. Use tools from mathematical statistics and probability to assess the quality of point estimators, confidence intervals, and hypothesis tests. Demonstrate the skills to connect methods of application to their theoretical underpinnings.
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5. Evaluate critically articles that use statistical argumentation. Assess whether or not the statistical arguments have been developed properly and the conclusions are reliable. If the arguments are not properly developed, they will be able to provide specific evidence for this.

## ADVISING AND CAREERS

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## So what can you do with a statistics major after you graduate?

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Statistical training is seen as very desirable in many other areas (e.g., agricultural, biological, engineering, and social sciences, business, and economics) where the primary activity may not be statistics. In view of this, statistics may often be a strong choice for a second or additional major.

## L\&S CAREER RESOURCES

SuccessWorks at the College of Letters \& Science helps students leverage the academic skills learned in their major, certificates, and liberal arts degree; explore and try out different career paths; participate in internships; prepare for the job search and/or graduate school
applications; and network with professionals in the field (alumni and employers).

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- SuccessWorks (https://careers.ls.wisc.edu)
- Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
- INTER-LS 210 L\&S Career Development: Taking Initiative ( 1 credit, targeted to first- and second-year students)-for more information, see Inter-LS 210: Career Development, Taking Initiative (https:// careers.Is.wisc.edu/inter-ls-210-career-development-taking-initiative)
- Learn how we're transforming career preparation: L\&S Career Initiative (http://ls.wisc.edu/lsci)


## PEOPLE

## FACULTY

Ané, Chappell, Clayton, Kang, Keles, Larget, Loh, Newton, Qian, Raskutti, Rohe, Shao, Tsui, Wahba, S. Wang, Y. Wang (chair), Yandell, Yuan, C. Zhang, Z. Zhang, A. Zhang, Zhu

## EMERITUS

Bates, Draper, Johnson, Nordheim, Wardrop, and Doksum (retired)

TEACHING STAFF<br>Bean, Fischer, Gillett, Keuler, Li, Xia, Yang

## ADMINISTRATIVE STAFF

Brinkerhoff (curricular coordinator), Runyan (department administrator)

## IT STAFF

Beebe, Brabender, Cammilleri (director)

## STUDENT SERVICES COORDINATORS

Barnish, Nguyen

## GAYLORD NELSON INSTITUTE FOR ENVIRONMENTAL STUDIES

The Institute for Environmental Studies was created in 1970 to promote and enhance interdisciplinary environmental instruction, research, and outreach at UW-Madison. In 2002, it was renamed in honor of former Wisconsin governor and U.S. Senator Gaylord Nelson, the founder of Earth Day and a lifelong champion of environmental stewardship.

The program espouses an integrated approach to learning about the environment. Students are encouraged to consider their interests, strengths, and values beyond the context of their courses and connect the subject of the environment to their other courses as well as their extracurricular experiences. The Nelson Institute is a robust environmental community in which students learn about current environmental issues, and more important, how to link environmental science, policy, literature, art, and philosophy to other fields of study The focus on the intentional integration of their academic endeavors with their interests, skills, and values provides a powerful source of
self-awareness that prepares students for success across a variety of options. Finding one's strength within this interdisciplinary approach affords students access to a wide variety of career settings and postgraduate options.

Approximately 170 faculty members from more than 50 natural and social science, engineering, and humanities departments are affiliated with the Nelson Institute, which offers scores of undergraduate-level courses in cooperation with the university's schools and colleges. The institute offers an undergraduate major and two certificates. The environmental studies major must always be done in tandem with another major on campus. Environmental studies majors have second majors in every school and college on campus, and the student population reflects the interdisciplinary focus of the Nelson Institute and its curricular offerings. All UW-Madison undergraduates are invited to consider the program.

## DEGREES/MAJORS/CERTIFICATES

- Environmental Studies, Certificate (p. 1291)
- Sustainability, Certificate (p. 1296)

The Nelson Institute also administers the Environmental Studies major (p. 646), available through the College of Letters \& Science.

## ENVIRONMENTAL STUDIES

- Environmental Studies, Certificate (p. 1291)
- Sustainability, Certificate (p. 1296)


## ENVIRONMENTAL STUDIES, CERTIFICATE

## WHY CHOOSE AN ENVIRONMENTAL STUDIES CERTIFICATE?

The Environmental Studies Certificate Program allows undergraduate students at UW-Madison to explore the environmental intersections that complement their major, but with fewer curricular requirements than the major. Students completing the certificate also benefit from participation in the Nelson academic community and gain invaluable access to a network of multidisciplinary problem-solving colleagues. The certificate program is available only to UW-Madison students pursuing a bachelor's degree through the university's regular academic departments.

Completion of the certificate program is noted on a student's academic transcript.

## HOW TO GET IN

## HOW TO DECLARE

Students interested in declaring the environmental studies certificate can email undergrad@nelson.wisc.edu or request a declaration appointment. Information about declaring the certificate can be found at undergraduate advising (https://nelson.wisc.edu/undergraduate/advising.php).

## REQUIREMENTS

## REQUIREMENTS FOR THE CERTIFICATE

Students are required to take five courses/15 credits to include two courses in the Foundation section and three courses in the thematic areas. A minimum of 6 credits overall must be at the intermediate or advanced level (I/A/D). A minimum of 8 credits must be taken in residence. A minimum GPA of 2.0 is required in certificate courses.

## ENVIRONMENTAL HUMANITIES/SOCIAL SCIENCE (TAKE ONE COURSE)

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENVIR ST 112 | Environmental Studies: The Social Perspective | 3 |
| ENVIR ST 113 | Environmental Studies: The Humanistic Perspective | 3 |
| ENVIR ST/HIST SCI/ HISTORY 125 | Green Screen: Environmental Perspectives through Film | 3 |
| ENVIR ST/GEOG 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| ENVIR ST/A A E 244 | The Environment and the Global Economy | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| ENVIR ST/ <br> RELIG ST 270 | The Environment: Religion \& Ethics | 3-4 |
| ENVIR ST/GEOG 339 | Environmental Conservation | 4 |
| ENVIR ST/GEOG/ HISTORY 460 | American Environmental History | 4 |
| ENVIR ST/ | Global Environmental History | 3-4 |

HISTORY 465

## ENVIRONMENTAL PHYSICAL SCIENCE/ECOLOGY (TAKE ONE COURSE)

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN 100 | Weather and Climate | 3 |
| ATM OCN 101 | Weather and Climate | 4 |
| ENVIR ST/ | Environmental Geology | 3 |
| GEOSCI 106 |  | 4 |
| GEOSCI 110 | Evolution and Extinction | 3 |
| PHYSICS 115 | Energy | 3 |
| ENVIR ST/GEOG | 120 | Introduction to the Earth System |
| ENVIR ST/ILS | 126 | Principles of Environmental Science |
| ENVIR ST/GEOG | 127 | Physical Systems of the |
| ATM OCN/ | Environment | 4 |
| SOIL SCI 132 | Earth's Water: Natural Science and | 5 |
| ENVIR ST/GEOG/ | Soil: Ecosystem and Resource | 3 |
| SOIL SCI 230 |  | 3 |
| BOTANY 240 | Plants and Humans | 3 |



Note: Nelson Institute topic numbers (ENVIR ST 400, ENVIR ST 401, ENVIR ST 402, ENVIR ST 404) all count in the theme portion of the curriculum. Because of the changing nature and titles of topics courses, they are not listed individually under the section headings.

## BIODIVERSITY

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENVIR ST/ | Insects and Human Culture-a | 3 |
| ENTOM 201 | Survey Course in Entomology |  |
| ENTOM/ ZOOLOGY 302 | Introduction to Entomology | 4 |
| F\&W ECOL 318 | Principles of Wildlife Ecology | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| ENVIR ST/ <br> F\&W ECOL/ <br> ZOOLOGY 360 | Extinction of Species | 3 |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| SOIL SCI/ <br> AGRONOMY/ <br> BOTANY 370 | Grassland Ecology | 3 |
| ENVIR ST 375 | Field Ecology Workshop | 3 |
| BOTANY 401 | Vascular Flora of Wisconsin | 4 |
| BOTANY/ANTHRO/ ZOOLOGY 410 | Evolutionary Biology | 3 |
| BOTANY 422 | Plant Geography | 3 |
| ENVIR ST/C\&E SOC/ GEOG 434 | People, Wildlife and Landscapes | 3 |
| BOTANY/ <br> ZOOLOGY 450 | Midwestern Ecological Issues: A Case Study Approach | 2 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin | 4 |
| BOTANY/F\&W ECOL/ ZOOLOGY 460 | General Ecology | 4 |
| AN SCI/F\&W ECOL/ ZOOLOGY 520 | Ornithology | 3 |


| AN SCI/F\&W ECOL/ ZOOLOGY 521 | Birds of Southern Wisconsin | 3 |
| :---: | :---: | :---: |
| ATM OCN/ AGRONOMY/ SOIL SCI 532 | Environmental Biophysics | 3 |
| GEOG 538 | The Humid Tropics: Ecology, Subsistence, and Development | 4 |
| F\&W ECOL/ SURG SCI 548 | Diseases of Wildlife | 3 |
| F\&W ECOL 550 | Forest Ecology | 3 |
| F\&W ECOL 551 | Forest Ecology Lab | 1 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems | 1 |
| ENVIR ST/BOTANY/ <br> F\&W ECOL/ <br> ZOOLOGY 651 | Conservation Biology | 3 |
| BOTANY/F\&W ECOL/ ZOOLOGY 672 | Historical Ecology | 2 |

## CLIMATE

Code Title Credits
ENVIR ST/ATM OCN/ Climate and Climate Change 3

GEOSCI 102

| ENVIR ST/ | Global Change: Atmospheric Issues | 2-3 |
| :--- | :--- | :--- |
| ATM OCN 171 | and Problems |  |


| A A E 246 | Climate Change Economics and <br> Policy | 3 |
| :--- | :--- | :---: |
| GEOG 321 | Climatology | 3 |

ENVIR ST/ATM OCN/ Climatic Environments of the Past 3 GEOG/GEOSCI 335
ENVIR ST/ATM OCN/ Global Warming: Science and 3
GEOG 332 Impacts
ENVIR ST $349 \quad 3$
GEOG/GEOSCI 420 Glacial and Pleistocene Geology 3
ATM OCN 425 Global Climate Processes 3
M E 466 Air Pollution Effects, Measurements 3
and Control
ENVIR ST/ Scientific Background to Global 3
$\begin{array}{lll}\text { PHYSICS 472 } & \text { Environmental Problems } & \\ \text { ENVIR ST/ } & \text { Bioclimatology } & 3\end{array}$
ATM OCN 520
ATM OCN 522 Tropical Meteorology 3
GEOG/GEOSCI 523 Quaternary Vegetation Dynamics 3
GEOG/GEOSCI 527 The Quaternary Period 3
ENVIR ST/ATM OCN/ Past Climates and Climatic Change 3
GEOG 528
ENVIR ST/ Atmospheric Dispersion and Air 3
ATM OCN 535 Pollution

## ENERGY

| Code | Title | Credits |
| :--- | :--- | ---: |
| E C E 356 | Electric Power Processing for | 3 |
|  | Alternative Energy Systems | 3 |


| ENVIR ST/N E 373 | Nuclear Energy and the <br> Environment | 3 |
| :--- | :--- | ---: |
| ENVIR ST/ | Energy Resources |  |
| GEOSCI 411 | Biorefining: Energy and Products <br> from Renewable Resources | 3 |
| BSE 460 | Thermal Systems Modeling |  |
| ME 461 | Air Pollution Effects, Measurements <br> and Control | 3 |
| M E 466 | Atmospheric Dispersion and Air | 3 |
| ENVIR ST/ | Pollution | 3 |
| ATM OCN 535 | Energy Markets | 3 |
| ENVIR ST/A A E/ <br> CIV ENGR/ | URB R PL 561 Energy Economics <br> ENVIR ST/A A E/  <br> ECON/URB R PL 671  | 3 |

## FOOD AND AGRICULTURE

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENVIR ST/ | Agroecology: An Introduction to the | 3 |
| AGROECOL/ | Ecology of Food and Agriculture |  |
| AGRONOMY/ |  |  |
| C\&E SOC/ |  |  |
| ENTOM 103 |  |  |
| FOOD SCI 120 | Science of Food | 3 |
| NUTR SCI 132 | Nutrition Today | 3 |
| SOC/C\&E SOC 222 | Food, Culture, and Society | 3 |
| HIST SCI/ C\&E SOC 230 | Agriculture and Social Change in Western History | 3 |
| AGRONOMY 300 | Cropping Systems | 3 |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| $\begin{aligned} & \text { C\&E SOC/A A E/ } \\ & \text { SOC } 340 \end{aligned}$ | Issues in Food Systems | 3-4 |
| A A E/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| CNSR SCI 360 | Sustainable and Socially Just Consumption | 3 |
| HORT 370 | World Vegetable Crops | 3 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| FOLKLORE 439 | Foodways | 3 |
| SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |
| HEALTH |  |  |
| Code | Title | Credits |
| ENVIR ST/ <br> MED HIST 213 | Global Environmental Health: An Interdisciplinary Introduction | 3 |
| AAE/AGRONOMY/ INTER-AG/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| CIV ENGR 422 | Elements of Public Health Engineering | 3 |


| CIV ENGR 423 | Air Pollution Effects, Measurement and Control | 3 |
| :---: | :---: | :---: |
| M E 466 | Air Pollution Effects, Measurements and Control | 3 |
| ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 |
| ENVIR ST/HIST SCI/ MED HIST 513 | Environment and Health in Global Perspective | 3 |
| GEN\&WS/ <br> INTL ST 535 | Women's Global Health and Human Rights | 3 |
| POP HLTH/HIST SCI/ <br> MED HIST 553 | International Health and Global Society | 3 |
| ENVIR ST/ <br> POP HLTH 560 | Health Impact Assessment of Global Environmental Change | 3 |
| CIV ENGR/ M\&ENVTOX/ SOIL SCI 631 | Toxicants in the Environment: <br> Sources, Distribution, Fate, \& Effects | 3 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 632 | Ecotoxicology: The Chemical Players | 1 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 633 | Ecotoxicology: Impacts on Individuals | 1 |
| AGRONOMY/ <br> ENTOM/F\&W ECOL/ <br> M\&ENVTOX 634 | Ecotoxicology: Impacts on Populations, Communities and Ecosystems | 1 |

## HISTORY AND CULTURE

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENVIR ST/ENGL 153 | Literature and the Environment | 3 |
| ENVIR ST/ RELIG ST 270 | The Environment: Religion \& Ethics | 3-4 |
| ENVIR ST/ <br> AMER IND 306 | Indigenous Peoples and the Environment | 3 |
| ENVIR ST 307 | Literature of the Environment: Speaking for Nature | 3 |
| ENVIR ST/ <br> HISTORY 328 | Environmental History of Europe | 3 |
| F\&W ECOL/ ZOOLOGY 335 | Human/Animal Relationships: Biological and Philosophical Issues | 3 |
| ENVIR ST/GEOG 339 | Environmental Conservation | 4 |
| ENVIR ST/ HIST SCI 353 | History of Ecology | 3 |
| ENVIR ST/HIST SCI/ RELIG ST 356 | Islam, Science \& Technology, and the Environment | 3-4 |
| ENVIR ST/ HISTORY 369 | Thinking through History with Animals | 3-4 |
| ENVIR ST/HISTORY/ <br> LEGALST 430 | Law and Environment: Historical and Contemporary Perspectives | 3 |
| ENVIR ST/ <br> PHILOS 441 | Environmental Ethics | 3-4 |
| LSC/AMER IND 444 | Native American Environmental Issues and the Media | 3 |
| ENVIR ST/ <br> SPANISH 445 | Culture and the Environment in the Luso-Hispanic World | 3 |


| ENVIR ST/ <br> F\&W ECOL/ | World Forest History | 3 | LSC/AMER IND 444 | Native American Environmental Issues and the Media | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HISTORY 452 |  |  | ENVIR ST/ | Government and Natural Resources | 3-4 |
| ENVIR ST/GEOG/ HISTORY 460 | American Environmental History | 4 | ECON/POLI SCI/ URB R PL 449 |  |  |
| HISTORY/ CHICLA 461 | The American West to1850 | 3-4 | F\&W ECOL/ SOIL SCI 451 | Environmental Biogeochemistry | 3 |
| HISTORY/ <br> CHICLA 462 | The American West Since 1850 | 3-4 | ENVIR ST/ <br> F\&W ECOL/ | World Forest History | 3 |
| ENVIR ST/ | Global Environmental History | 3-4 | HISTORY 452 |  |  |
| HISTORY 465 |  |  | ENVIR ST/GEOG/ | American Environmental History | 4 |
| ENVIR ST/GEOG/ | The Making of the American | 4 | HISTORY 460 |  |  |
| HISTORY 469 | Landscape |  | LAND ARC/ | Evolution of American Planning | 3 |
| ANTHRO 477 | Anthropology, Environment, and | 3 | URB R PL 463 |  |  |
|  | Development |  | GEOG/URB R PL 505 | Urban Spatial Patterns and Theories | 3 |
| HISTORY/ <br> AMER IND 490 | American Indian History | 3-4 | ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| ENGL/ENVIR ST 533 | Topic in Literature and the | 3 | ENVIR ST/GEOG 537 | Culture and Environment | 4 |
|  | Environment |  | GEOG 538 | The Humid Tropics: Ecology, | 4 |
| ENVIR ST/GEOG 537 | Culture and Environment | 4 |  | Subsistence, and Development |  |
| ENVIR ST/GEOG 557 | Development and Environment in Southeast Asia | 3 | ENVIR ST/GEOG 557 | Development and Environment in Southeast Asia | 3 |
| BOTANY/F\&W ECOL/ <br> ZOOLOGY 672 | Historical Ecology | 2 | ENVIR ST/ <br> SOIL SCI 575 | Assessment of Environmental Impact | 3 |
|  |  |  | URB R PL 601 | Site Planning | 3 |
|  |  |  | ENVIR ST/BOTANY/ | Conservation Biology | 3 |
| Code | Title | Credits | F\&W ECOL/ |  |  |
| ENVIR ST/GEOG/ | Soil: Ecosystem and Resource | 3 | ZOOLOGY 651 |  |  |
| SOIL SCI 230 |  |  | LAND ARC 668 | Restoration Ecology | 3 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 | LAND ARC 677 | Cultural Resource Preservation and | 3 |
| A A E/ECON/ | The Real Estate Process | 3 |  | Landscape History |  |
| REAL EST/ |  |  | ENVIR ST/ | Applications of Geographic | 3 |
| URB R PL 306 |  |  | LAND ARC/ | Information Systems in Natural |  |
| ENVIR ST/GEOG 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 | SOIL SCI 695 POLICY | Resources |  |
| ENVIR ST/ | Soils and Environmental Quality | 3 | Code | Title | Credits |
| SOIL SCI 324 |  |  | A A E/ENVIR ST 244 | The Environment and the Global | 3 |
| ENVIR ST/GEOG 325 | Analysis of the Physical | 4 |  | Economy |  |
|  | Environment |  | POLI SCI 272 | Introduction to Public Policy | 3-4 |
| ENVIR ST/GEOG 337 | Nature, Power and Society | 3 | ENVIR ST/GEOG 309 | People, Land and Food: | 3 |
| BOTANY/GEOG 338 | Environmental Biogeography | 3 |  | Comparative Study of Agriculture |  |
| ENVIR ST/GEOG 339 | Environmental Conservation | 4 |  | Systems |  |
| GEOG 344 | The American West | 3 | ENVIR ST/ | Challenges \& Solutions in Business | 3 |
| BSE/DS/ | Sustainable Residential | 3 | M HR 310 | Sustainability |  |
| LAND ARC 356 | Construction |  | ENVIR ST/GEOG 339 | Environmental Conservation | 4 |
| CNSR SCI 360 | Sustainable and Socially Just Consumption | 3 | ENVIR ST/A A E/ <br> ECON 343 | Environmental Economics | 3-4 |
| ENVIR ST/ <br> GEOSCI 410 | Minerals as a Public Problem | 3 | ENVIR ST/ <br> AMER IND/ | Managing Nature in Native North America | 3 |
| F\&W ECOL 410 | Principles of Silviculture | 3 | GEOG 345 |  |  |
| ECON/REAL EST/ | Urban and Regional Economics | 3 | ENVIR ST 349 | Climate Change Governance | 3 |
| URB R PL 420 |  |  | BSE/DS/ | Sustainable Residential | 3 |
| ENVIR ST/C\&E SOC/ | People, Wildlife and Landscapes | 3 | LAND ARC 356 | Construction |  |
| GEOG 434 |  |  | ENVIR ST/ | Environmental Law, Toxic | 2 |
|  |  |  | M\&ENVTOX/ PLPATH 368 | Substances, and Conservation |  |


| OTM 370 | Sustainable Approaches to System Improvement | 3 |
| :---: | :---: | :---: |
| F\&W ECOL 410 | Principles of Silviculture | 3 |
| ENVIR ST/HISTORY/ <br> LEGAL ST 430 | Law and Environment: Historical and Contemporary Perspectives | 3 |
| ENVIR ST/GEOG 439 | US Environmental Policy and Regulation | 3-4 |
| LSC/AMER IND 444 | Native American Environmental Issues and the Media | 3 |
| ENVIR ST/ <br> ECON/POLI SCI/ <br> URB R PL 449 | Government and Natural Resources | 3-4 |
| M E 466 | Air Pollution Effects, Measurements and Control | 3 |
| ENVIR ST/ <br> F\&W ECOL 515 | Natural Resources Policy | 3 |
| CIV ENGR 522 | Hazardous Waste Management | 3 |
| ENVIR ST/ PHILOS 523 | Philosophical Problems of the Biological Sciences | 3 |
| ECON/A A E/ <br> F\&W ECOL 531 | Natural Resource Economics | 3 |
| ENVIR ST/GEOG 534 | Environmental Governance: Markets, States and Nature | 3 |
| ENVIR ST 539 | Air Resources Science and Policy | 3 |
| ENVIR ST/C\&E SOC/ SOC 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| SOC/C\&E SOC 541 | Environmental Stewardship and Social Justice | 3 |
| ENVIR ST/GEOG 557 | Development and Environment in Southeast Asia | 3 |
| SOC/C\&E SOC 573 | Community Organization and Change | 3 |
| SOIL SCI/CIV ENGR/ M\&ENVTOX 631 | Toxicants in the Environment: Sources, Distribution, Fate, \& Effects | 3 |
| R M I 650 | Sustainability, Environmental and Social Risk Management | 3 |
| SOC/ECON 663 | Population and Society | 3 |
| ENVIR ST/ URB R PL 668 | Green Politics: Global Experience, American Prospects | 3 |
| WATER |  |  |
| Code | Title | Credits |
| ATM OCN/ GEOSCI 105 | Survey of Oceanography | 3-4 |
| ATM OCN/ SOIL SCI 132 | Earth's Water: Natural Science and Human Use | 3 |
| CIV ENGR 311 | Hydroscience | 3 |
| ENVIR ST/ ZOOLOGY 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |
| CIV ENGR 320 | Environmental Engineering | 3 |
| CIV ENGR 322 | Environmental Engineering Processes | 3 |


| SOIL SCI 322 | Physical Principles of Soil and Water Management | 3 |
| :---: | :---: | :---: |
| ENVIR ST/ <br> LAND ARC 361 | Wetlands Ecology | 3 |
| $\begin{aligned} & \text { ENVIR ST/ } \\ & \text { ZOOLOGY } 510 \end{aligned}$ | Ecology of Fishes | 3 |
| ENVIR ST/ ZOOLOGY 511 | Ecology of Fishes Lab | 2 |
| G LE/GEOSCI 627 | Hydrogeology | 3-4 |
| GLE/GEOSCI 629 | Contaminant Hydrogeology | 3 |

Certificate students may enroll in a capstone course after the majors have enrolled, and the capstone course will be allowed to count in the thematic requirement. Junior standing is required for enrollment.

## PASS/FAIL COURSES

Courses in the environmental studies major cannot be taken on a pass/ fail basis.

Courses listed under more than one category in the curriculum may be used to satisfy only one category.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Explain the social and historical processes that impact our current environments. Interpret the meanings, values, and aesthetics that are created, shaped, and revealed as humans interact with and modify the environments they inhabit.
2. Explain ecological processes and fundamental principles of environmental sciences relating to humanity's key environmental challenges of the past, present, and future.
3. Apply perspectives and techniques drawn from a coordinate major to develop interdisciplinary responses to environmental questions.
4. Recognize through critical thinking a diversity of viewpoints, ethical commitments, and disciplinary approaches to environmental concerns across various scales from the local to the global.
5. Demonstrate excellent reading, writing, communication, and research skills, both individually and in interdisciplinary teams.

## ADVISING AND CAREERS

Environmental studies students are represented in majors across campus and in most undergraduate schools and colleges. Environmental studies certificate students should utilize the career office for their home school as appropriate. All students, not just Letters \& Science students, can also benefit from SuccessWorks at the College of Letters \& Science.

## PEOPLE

A complete list of faculty and staff affiliated with the Nelson Institute is available here. (http://nelson.wisc.edu/people)

## SUSTAINABILITY, CERTIFICATE

## WHY CHOOSE A SUSTAINABILITY CERTIFICATE?

Perhaps the best reason for pursuing a sustainability certificate is a personal interest in learning practical skills to make a difference in the world-in your life, in your job, and in your community. Working toward a certificate offers students the opportunity to pursue interests that complement their major(s). For example, the interdisciplinary nature of sustainability encourages students to consider multiple perspectives. In doing so, this certificate provides a breadth of perspective highly applicable to complex problems, such as those we face in our communities, in our workplaces, and in our personal lives.

The Nelson Institute also offers a major and another certificate:
Environmental Studies Major (p. 646)
Environmental Studies Certificate (p. 1291)
The sustainability certificate can be added to any undergraduate major. Students who earn a sustainability certificate may not earn the environmental studies certificate or the certificate in engineering for energy sustainability.

## HOW TO GET IN

## AM I ELIGIBLE TO APPLY?

Undergraduate students enrolled at the University of Wisconsin-Madison may apply for the sustainability certificate if they meet two criteria:
(1) completion of one of the approved courses for the certificate with a grade of $B$ or better and (2) are not earning the environmental studies certificate, or the certificate in engineering for energy sustainability.

## HOW CAN I APPLY?

Interested? Eligible as described above? If so, fill out this application form (https://uwmadison.qualtrics.com/SE/?SID=SV_6DWJeRMGBmPHmDz). Be ready to upload an unofficial copy of your transcript and to answer two short essay questions (fewer than 500 words). The first question asks "Pick an experience from your own life, and explain how it has influenced your interest in sustainability." The second question asks "If you could change one thing in the world, what would it be and why?" You might find it helpful to draft your responses beforehand.

## REQUIREMENTS

## REQUIREMENTS FOR THE CERTIFICATE

- A 3.00 GPA in all coursework that counts toward the certificate
- 12 credits of coursework total, 3 credits from each of the four main categories
- Courses taken on a pass/fail basis will not count toward the certificate.

| ENVIRONMENTAL DIMENSION |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select minimum of 3 credits |  | 3 |
| ENVIR ST/ <br> SOIL SCI 101 | Forum on the Environment | 1-2 |
| ENVIR ST/ <br> GEOSCI 106 | Environmental Geology | 3 |
| ENVIR ST/GEOG 120 | Introduction to the Earth System | 3 |
| ENVIR ST/ILS 126 | Principles of Environmental Science | 4 |
| ENVIR ST/GEOG 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| ENVIR ST/ATM OCN/ GEOG 332 | Global Warming: Science and Impacts | 3 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (Green House Seminar only) | 1 |

## SOCIAL DIMENSION

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select minimum of 3 credits |  | 3 |
| ENVIR ST 112 | Environmental Studies: The Social Perspective | 3 |
| ENVIR ST/GEOG 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| C\&E SOC/F\&W ECOL/ <br> SOC 248 | Environment, Natural Resources, and Society | 3 |
| ENVIR ST 349 | Climate Change Governance | 3 |
| CNSR SCI 360 | Sustainable and Socially Just Consumption | 3 |
| CSCS 375 | Special Topics (Human Ecology of Food and Sustainability only) | 1-4 |
| ENVIR ST/ <br> PHILOS 441 | Environmental Ethics | 3-4 |
| SOC/C\&E SOC/ <br> ENVIR ST 540 | Sociology of International Development, Environment, and Sustainability | 3 |
| C\&E SOC/SOC 541 | Environmental Stewardship and Social Justice | 3 |


| ECONOMIC DIMENSION |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Select minimum of 3 credits |  | 3 |
| ENVIR ST/ <br> MHR 310 | Challenges \& Solutions in Business Sustainability | 3 |
| OTM 370 | Sustainable Approaches to System Improvement | 3 |
| CIV ENGR 421 | Environmental Sustainability Engineering | 3 |
| R M I 650 | Sustainability, Environmental and Social Risk Management | 3 |
| REAL EST 651 | Green - Sustainable Development | 3 |

## SYSTEMS DIMENSION

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select minimum of 3 credits | 3 |  |
| AGRONOMY 375 | Special Topics (Systems Thinking <br> only) | $1-4$ |
| ENVIR ST 506 | Modeling and Analysis of <br> EnvIR ST 402 <br>  <br>  <br>  <br> Environmental Systems <br> Special Topics: Social Perspectives <br> in Environmental Studies (Systems <br> Thinking only) | 3 |

## MISCELLANEOUS

| Code | Title | Credits |
| :---: | :---: | :---: |
| May use maximum of 3 credits to substitute for 3 credits from one of the four categories above; requires special permission |  |  |
| INTER-LS 107 | First-Year Seminar in the Social Sciences and Natural Sciences (Building a Clean Energy Future only) | 3 |
| ED POL 150 | Education and Public Policy <br> (Climate Change and Sustainability <br> Education only) | 3 |
| ILS 251 | Contemporary Physical Sciences (Radioactivity, People and the Planet only) | 3 |
| HORT/PL PATH 261 | Sustainable Turfgrass Use and Management | 2 |
| ENVIR ST/BSE 367 | Renewable Energy Systems | 3 |
| C\&E SOC 375 | Special Topics (Education for Sustainable Communities only) | 1-4 |
| ENVIR ST 400 | Special Topics in the Environment: Biological Aspects of Envir St (Food Systems, Sustainability and Climate Change only) | 1-4 |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (Systems Thinking and Sustainability or People, Environment \& Sustainability only) | 1-4 |
| INTEREGR 601 | Topics in Interdisciplinary Engineering (Interdisciplinary Design for Energy and Sustainability only) | 1-3 |

## EXCEPTIONS

Under special circumstances, students can ask to use a maximum of 3 credits from the Miscellaneous category to substitute a maximum of 3 credits from one of the four main categories. Such a request is granted on an individual basis and requires that the student explains how the substitute class assists the student in optimizing individual goals for taking the certificate in light of the student's current major and later professional aspirations. The request requires approval by the certificate's faculty advisor in coordination with the certificate's oversight committee.

Students may request to substitute a listed course with a sustainabilityrelated course that is currently not listed. Such a request requires that
students submit a written explanation of how the substitute course meets the learning outcomes of the certificate and assists them in reaching their individual goals for taking the certificate. They must also submit a syllabus of the substitute class. The substitute request requires approval by the certificate's faculty advisor.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Students will be able to identify, critically analyze, and propose solutions to the environmental, social, and economic dimensions of sustainability.
2. Students will be able to engage in systems thinking and practice so as to address the interrelationships among the three dimensions of sustainability.
3. Students will develop the capacity for an engaged life in which theory, practice, and reflection are integrated in the pursuit of a more sustainable world.

## ADVISING AND CAREERS

Nelson Institute students are represented in majors across campus and in most undergraduate schools and colleges. Sustainability certificate students should utilize the career office for their home school as appropriate. All students, not just Letters \& Science students, can also benefit from SuccessWorks at the College of Letters \& Science.

## PEOPLE

A complete list of faculty and staff affiliated with the Nelson Institute is available here. (http://nelson.wisc.edu/people)

## SCHOOL OF BUSINESS

The School of Business (http://www.bus.wisc.edu) attracts talented, energetic, creative students who are known for their strong work ethic and technical capabilities. Undergraduate students in the Bachelor of Business Administration (BBA) Program (https://wsb.wisc.edu/programs-degrees/undergraduate-bba? _ga=1.242357250.1617918104.1481300313) experience innovative coursework directed by leading scholars in business. They have opportunities to connect with outstanding alumni for applied learning, mentoring, and general life-experience lessons. Students also enjoy access to an unlimited array of activities, clubs, and life-changing opportunities.

In 1900, UW-Madison established one of the first six commerce programs in the country, beginning as a department in the College of Letters and Science, and receiving separate school status by a 1944 act of the Wisconsin Legislature. The School of Business was a founding member of Beta Gamma Sigma (https://www.betagammasigma.org),
a national professional business honor society and the Association to Advance Collegiate Schools of Business (AACSB) (http:// www.aacsb.edu), the standard-setting organization for collegiate business education. The School's undergraduate and graduate programs were reaccredited by the AACSB in 2017.

## EXPERIENCE A HIGH-CALIBER UNDERGRADUATE BUSINESS EDUCATION

The University of Wisconsin-Madison is a world-class university, nationally and internationally recognized for academic excellence, incredible students, and inspiring faculty. As a student in the undergraduate business program, you will have access to the academic and co-curricular resources of the entire university, combined with the personalized experience of being a Business Badger. It's like having the best of both worlds.

The curriculum for the Wisconsin BBA Program incorporates a foundation in the liberal arts with a business education, including focused coursework in ten majors. The liberal arts foundation-including courses taken outside of the School of Business-develops your skills in thinking critically, analyzing problems, generating creative solutions, communicating effectively, and working in diverse teams. These are all skills top employers seek when filling positions with strong potential for advancement.

Ten undergraduate business majors are offered, giving you the specialized knowledge you need to begin a great career. You will graduate with skills gained from top-notch faculty and real-world learning experiences. It all adds up to an educational experience that prepares you for career success. The School of Business also offers a certificate in business, a certificate in entrepreneurship, and a capstone certificate in actuarial science. There are also opportunities for further education through our graduate, master's, and doctoral programs.

## PREPARE FOR LEADERSHIP AND GAIN PERSONAL SKILLS

The Wisconsin BBA Program gives you far more than an academic experience. We offer a comprehensive business education that equips you to have an impact as a business professional, a volunteer, a leader in your community, and a future mentor and role model to others.

Employers value specific characteristics in their new hires, including leadership skills, confidence, communication skills, ethical decisionmaking, and experience working in diverse teams. Top companies come to the School of Business to recruit year after year because they find these qualities in Business Badgers.

## ONE-OF-A-KIND PROGRAMS

The School of Business has created groundbreaking programs to support the development of leadership, personal, and professional skills in our BBA students.

## THE ACCENTURE LEADERSHIP CENTER

The Accenture Leadership Center (https://wsb.wisc.edu/programs-degrees/undergraduate-bba/leadership-personal-development/accenture-leadership-center) (ALC) was one of the first in-house leadership centers at a U.S. business school. Today, it continues to be student-driven and alumni-supported. The center offers a variety of activities, classes, workshops, and leadership training events, including LeaderShape Institute, a six-day, intensive, leadership training. Wisconsin BBA students
graduate with the confidence, self-awareness, and professional skills to lead and inspire others.

## CHART YOUR PATH WITH THE COMPASS PROGRAM" ${ }^{\text {w }}$

Unique to the School of Business, The Compass Program is a multi-year program designed to help you chart your own path to success in the BBA program and beyond. Every Wisconsin BBA student completes this program, which supports personal, academic, career, and professional growth, as well as the development of leadership skills. Both curricular and co-curricular components are incorporated.

The Compass Program will equip you with a portfolio of businessready skills and a clear understanding of your individual values and strengths. You will have the leadership abilities, communication skills, and professionalism needed to be a well-rounded business leader.

If you want to make a positive contribution to the world around you, both in your career and beyond, The Compass Program will empower you to get there.

## DEGREES/MAJORS/CERTIFICATES

## MAJORS, SPECIALIZATIONS, CERTIFICATES, AND OTHER PROGRAMS

- Business, Certificate (p. 1313)
- Business: Accounting, BBA (p. 1308)
- Business: Actuarial Science, BBA (p. 1373)
- Business: Finance, Investment, and Banking, BBA (p. 1321)
- Business: Information Systems, BBA (p. 1362)
- Business: International Business, BBA (p. 1325)
- Business: Management and Human Resources, BBA (p. 1344)
- Business: Marketing, BBA (p. 1357)
- Business: Operations and Technology Management, BBA (p. 1365)
- Business: Real Estate and Urban Land Economics, BBA (p. 1369)
- Business: Risk Management and Insurance, BBA (p. 1377)
- Entrepreneurship, Certificate (p. 1355)
- Health Care Management, Specialization (p. 1315)
- Supply Chain Management, Certificate (p. 1316)
- Supply Chain Management, Specialization (p. 1318)


## ADDITIONAL MAJOR IN LETTERS \& SCIENCE

With approval from both the business academic dean's office and the appropriate L\&S academic department, business students may complete one L\&S major in addition to a business major. Interested students should visit this website (http://bus.wisc.edu/bba/mybiz/academics/ academic-policies-procedures/\#Letters\%20and\%20Science\%20Major).

The Certificate in Spanish Studies for Business Students (http:// guide.wisc.edu/undergraduate/letters-science/spanish-portuguese/ spanish-studies-business-students-certificate) is available through the College of Letters \& Science.

## PEOPLE

For a complete listing of BBA Program staff, please visit our directory (https://bus.wisc.edu/bba/mybiz/contact-wisconsin-bba).

## ENTERING THE SCHOOL

## A STUDENT-CENTERED ADMISSIONS PROCESS

The School of Business boasts a student body that is focused and engaged. Our highly talented undergraduate students, in turn, attract recruiting employers who return to Wisconsin year after year to fill internships and full-time positions.

Although the Wisconsin BBA Program is competitive, we do everything we can to help you prepare for the admissions process. The School of Business strives for a great fit between applicants and what we have to offer. Our focus is on partnering with you to help you make the best choice for your future.

There are three different admission paths to the Wisconsin BBA Program. Prospective high school students may be considered for Direct Admission based on their application to the University of WisconsinMadison. Students who are already enrolled at UW-Madison can apply through the pre-business admissions process. Transfer students can gain admission through the transfer admit process, which has its own distinct requirements. The right choice for you depends on your current goals and where you are in your journey to becoming a Business Badger.

For more information about these options, including directions for navigating the admissions processes, qualities the Wisconsin BBA Program is looking for in applicants, and tips for submitting a competitive application, please visit the Wisconsin BBA Program website (https:// wsb.wisc.edu/programs-degrees/undergraduate-bba/admissions).

Transfer applicants (https://wsb.wisc.edu/programs-degrees/ undergraduate-bba/admissions/transfer-students) should visit the School of Business website to determine which process fits their situation.

Questions along the way? We're here to help. Reach out to a Wisconsin BBA Student Ambassador or contact the BBA Program Office.

## WISCONSIN EXPERIENCE

## INTEGRATE CLASSROOM LEARNING WITH DIRECT EXPERIENCE

Wisconsin BBA students are expected to apply learning inside and outside the traditional classroom in ways that have a positive impact on the world. Known as the Wisconsin Experience, this principle draws upon opportunities ranging from conducting research to embracing entrepreneurship to developing multicultural competence (https:// wsb.wisc.edu/programs-degrees/undergraduate-bba/student-life/ diversity-inclusion), on campus or through study abroad programs (https://wsb.wisc.edu/programs-degrees/undergraduate-bba/studyabroad). By applying classroom learning in leadership programs (https:// wsb.wisc.edu/programs-degrees/undergraduate-bba/leadership-
personal-development/accenture-leadership-center) or student organizations (https://wsb.wisc.edu/programs-degrees/undergraduate-bba/student-life/student-organizations), you will build your résumé and gain practical experience in using your business skills.

## POLICIES AND REGULATIONS

School of Business students as well as pre-business students are responsible for being familiar with the policies that affect them. School of Business policy is subject to change, so be sure to review this website for the most up-to-date information. Questions related to policy interpretation can be directed to your academic advisor for clarification. Please note that pre-business students are subject to the academic policies and procedures of their current school/college. In addition to the academic-related policies below, we strongly encourage prospective/pre-business applicants to review all admission policies listed on the Wisconsin BBA Admission Policies (http://bus.wisc.edu/ bba/admissions/Policies) page.

## COURSES/ENROLLMENT bUSINESS CREDIT LIMIT

Undergraduate students may not take more than 75 credits of School of Business courses.

## 10-SEMESTER RULE (REENTRY AND TRANSFER)

This explains the ten-semester rule regarding business school admissions policy.

## Students re-entering after an absence of 10 or more semesters:

A prospective business student seeking admission to the School of Business is responsible for completing all of the current School of Business admission and degree requirements that are in effect at the time of re-entry to UW-Madison.

A business student reentering UW-Madison is responsible for completing all the current School of Business degree requirements that are in effect at the time of reentry to UW-Madison and the School of Business. Students who left the institution as a business student do not need to reapply for admission to the School of Business when they return.

## Transfer Students seeking admission to the School of Business:

A transfer student whose first college entry date is ten or more semesters prior to UW-Madison matriculation must complete all of the current School of Business admission requirements that are in effect at the time of UW-Madison matriculation.

A transfer student whose first college entry date is less than ten semesters prior to UW-Madison matriculation, must complete all School of Business admission requirements that were in effect at the time of the student's first college matriculation date.

## GRADUATION

The School of Business will graduate a student at the end of the semester (spring, summer or fall) in which all BBA degree and business major requirements are complete. Graduation will not be postponed for any incomplete School of Business certificate(s), specialization(s), or honors program(s); or additional certificate(s) or major(s) outside the School of Business.

It is the student's responsibility to ensure that graduation requirements have been met. All students should regularly consult their DARS (Degree Audit Reporting System) document in conjunction with their advisor to ensure that all graduation requirements have been met.

## STUDENT RESPONSIBILITY FOR ENROLLMENT

Each student is responsible for arranging a course list that will permit satisfactory progress toward degree requirements and a class schedule that (a) avoids class and final exam scheduling conflicts, (b) avoids an excessively demanding final exam schedule, and (c) verifies registration in chosen classes.

The Office of the Registrar publishes university deadlines for adding and dropping individual courses, withdrawing (from all courses), and selection options such as pass/fail and audit. Changing enrollment can have consequences for academic standing, tuition, progress toward degree, etc. Students are strongly encouraged to consult with an academic advisor prior to initial enrollment and before making any changes to enrollment.

## NO-CREDIT COURSES

The School of Business does not award credit for a small number of courses offered at the University of Wisconsin-Madison. Students who take these courses and are subsequently admitted to the School of Business will have the credit removed upon admission. This list is specific to students admitted to the School of Business and is in addition to all applicable university credit policy.

## The list of no-credit courses is as follows:

- Failed courses (grade of " $F$ ")
- Repeated courses (except where a repeat is allowed)
- Courses for which a student may not receive credit because of a previously completed course (as indicated in the Course Guide)
- ACCT I S 300 Accounting Principles
- I SY E 313 Engineering Economic Analysis
- CNSR SCI 275 Consumer Finance
- CNSR SCI 665 Household Risk Management

Being enrolled in any of the above courses could impact your application to the School of Business. Before enrolling in and taking any of the above courses, please consult your academic advisor.

## PART-TIME ENROLLMENT

To maintain full-time standing, students must be enrolled in 12-18 credits.

Undergraduate students who are considering dropping below full time (less than 12 credits) should make sure they know how it will affect their status. Students are responsible for knowing how part-time status will affect them. Below are some of the more common scenarios to explore before dropping credits:

## International Students:

Dropping below full time as an international student can have serious consequences, up to and including deportation. Please be sure to check with the International Student Services Office before dropping below 12 credits.

## Scholarships, Grants, and Other Awards:

Depending on the conditions of the scholarship, a student may be required to be full time in order to remain eligible for an award. Be sure to check the stipulations for any awards you have received.

## Financial Aid:

Be sure to check with the Office of Student Financial Aid to find out if being part time will affect your financial aid package.

## Tuition Refunds:

Depending on when the credits are dropped, you may be eligible for a tuition refund. Check the registrar's website for information about refund deadlines.

## Athletes:

Varsity athletes are governed by Big Ten and NCAA rules that do not allow them to drop below full time. Be sure to check with your coach and athletic advisor before dropping below 12 credits.

## Degree Completion:

Taking fewer credits or courses than anticipated may delay your graduation. Be certain that if you drop a course, you will still be able to complete all required courses within your desired timeline. If you are not sure, please see your academic advisor.

## PASS/FAIL

Undergraduate business students who are in good academic standing (i.e., not on probation) may take only one (1) course as pass/fail per semester including the summer session. A maximum of 16 total credits may be completed as pass/fail to count toward completion of the 120 degree credits required for the BBA.

The pass/fail privilege is for a non-business elective course. The following courses cannot be taken pass/fail:

- All business courses including those designated as "meets with," "cross-listed," and those taken during study abroad programs
- Any requirement for the business major or degree, including, but not limited to, pre-business and liberal studies requirements

Note: It is the responsibility of the student to check requirements and policies for non-business majors and certificates prior to requesting the pass/fail privilege.

The pass/fail grade will not be included when computing your GPA, but the pass/fail credits with S (Satisfactory) grades will apply toward graduation. S is the grade for A to $\mathrm{C} ; \mathrm{U}$ (Unsatisfactory) is the grade for D and $F$.

Students must complete a minimum of 12 graded credits each semester in order to be eligible for the dean's list.

In order to apply for the pass/fail privilege, students must submit an online request by following the directions below:

- Sign in to your My UW page, and click on the Student Center link.
- Click on Course Enrollment on the left hand side under Academics.
- Select the upper right hand tab entitled "term information."
- Click on Course Change Request.
- After you select the term, you will see a list of your current courses.
- Check the box to the left of the course that fulfills the non-business elective course requirements as seen above. A list of options will appear.
- Select the "Add Pass/Fail" box.
- Please disregard the message that says "print and obtain necessary signatures to complete this process." You do not need to do this.
- Scroll down and click Save.
- Your request is then sent directly to the BBA Advising Center. You will be notified by email whether or not your request has been approved.

Please complete the online pass/fail form by the deadline. See the 0 (http://www.registrar.wisc.edu)ffice of the Registrar website (https:// registrar.wisc.edu) for deadline information.

Once the student has submitted the form, the course may not be changed from pass/fail back to a conventionally graded course after the established deadline. Once a pass/fail grade is recorded as S or U , it cannot be changed to a letter grade.

## PHYSICAL EDUCATION/DANCE/KINESIOLOGY

Students are allowed a total of 8 degree credits of physical education/ dance/kinesiology toward a BBA degree.

## REPEATING A COURSE

Students thinking about repeating a course should talk with their advisor. Students must do all the work in the repeated course, including laboratory; attend regularly; participate in class discussions; and take examinations. Students will earn a final grade in the course. Such credits are indicated with an X on the transcript. Students should know that:

- the original grade still counts in GPA and remains on the transcript;
- credits in the repeated course do not count toward the degree, unless the course was failed the first time;
- grade points in the repeated course do count toward calculation of cumulative GPA;
- credits carried on courses being repeated count toward the maximum credits permitted in a semester.

Special note: Students cannot take more than one Communication Part A course for degree credit.

Transfer students must be particularly careful to avoid taking courses on the UW-Madison campus that duplicate courses taken at another school. Credit will not be given twice for the same or similar courses, nor will credit be given for a lower-level course in a sequence if students have already received credit for a higher-level course in that sequence. Students should carefully check the Evaluation of Transfer Credits prepared by the UW-Madison Office of Admissions and Recruitment and should consult with their advisor. Duplicate courses may include transfer, Farm and Industry Short Course, and Advanced Placement credits coming in as course equivalents.

## RESIDENCY FOR DEGREE

Students admitted to the Wisconsin BBA at UW-Madison who transfer from another college or university must complete a minimum of 30 credits in business courses. These courses must be offered by the School of Business and taken as a UW-Madison student to satisfy degree requirements for the BBA. Students can use a maximum of two courses taken at another school to satisfy requirements of the Wisconsin BBA major that are not part of the Wisconsin BBA core. Individual departments may have a more restrictive policy on transfer courses.

## WITHDRAWAL

A student who finds it necessary to withdraw during a semester or summer session must drop all their courses and complete the online
withdrawal request in the Student Center. Failure to do so may result in a recording of Failure for all courses and a "may not continue" action. Any student may withdraw with permission and without grades being recorded at any time up to the last three weeks of a semester or up to the last two weeks of a summer session.

## COURSES SCHEDULED FOR FEWER THAN 15 WEEKS

Deadlines for sessions and modular courses are listed on the Office of the Registrar's website.

## FIRST-YEAR REQUIREMENTS (FRESHMAN DIRECT ADMIT STUDENTS ONLY) ACADEMIC PROBATION POLICY

Direct Admit students will be held to the same academic probation policy as all other business students. The policy is as follows:

Students admitted to the School of Business must maintain all of the following GPA minimums:
2.00 cumulative GPA on all UW-Madison coursework
2.00 semester GPA for each semester
2.00 GPA on business/economics coursework
2.00 GPA on all coursework taken since admission to the School of Business

If a student fails to meet any of these standards, the student will be placed on academic probation. Students continuing on probation for a second, consecutive semester will be placed on strict probation. Students who do not clear the GPA minimums after being placed on strict probation will be placed on academic suspension/dropped from the university.

Students whose GPA places them in dropped status may submit an appeal requesting immediate readmission to the university or reapply on probationary status after a minimum one-semester hiatus.

A student will be cleared of probationary status at the end of the semester or summer session when all of the above conditions are met and the student's record contains no grade of incomplete.

## ACADEMIC PROGRESSION REQUIREMENTS \& POLICIES

To progress in the BBA program after direct admission, students must complete the following requirements after their first two semesters of residency at UW-Madison:

1. Students must complete a minimum of 24 degree credits in residence.
2. Students must complete the following requirements through successful completion of a course, placement test, transfer credit or test credit:

- Communication Part A (complete one):
- ENGL 100 Introduction to College Composition (3 cr)
- COM ARTS 100 Introduction to Speech Composition (3 cr)
- ESL 118 Academic Writing II (3 cr), non-native English speakers only
- Calculus (complete one):
- MATH 211 Calculus (5 cr)
- MATH 217 Calculus with Algebra and Trigonometry II (5 cr) (must complete MATH 171 first)
- MATH 221 Calculus and Analytic Geometry 1 (5 cr)
- Economics (complete one):
- ECON 101 Principles of Microeconomics (4 cr)
- ECON 111 Principles of Economics-Accelerated Treatment (4 cr, Honors course)
- Psychology
- PSYCH 202 Introduction to Psychology (3 cr), Introduction to Psychology
- Business course for first-year students
- GEN BUS 110 Personal and Professional Foundations in Business ( 1 cr ) (this course is not repeatable)


## Monitoring and communication after fall semester

First-year progression progress will be monitored after the fall semester. Students in jeopardy of not meeting progression requirements after the first semester will receive notification and be required to meet with advisor. This is simply the warning stage.

## Action for students who did not meet the First-Year Progression Requirements

Students who do not meet progression requirements after the first year will receive an enrollment hold. To remove the enrollment hold, student who did not meet first-year progression requirements must submit an appeal (see below) and meet with their academic advisor in the BBA Program.

## BBA FIRST-YEAR PROGRESSION APPEAL PROCESS

Students who will not meet progression requirements due to University of Wisconsin placement and/or assessment tests (math and ESL) may submit an appeal requesting an extension if they are making satisfactory progress in the degree program. Students who will not meet progression requirements as a result of extenuating circumstances may also submit an appeal for an extension.

The consideration process includes review of a written statement, rigor of completed courses, level of campus engagement, grade trends, a plan for completion of progression requirements and/or documentation supporting extenuating circumstances. Extensions will be evaluated only in cases where it is possible during the extension to meet GPA requirements, degree credit minimums and course requirements for progression.

## EXAMS

## FINALS

## General Info/Schedule:

Final exam times are automatically assigned for both fall and spring semesters. Final exam times can be found in the Student Center at MyUW.

## Make-Up Final Exams:

Make-up exams may not consist of more than $10 \%$ of the total number of students enrolled. If an instructor needs to give a make-up to more than $10 \%$ of students enrolled, they must obtain the dean's written approval.

## Student Conflicts:

Students should attempt to avoid having more than two exams within 24 hours. If a student has more than two exams in 24 hours, the instructor may-but is not required to-offer a make-up final exam or allowable alternative. However, if a student has two exams at the same time and date, one instructor must offer a make-up final exam or allowable alternative.

## MIDTERMS

The department chairs have approved this midterm policy.
The School of Business discourages giving exams outside of regularly scheduled class periods. Exams given outside class-for example, in the evenings-inevitably create conflicts for students who are taking other classes at that time. This problem with conflicts is getting more common as departments are using all available times-especially late in the afternoon and evenings-for scheduling classes.

Exams must be scheduled for either 5:30-7 p.m. or 7:15-9:15 p.m. This allows students with classes that end at 5:15 to make the exam. Any exam longer than 90 minutes should be given in the 7:15-9:15 p.m. time period to conform to university policy. This policy is consistent with the out-of-class exam policy passed by the faculty senate on May 10, 1982.

Any student that has another class that meets at the time the out-ofclass exam is scheduled must be given the opportunity to take a make-up at a time convenient for the student.

Instructors of daytime courses who plan to give evening mid-term exams must footnote such intentions in the Schedule of Classes so students will be aware of potential conflicts with evening courses or other commitments. If the possibility of evening exams is not mentioned in the Schedule of Classes, it is usually not a good idea to try to schedule one unless every student agrees. If any conflicts arise, instructors who schedule evening exams should accommodate students with unavoidable conflicts. Whenever possible, times and/or days of evening exams should also be footnoted.

## Student Conflicts:

Students should attempt to avoid having more than two exams within 24 hours. If a student has more than two exams in 24 hours, the instructor may-but is not required to-offer a make-up exam or allowable alternative. However, if a student has two exams at the same time and date, one instructor must offer a make-up exam or allowable alternative.

## GRADES

## aCADEMIC PROBATION

Students admitted to the School of Business must maintain all of the following GPA minimums:

- 2.00 cumulative GPA on all UW-Madison coursework
- 2.00 semester GPA for each semester
- 2.00 GPA on business/economics coursework
- 2.00 GPA on all coursework taken since admission to the School of Business

Failure to meet any of these standards will result in probationary status.
A student will be cleared of probationary status at the end of the semester or summer session when all of the above conditions are met and the student's record contains no grade of incomplete.

Students continuing on probation for a second, consecutive semester will be placed on strict probation. Students who are not removed from strict probation after one semester will be dropped from enrollment in the School of Business (and UW-Madison) for one semester. Students whose GPA places them in dropped status may reapply on probationary status (after a one-semester hiatus) if they can demonstrate the ability and desire to devote sufficient energy to scholastic work. To reapply,
students may complete a reentry application through the Office of Admissions and Recruitment.

GPA deficiencies causing probationary status cannot be removed through coursework at another university or through correspondence study.

## DEAN'S LIST

Business students who achieve a grade point average of 3.75 for any semester in which they complete 12 graded degree credits will have their names on the dean's list. A permanent record of this achievement is entered on the student's transcript. Students with I, P, or U on their grade report will automatically be ineligible for the dean's list. Subsequent academic action may change eligibility.

## GRADE APPEAL

If a student is dissatisfied with a grade received in a School of Business course, the following procedure must be followed should the student wish to appeal the grade.

1. The student will first discuss the grade appeal with the instructor of the course.
2. If the student and instructor cannot come to an agreement, the student will provide a formal written request for grade appeal to the associate dean in charge of the relevant program. The written request must include the class, instructor, grade received, date and conclusion of meeting with instructor, and the specific reason(s) for appealing the grade.
3. The associate dean will forward the appeal request to the chair of the department which houses the course in question. The department chair will perform the due diligence necessary (including, but limited to, meeting with the instructor and student) to assess the merits of the appeal request and will provide a decision in writing to the associate dean.
4. The associate dean will communicate the decision to both the student and instructor.
5. Should the student wish to appeal the decision further, the associate dean will perform the due diligence necessary (including, but limited to, meeting with the chair, instructor, and student) to assess the merits of the appeal request. The associate dean has the discretion to review not only the process that was undertaken in the first review, but also the earlier decision. The associate dean will provide a decision in writing to the chair, instructor, and student.
6. The instructor will take action if needed.

## GRADING POLICY

## Effective Fall Semester 2009:

Core Classes: The mean grade should be no higher than 3.0 in the following undergraduate classes:

1. ACCT I S 100 Introductory Financial Accounting
2. GEN BUS 301 Business Law, GEN BUS 303 Business Statistics, ACCT I S 211 Introductory Managerial Accounting, FINANCE/ ECON 300 Introduction to Finance, MARKETNG 300 Marketing Management, M H R 300 Managing Organizations, OTM 300 Operations Management, R M I 300 Principles of Risk Management
3. Exempt from this requirement is GEN BUS 300 Professional Communication
4. Non-Core Classes: For all other undergraduate courses with class numbers below 600 and 15 or more students enrolled, the mean
grade should be no higher than 3.3 and the maximum percentage of As is $30 \%$.

## GRADUATING WITH DISTINCTION

The Office of the Registrar compiles a preliminary list of business students eligible for distinction. These students are eligible to wear an honors stole with their commencement attire. The BBA Advising Center will notify eligible students via email 2-3 weeks before the commencement ceremony.

Distinction is awarded to graduated business students who meet the following criteria:

- At least sixty (60) credits earned (in residence) at UW-Madison
- A cumulative UW-Madison GPA in the top twenty percent (20\%) of the graduating business class

Please note that students on the preliminary list for distinction may or may not receive distinction. The distinction designation is subject to change and is dependent upon official graduation date (semester), number of students graduating, and final grade calculations, including last semester and in-progress courses.

Students who graduate with distinction are eligible to wear a cardinal stole with their commencement attire. The stoles can be obtained from the University Bookstore with a deposit and do not need to be ordered in advance. More information on graduation attire can be found on the site of the Secretary of the Faculty.
"Graduated with Distinction" is notated on official transcripts only.

## INCOMPLETE POLICY

An incomplete may be reported for a student who has carried a subject with a passing grade until near the end of the semester and then, because of illness or other unusual and substantiated cause beyond his/ her control, has been unable to take or complete the final examination or to complete some limited amount of term work. An incomplete is not given to a student who stays away from a final examination unless the student proves to the instructor that he or she was prevented from attending as indicated above. In the absence of such proof, the grade shall be F; even with such proof, if his/her work has convinced the instructor that he/she cannot pass, the grade shall be F.

If an admitted business student earns an incomplete, the work for that course must be completed by the end of the student's next semester in residence (exclusive of summer sessions). Incompletes incurred in the last semester of residence may not be removed after five years of absence from the university without special advance permission of the associate dean. Such incompletes must remain on the record with grades of Pl and do not lapse into failures.

See the Office of the Registrar's website (http://registrar.wisc.edu/ incompletes.htm) for the full incomplete policy, including the policy for students in other schools/colleges.

## MAJOR DECLARATION

## LETTERS AND SCIENCE MAJOR

Business students may declare one additional major in the College of Letters \& Science. Additional majors in a school/college other than the School of Business or College of Letters \& Science may not be declared. Business students who gain approval to complete an additional major in L\&S must complete major requirements prior to or concurrently with
their business major/degree. Students who have fulfilled the major and degree requirements for the BBA will be graduated, even if L\&S major requirements have not been completed.

## To declare a second L\&S major:

Meet with the major advisor in the College of Letters \& Science and complete the major declaration form (https://kb.wisc.edu/images/ group86/24550/LSMAJORDECFORM.pdf) or other document students use to declare a major in the department. The form or document must have L\&S academic advisor's signature, and it must be filled out completely. Deliver the completed form to the BBA Advising Center (3150 Grainger Hall). Incomplete or inaccurate forms will not be processed. You will be notified via email if the form is incomplete or if your request has been approved.

Meet regularly with your School of Business academic advisor and College of Letters \& Science major advisor regarding major and/or degree requirements

## To cancel a second L\&S major:

Students interested in cancelling their L\&S major must go to the department to undeclare their additional major. Usually students must fill out a Major Declaration/Cancellation Form provided by the department advisor. The form must be signed and dated by both the student and a representative of the major department. The form must include the name phone, and email address of the departmental faculty or staff advisor associated with the major. Turn the original form in to the BBA Advising Center (3150 Grainger Hall).

## SCHOOL OF BUSINESS MAJOR

All students admitted to the School of Business are required to declare a major before or upon the completion of 86 credits (including credits from transfer, AP, test, study abroad, or retroactive credits). Business students may declare or cancel any of the 10 majors offered by completing the major declaration form.

Students interested in declaring a certificate offered through the School of Business should follow the procedures outlined on the Certificates page for the appropriate program

Please note that first-year students will not receive an enrollment hold in their first two semesters on the UW-Madison campus. In addition, firstsemester transfer students will also not receive an enrollment hold.

## COURSES AT OTHER INSTITUTIONS COMMON GUIDANCE FOR OFF-CAMPUS COURSEWORK

Wisconsin BBA students are advised to take no more than two courses in their major (or per major if pursuing multiple majors) off-campus. This guidance includes courses taken for transfer credit at another accredited institution as well as courses taken on a School of Business or UW-Madison-sponsored study abroad program. Due to the international emphasis of the major, there is no limit on the number of courses taken towards the International Business major while on a School of Business or UW-Madison-sponsored study abroad program. The academic departments of the School of Business strongly recommend that all BBA students complete the core or initial course in their major(s) on campus.

While BBA students are able to take courses off-campus, the BBA Program reminds students that they should plan to complete all prerequisites for any off-campus course, regardless of its place in the BBA curriculum, prior to taking the course off-campus. Attention to these prerequisites is crucial to ensuring BBA students are prepared for their
coursework whether it is taken on or off campus. Advance academic planning is an integral part of a student's success and ability to remain on track to graduate.

## CONCURRENT ENROLLMENT

School of Business students are not allowed to enroll concurrently at other accredited post-secondary institutions during any term in which they are enrolled at UW-Madison (fall, spring). This includes enrollment in online, distance education, and physical attendance classes (exceptions may be made for UW-Extension/Independent Learningsee below). Please be aware that if you are taking a course at another university that begins in the summer and continues through the fall and/ or spring semester, it will fall into this category of concurrent enrollment, regardless of when the course will be completed

Students are permitted to enroll in more than one university during summer sessions only.

If it is discovered that a student violated the above policy, this credit will be removed from the student's record. It is the responsibility of the student to verify with their academic advisor that they are not in violation of this policy.

## INDEPENDENT LEARNING

UW Independent Learning (UW IL) is a branch of UW Extension that offers online and print-based courses. Courses taken through UW Independent Learning are considered concurrent enrollment and require special permission to enroll in the fall, spring or summer.

Students interested in taking a course through UW IL should meet with an academic advisor. If the advisor and student agree this is a good option the student should follow these steps to request permission for concurrent enrollment and request a tuition waiver (if applicable). Forms should be returned to 3150 Grainger.

- Fill out a Petition/Special Consideration Request requesting permission for concurrent enrollment with UW Independent Learning. Be sure to include which class you intend to take.
- Students with full time status at UW-Madison may request a tuition waiver for UW Extension Independent Learning Courses provided that the following conditions are met:
- The student requests the waiver and enrolls in the course by the UW-Madison add deadline (second Friday of the semester).
- The course is taken during the regular academic session
- The course is completed during the term for which the tuition waiver is requested.
- The student does not exceed 18 credits total between the two campuses.

Students are responsible for the \$75 administrative fee for enrolling in a UW IL course.

The minimum length of time to complete an IL course is typically three months. Foreign language courses often require more time. Students should take this into consideration as they are planning the completion of their degree.

## TRANSFER CREDITS

UW-Madison students may choose to take courses off campus during the summer and potentially transfer credit to UW-Madison. The UWMadison Office of Admissions handles all transfer course equivalencies. Please note that UW-Madison students may not take courses at another
institution during the fall or spring semester if they are concurrently taking courses at UW-Madison (see concurrent enrollment policy). Students may take no more than one course off-campus during winter recess provided the winter term does not conflict with the UW-Madison fall or spring terms. Students interested in earning transfer credit for a non-UW study abroad program must work with UW-Madison's International Academic Programs well in advance.

It is highly recommended that students do not take a course unless they know in advance that it will transfer to UW-Madison for credit.

Transferring courses from a Wisconsin public or technical college? Use the Transfer Information System to determine course equivalencies.

## Transferring courses from select technical colleges in Minnesota and Illinois?

Use the Transfer Equivalency Database to determine course equivalencies from common feeder technical colleges in neighboring states.

## Transferring courses from any other institution?

The UW-Madison Office of Admissions offers a Course Equivalency
Service to students who wish to submit courses for transfer equivalency prior to taking a course off campus during the winter or summer terms.

## Transfer Credit Process

- Review your DARS report and consult your academic advisor to see what you still need to take and whether the course(s) would be a good option to take at another institution over the summer. It is not advised to take your business major courses off campus.
- Research course options at the institution where you plan on taking the course(s).
- Determine equivalency (use resources listed above).
- Apply as a "special" or "guest" student at the institution you plan on attending.
- Enroll in the course and pay tuition directly to the institution you are attending.
- After the course is complete, have the institution send an official transcript to the UW-Madison Office of Admissions and Recruitment (702 West Johnson Street, Suite 1101, Madison, WI 53715-1007).


## REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business.

## PRE-BUSINESS REQUIREMENTS

The following requirements are for students who began coursework at any institution in summer 2008 and after. Students who began coursework before summer 2008 should consult their academic advisor.

Students need to complete or be in the process of completing these courses in order to apply to the School of Business (with the exception of Direct Admit Students (p. 1299)).

| Code Title | Credits |
| :--- | ---: |
| Communication Part A | $0-3$ |
| Complete one course designated Communication Part A, <br> preferably: |  |


| COM ARTS 100 | Introduction to Speech Composition |  |
| :---: | :---: | :---: |
| ENGL 100 | Introduction to College Composition |  |
| ESL 118 | Academic Writing II |  |
| Completion of Communication Part A based on UW Placement Test |  |  |
| Economics |  |  |
| $\begin{aligned} & \text { ECON } 101 \\ & \quad \text { or ECON } 111 \end{aligned}$ | Principles of Microeconomics <br> Principles of Economics-Accelerated Treatment | 4 |
| Psychology |  |  |
| PSYCH 202 | Introduction to Psychology |  |
| Calculus |  |  |
| Select one of the following: 5 |  |  |
| MATH 211 | Calculus |  |
| MATH 217 | Calculus with Algebra and Trigonometry II |  |
| MATH 221 | Calculus and Analytic Geometry 1 |  |

Total Credits

## LIBERAL STUDIES REQUIREMENTS

Liberal studies requirements must be completed prior to graduation. Students may not use courses offered by the Department of Economics or by the School of Business to fulfill liberal studies requirements. In addition, a single course may not be used to fulfill multiple liberal studies requirements.

Code

Title

Credits

Communication Part B
Select one 3 (or more) credit course designated Comm B
(b)

Literature
Select one 3 (or more) credit course designated Literature
(L)

Science
Select six credits designated Biological, Natural or 6
Physical Science. Courses that MAY NOT COUNT
include: Courses in Computer Science, Mathematics,
Statistics, Economics, or courses that are also designated
Humanities or Social Science.
Foreign Language
Select 3 units (or more) of the same foreign language ${ }^{1} \quad 0-12$
Ethics
Select one of the following: 3-4
PHILOS 241 Introductory Ethics
PHILOS 243 Ethics in Business
PHILOS 341 Contemporary Moral Issues
PHILOS/ Environmental Ethics
ENVIR ST 441

## Humanities

Select one 3 (or more) credit course designated 3
Humanities (H or Z) ${ }^{2}$

## Ethnic Studies

Select one 3 (or more) credit course designated Ethnic 3
Studies (e)
Social Science

| Advanced Math/Statistics |  |  |
| :---: | :---: | :---: |
| Select one of the follow | wing: ${ }^{3}$ | 3-4 |
| GEN BUS 307 | Business Analytics II |  |
| STAT/MATH 310 or STAT 312 | Introduction to Probability and Mathematical Statistics II <br> Introduction to Theory and Methods of Mathematical Statistics II |  |
| ECON 410 | Introductory Econometrics |  |
| Total Credits |  | 7-42 |

1 One unit of foreign language equals one high school year or one college semester. Therefore, some students may have this requirement satisfied upon matriculation if they took 3 or more years of the same language in high school.
2 Note: If a student completes an additional Literature (L) course, this requirement will be satisfied
3
This requirement also satisfies a business prep requirement (more information about this is below), which is required of all business students.

## BUSINESS FOUNDATION REQUIREMENTS

All degree candidates in the Wisconsin BBA are required to complete foundation courses in business and economics. The foundation courses, in conjunction with a broad educational base, are designed to integrate the student's specialized training with an understanding of the structure and functions of business and its role in the larger social system
Business foundation courses make up the business preparatory, core, and breadth requirements. During the first semester after admission to the School of Business, students must complete a one-credit course that is the foundation of the Compass Program ${ }^{\text {TM }}$.

## BUSINESS PREPARATORY REQUIREMENT

Preparatory business requirements are typically taken within the first two semesters after admission to the Wisconsin BBA.

All students must take the following:


## BUSINESS ANALYTICS REQUIREMENT ${ }^{1}$

The business analytics requirement is part of the business prep courses, but has 3 options to choose from. Most students complete Option 1.

GEN BUS 306 \& GEN BUS 307 should be taken as soon as possible and in subsequent semesters. Actuarial science and economics majors will fulfill Option 2 or 3 . Number of credits for this requirement varies between options:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Option 1: |  |  |
| GEN BUS 306 | Business Analytics I |  |
| \& GEN BUS 307 | and Business Analytics II | 6 |
| Option 2 (Actuarial Science Majors ONLY): |  |  |
| This is a 3-course sequence. Choose one course from |  |  |
| each of the three options: | 9 |  |


| MATH/STAT 431 | Introduction to the Theory of <br> Probability <br> or STAT/ <br> MATH 309 <br> or STAT 311 |
| :--- | :--- |
|  | Introduction to Probability and Mathematical <br> Statistics I <br> Introduction to Theory and Methods of <br> Mathematical Statistics I |
| STAT/MATH 310 | Introduction to Probability and <br> Mathematical Statistics II |
| or STAT 312 | Introduction to Theory and Methods of <br> Mathematical Statistics II |
| ACT SCI 654 | Regression and Time Series for <br> Actuaries |
| or ACT SCI 655 | Health Analytics |
| Option 3 (EconomicsDouble Majors ONLY): <br> ECON 310Statistics: Measurement in <br> \& ECON 410Economics <br> and Introductory Econometrics |  |

1 The second course of each sequence (GEN BUS 307, ECON 410, STAT/MATH 310, or STAT 312) also satisfies the advanced math requirement from Liberal Studies Requirements.

## BUSINESS CORE REQUIREMENT

Students in the Wisconsin BBA must complete the preparatory business requirements (above) and at least two Core Business courses prior to enrolling for Advanced Business Courses. All Core Business courses should be completed by the end of a student's junior year. Advanced business courses are all courses at the 300 level or above, and we require all students to take four:

| Code | Title | Credits |
| :--- | :--- | ---: |
| FINANCE/ECON 300 | Introduction to Finance | 3 |
| MARKETNG 300 | Marketing Management | 3 |
| M H R 300 | Managing Organizations | 3 |
| OTM 300 | Operations Management | 3 |
| Total Credits | 12 |  |
| Business Breadth Requirement |  |  |
| The Business Breadth Requirement includes Business Law, and two <br> Breadth Courses that are outside of a student's major in a different <br> business major department. |  |  |


| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN BUS 301 | Business Law | 3 |
| Business Breadth Course | 3 |  |

Business Breadth Course ${ }^{1}$
Total Credits ${ }^{2}$
1
Students must complete two business courses (3 credits each) that are outside their major area from two separate School of Business departments. Courses taken to satisfy this requirement may not include preparatory or core courses, courses required by or crosslisted with the student's major, general business courses, any 399 (Readings and Research) course, or business courses cross-listed with foreign language departments. Courses taken at another institution must be directly equivalent to a UW-Madison business course and title (i.e. not elective credit which is sometimes given an X10 course number).
2
Students with two majors in business or students with one major and a specialization in supply chain management need only one course ( 3 credits) outside their majors/supply chain management specialization to satisfy this requirement. Students with three or more majors (in the business school) or two majors and the supply chain specialization are not required to take additional breadth courses.

## CREDITS FOR BBA DEGREE CREDIT REQUIREMENTS

Candidates for the Wisconsin Bachelor of Business Administration degree (BBA) must meet all of the following credit requirements in addition to completing the required coursework.

## 120 Degree Credits

All students who plan to graduate from the University of WisconsinMadison with a bachelor's degree must complete a minimum of 120 degree credits.

## 52-52 Credit Rule

The minimum 120 degree credits required for graduation must include:

- 52 Business/Economics Credits. This includes all courses offered by, or cross-listed with, a School of Business academic department or the Department of Economics. Additional courses counting toward this requirement include: COMP SCI 301, STAT/MATH 309, STAT/ MATH 310, STAT 311, STAT 312, and MATH/STAT 431.
- 52 Non-Business/Non-Economics Credits. This includes all courses not offered by, or cross-listed with, a School of Business academic department or the Department of Economics. Additional courses that do not count toward this requirement include: COMP SCI 301, STAT/MATH 309, STAT/MATH 310, STAT 311, STAT 312 and MATH/ STAT 431. For students admitted to the WSB prior to 2008, this also excludes foreign language retro credits.


## RESOURCES

## ACADEMIC ADVISING

As a student in the Wisconsin BBA Program, you will work directly with academic advisors who will help you plan your business education every step of the way. The advisors are here to help you explore options, define goals, and accomplish what you set out to achieve during your time as a Business Badger and beyond. Academic advisors also support students in making choices about course enrollment and understanding and interpreting degree requirements and policies.

Advisors in the Wisconsin BBA Program work in partnership with you. They give you the tools and support you need to make your own decisions about the course of your education. Your partnership with the advising team begins early in your academic career at the University of Wisconsin-Madison. When you enroll in the UW-Madison, one of your first steps will be to attend Student Orientation, Advising, and Registration (SOAR), where you will have your first meeting with an academic advisor.

Admitted students check in with their academic advisor at least once a year. The BBA Advising Center also holds drop-in hours. UW-Madison students who are not yet enrolled in the Wisconsin BBA Program but who expect to apply through the pre-business admissions process (https:// wsb.wisc.edu/programs-degrees/undergraduate-bba/admissions/uw-madison-students) receive their business advising at the School of Business.

In addition to providing advising, the Wisconsin BBA Advising Center serves as the academic dean's office: interpreting policy, administering academic processes, and performing graduation checks for graduating business students. For more information, visit the advising website (http://bus.wisc.edu/bba/mybiz/advising) or contact the Wisconsin BBA Advising Center in 3150 Grainger Hall; 608-262-0471; wibbaadvising@bus.wisc.edu.

## CAREER SERVICES

The Wisconsin BBA Career Services (https://bus.wisc.edu/bba/mybiz/ careers-internships) team takes a relationship-based approach to working with students throughout the career development process and also consults with top employers to facilitate the recruitment, hiring and career readiness of our students. We offer a variety of services to undergraduate business, certificate in business, certificate in entrepreneurship, capstone in actuarial science, and master of accountancy students including 1:1 advising, career and major exploration and planning, career workshops, mock interviews, career fairs, employer information sessions, on-campus interviewing, job shadow experiences, industry connections and networking events. We will also coach you through the development of a professional resume, cover letter, networking and interviewing skills and job offer/negotiation skills. Through the exploration of your values, strengths and interests, we will help you create a career action plan early on in your collegiate experience so that you can participate in experiences both on and off campus to build your skills and readiness for the workplace or graduate study. Career planning is an ongoing process, and we are committed to helping you determine and achieve your immediate career goals and support you in developing the skills to manage a successful career throughout your lifetime.

For more information about BBA Career Services resources for students and faculty/staff, please see this page (http://bus.wisc.edu/bba/mybiz/ careers-internships).

## BUSINESS LEARNING CENTER

The Business Learning Center (BLC) provides supplemental not-forcredit tutorials, drop-in office hours, and practice materials for select business-related courses. Materials are lecture-specific and tailored to the particular course instructor and textbook in use. BLC teaching assistants are all graduate students in either business or economics.

Drop-in office hours and practice materials are available to all students enrolled in BLC-supported courses. The tutorials are an additional service that requires registration--although BLC tutorials are open to all students,
enrollment is limited and registration is required in order to attend. Courses supported through the BLC include mostly quantitative courses required for the BBA degree.

Students interested in the BLC may call 608-262-1186 for more information, or stop by the office, 2240 Grainger Hall. Please check the BLC website (http://www.bus.wisc.edu/blc) for additional information, including the online application.

## STUDENT LIFE

Wisconsin BBA student life (https://wsb.wisc.edu/programs-degrees/ undergraduate-bba/student-life) coordinates leadership and involvement opportunities for students to enhance their personal and professional skills.

The Accenture Leadership Center (ALC) offers students unique, handson opportunities to develop leadership skills through workshops, guest speaker events, leadership case competitions, and other programs. The ALC also coordinates LeaderShape Institute, an intensive, six-day offcampus leadership training program where students learn to develop a vision and work with others to bring it to life. Students interested in documenting their leadership journey, making connections between their leadership experiences, and reflecting on their leadership development can pursue the ALC Leadership Certificate.

The Wisconsin BBA Program also has its own student government, UBC (Undergraduate Business Council), to unify and represent the student voice on issues of shared governance within the school and to promote community within the BBA program. In addition, there are 40 undergraduate business student organizations, offering plenty of opportunities for students to get involved and put their leadership and collaboration skills into practice. A business student organization fair is held at the start of each semester where potential new members can meet with representatives of organizations.

The student life team also oversees the Personal and Professional Foundations in Business course that all newly admitted BBA students take and coordinates the BBA program requirements to help students develop their professional skills outside the classroom.

For more information about Wisconsin BBA Student Life, see this page (https://wsb.wisc.edu/programs-degrees/undergraduate-bba/studentlife).

## BBA INTERNATIONAL PROGRAMS

A study abroad experience (https://wsb.wisc.edu/programs-degrees/ undergraduate-bba/study-abroad) can complement and enhance every aspect of your business education. The Wisconsin BBA Program makes this opportunity possible by partnering with more than 35 of the top business schools and study abroad programs across the globe. Around 40 percent of each Wisconsin BBA graduating class studies abroad. These students regularly speak of their experience as professionally rewarding and personally transformative. A study abroad experience can be a great way to demonstrate enhanced autonomy, motivation, organization, worldview, and ability to take risks. You, too, can return from study abroad with a developed set of skills (that employers value!), a new sense of self, and a greater appreciation of cultural differences. Learn more about business study abroad opportunities here (http:// www.bus.wisc.edu/studyabroad).

## ACCOUNTING AND INFORMATION SYSTEMS

The accounting major provides a student with the foundation to excel as a certified public accountant, internal auditor, financial manager, controller, and consultant. Tools and techniques of planning, control, and decision analysis (including computer applications) are developed in broad areas such as financial and managerial accounting, taxes, consulting, cost analysis, computer auditing, and accounting systems.

## DEGREES/MAJORS/CERTIFICATES

- Business: Accounting, BBA (p. 1308)


## BUSINESS: ACCOUNTING, BBA

The accounting major (https://wsb.wisc.edu/programs-degrees/ undergraduate-bba/academics/majors/\#accounting) provides a student with the foundation to excel as a certified public accountant, internal auditor, financial manager, controller, and consultant. Tools and techniques of planning, control, and decision analysis (including computer applications) are developed in broad areas such as financial and managerial accounting, taxes, consulting, cost analysis, computer auditing, and accounting systems.

Every significant transaction in today's world requires assessing employment of money and materials. Accountants suggest the best way to manage resources or monitor and report on an organization's financial well being. Career possibilities include corporate accountant, auditor, controller, consultant, tax advisor or systems expert.

## OUR MISSION IS TO

- Serve our students, the accounting profession, academia, and other stakeholders through nationally recognized leadership in all aspects of scholarship, with an emphasis on discipline-based research.
- Provide meaningful learning experiences that engage the highest quality faculty and students who will be entering the accounting profession or the accounting academy and support the development of business professionals.
- Provide leadership and service to the academic community and policy-making bodies.


## RELATED STUDENT ORGANIZATIONS

Beta Alpha Psi (https://win.wisc.edu/organization/BetaAlphaPsi) Institute of Management Accountants (https://win.wisc.edu/ organization/imauwmadison)
National Association of Black Accountants

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

| Code Title |
| :--- |
| School of Business BBA Requirements |
| Complete requirements: $(\mathrm{p} .1305)$ |
| Pre-Business |
| Liberal Studies |
| Business Prep |
| Business Core |
| Business Breadth |

## ACCOUNTING MAJOR REQUIREMENTS

The accounting major is a total of 24 credits, distributed as follows:

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN BUS 302 | Business Organizations and <br> Negotiable Instruments | 3 |
| ACCT I S 301 | Financial Reporting I | 3 |
| ACCT I S 302 | Financial Reporting II | 3 |


| ACCT IS 310 | Cost Management Systems. | 3 |
| :--- | :--- | :--- |
| ACCT IS 340 | Accounting Systems | 3 |
| ACCT IS 406 | Advanced Financial Reporting ${ }^{1}$ | 3 |
| ACCT IS 620 | Fundamentals of Taxation | 3 |
| ACCT IS 630 | Audit and Assurance Services | 3 |

Accounting majors must maintain a minimum 2.5 GPA in business and econ courses every semester
Accounting majors must take a minimum of 18 credits of ACCT I S courses at the 301 level or higher at UW-Madison

## Total Credits

1 Students admitted to the Integrated Master's of Accountancy (IMAcc) Program (https://wsb.wisc.edu/programs-degrees/ macc/imacc-program-overview) who complete a spring semester internship must complete ACCT I S 600 and ACCT I S 601 instead of ACCT I S 406. IMAcc students who complete a summer internship will still be responsible for completing ACCT I S 406 as part of the undergraduate degree requirements and will not enroll in ACCT I S 600 and ACCT I S 601.

## RECOMMENDED ELECTIVES ${ }^{1}$

Code Title Credits
ACCT I S 603 Financial Statement Analysis 3
ACCT IS 621 Corporate and Advanced Taxation 3
The following courses are recommended as program electives outside of accounting. The student is encouraged to elect as many as a program will permit.
FINANCE/ECON 320 Investment Theory 3
FINANCE 325 Corporation Finance 3
INFO SYS/ Technology of Computer-Based 3
COMP SCI 371 Business Systems

| INFO SYS 424 | Analysis and Design of Computer- <br> Based Systems | 3 |
| :--- | :--- | :--- |
| OTM 654 | Production Planning and Control | 3 |

REAL EST/A A E/ The Real Estate Process 3

ECON/URB R PL 306
R M I $300 \quad$ Principles of Risk Management 3
1 Students who are interested in sitting for the CPA Exam may consider taking 1-2 extra accounting courses, as CPA requirements vary from state to state.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Understand the conceptual and technical knowledge foundations of financial accounting, managerial accounting, taxation, business law, and auditing.
2. Apply Generally Accepted Accounting Principles (GAAP) (and relevant assumptions, principles, and constraints) to prepare financial statements.
3. Understand that management accounting and control systems, providing financial and non-financial performance information, are integral to the successful design and implementation of an organizational strategy.
4. Interpret and validate business events and transactions through the lens of business processes and systems.
5. Demonstrate technical competence in income taxation of individuals, partnerships, corporations, and international organizations.
6. Identify the legal implications of their choices and how the law impacts their interactions with others in a business setting.
7. Explain how to complete an audit from beginning to end, applying auditing standards, assessing risk, and gathering evidence.
8. Understand how earning trust and demonstrating integrity as successful accounting professionals impact business, contracts, and capital markets, as well as society at large.
9. Understand that leadership in the field of accounting is the consistent display and communication of respect, trust, expertise and adaptability within various business relationships and contexts.
10. Engage in effective written communication practices by crafting professional memos and reports that integrate research and analysis skills, technical information, and expert writing proficiency.
11. Understand how accounting is a global practice requiring knowledge of national and international standards, the examination of sociocultural impacts within business contexts, and the ability to leverage the advantages that diversity brings to an organization.

## FOUR-YEAR PLAN

This page includes two sample four-year plans for students directly admitted into the Wisconsin School of Business from high school. The first plan represents the accounting major and the second plan represents the accounting major with the Integrated Master of Accountancy Program (IMAcc). We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

## PLAN 1: ACCOUNTING MAJOR

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 211 | 5 ECON 101 | 4 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |
| Communications | 3 GEN BUS 300 | 3 |
| A | 3 Communications <br> B | $3-4$ |
| Ethnic Studies | 12 | $13-14$ |

## Sophomore

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| ACCT I S 100 | 3 ACCT I S 211 | 3 FINANCE/ | 3 |
|  |  | ECON 300 |  |

Total Credits 108-109
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

Note: A student pursuing this plan may end up taking more credits to reach 150 total credits to be eligible to sit for the CPA exam.

## PLAN 2: ACCOUNTING MAJOR WITH IMACC

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 211 | 5 ECON 101 | 4 |
| Communications | 3 PSYCH 202 | 3 |
| A |  |  |
| GEN BUS 110 | 1 Communications | $3-4$ |
|  | B |  |


| Ethnic Studies | 3 GEN BUS 300 | 3 |  |
| :--- | :---: | :---: | ---: |
|  | 12 | $13-14$ |  |
| Sophomore |  | Credits Summer | Credits |
| Fall | Credits Spring | 3 FINANCE/ | 3 |
| ACCT I S 100 | 3 ACCT I S 211 | ECON 300 |  |
|  |  | 3 |  |
| GEN BUS 306 | 3 ACCT I S 301 | 3 |  |
| ECON 102 | $3-4$ GEN BUS 307 | 3 |  |
| MARKETNG 300 | 3 Humanities | 3 |  |
| OTM 300 | 3 M H R 300 | 3 | 3 |

## Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| ACCT I S 302 | 3 ACCT I S 310 | 3 |
| ACCT I S 620 | 3 GEN BUS 302 | 3 |
| GEN BUS 301 | 3 Business <br> Breadth | 3 |
| Science | 3 Ethics ${ }^{1}$ | 4 |
| Literature | 3 | 13 |

## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| ACCT I S 340 | 3 ACCT I S 600 | 6 |
| ACCT I S 630 | 3 ACCT I S 601 | 3 |
| Science | 3 |  |
| Social Science | 3 |  |
| Business <br> Breadth | 3 |  |

Total Credits 110-112
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

Students may direct questions about the IMAcc program to Kristen
Fuhremann (kristen.fuhremann@wisc.edu), director of the program, or their academic or career advisor.

## CAREERS

Accounting is the development and use of a system for recording and analyzing the financial transactions and financial status of an organization. Accountants are responsible for the record-keeping methods involved in making a financial record of business transactions and in the preparation of statements concerning the assets, liabilities, and operating results of a business.

Find out more about common industries for accounting and essential skills needed on the BBA Accounting website (https://bus.wisc.edu/bba/ academics-and-programs/majors/accounting).

## PEOPLE

## ACCOUNTING FACULTY AND STAFF

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## CERTIFICATION/LICENSURE

## CERTIFIED PUBLIC ACCOUNTANT (CPA)

The state of Wisconsin and most other states have passed legislation mandating that candidates sitting for the CPA exam must have completed a 150 -credit-hour program including at least the equivalent of an undergraduate major in accounting. Three advanced degree options for completing these requirements exist at the University of WisconsinMadison. They are:

1. The IMAcc (https://wsb.wisc.edu/programs-degrees/macc/ imacc-program-overview) (Integrated Master's of Accountancy) program leads to a BBA (Bachelor of Business Administration) with an accounting major and a Master of Accountancy degree. The BBA is 120 credits and the MAcc is 30 credits in this program. Students who are majoring in accounting apply for admission to this program during the spring semester of their junior year. Those who are admitted to the IMAcc program must complete a required internship during the spring semester of their senior year. Students
are encouraged to take the GMAT exam during the first semester of their senior year.
2. The BBA degree with an accounting major and an MBA (https:// wsb.wisc.edu/programs-degrees/mba/full-time) (Master of Business Administration) degree. The BBA degree is 120 credits and the MBA is a minimum of 36 credits resulting in a total of 156 credits. There is no accounting specialization track in the MBA, so graduate students must major in another area of business. Students can also satisfy the 150 credit hour requirement by completing the BBA degree with a major in accounting and 30 additional college credits in any area, including a second undergraduate major.
3. Any undergraduate degree with a MAcc degree. The graduateonly master's of accountancy degree program (GMAcc) (https:// wsb.wisc.edu/programs-degrees/macc/gmacc-program-overview) does not require an undergraduate major in accounting or in business. There are 56 credits in this program, completed over two years. Students admitted to this program are required to complete an internship during the summer between the first and second years. The GMAT exam is required for admission.

Please consult the Department of Accounting and Information Systems (https://bus.wisc.edu/knowledge-expertise/academic-departments/ accounting) for additional information.

## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022.

## BUSINESS - SCHOOL-WIDE

## DEGREES/MAJORS/CERTIFICATES

- Business, Certificate (p. 1313)
- Health Care Management, Specialization (p. 1315)
- Supply Chain Management, Certificate (p. 1316)
- Supply Chain Management, Specialization (p. 1318)


## PEOPLE

For a full list of School of Business faculty and staff, visit the school's directory (http://bus.wisc.edu/about-us/admin/faculty-staff-search).

## BUSINESS, CERTIFICATE

The Certificate in Business (https://wsb.wisc.edu/programs-degrees/ certificates/business-undergrad) (CIB) program provides non-business students the opportunity to earn a concentration in a clearly defined academic program in business. The coursework allows students to develop a foundational understanding of business and apply this to their specific field, such as international studies or engineering. In addition to careers related to their own fields, students who earn the certificate
have also found job opportunities in management, marketing, and other business fields in the past.

## HOW TO GET IN

The certificate in business is for non-business students only. An application is required to be accepted into the CIB Program. Not all students are admitted, so it is important to make your application as strong as possible. There are no specific courses that must be taken before applying. If a student chooses to take CIB courses before being admitted, the courses will fulfill requirements after admission.

## ELIGIBILITY

To be eligible to apply, students must meet the following requirements:

- 54 degree credits completed at time of application (junior standing)
- 12 GPA credits (transfer students must complete a minimum of 12 credits at UW-Madison)
- 2.75 minimum cumulative GPA (This GPA does not guarantee admission to the CIB)
- Grades and GPAs from transfer coursework do not count toward CIB admission
- Currently enrolled UW-Madison student
- Undergraduate, degree-seeking student (non-business)


## APPLICATION

The application (https://apps.wsb.wisc.edu/undergrad/certificate/ application/closed.aspx) is available the first Friday of each semester and due the fourth Friday of the semester. Students must complete the application in one sitting.

The certificate in business application requires an essay on behalf of the applicant.

Admission decisions are based primarily on cumulative UW-Madison GPA and fit for the program as evidenced through the applicant's essay. All admission decisions are final and there is no appeal process for denied students.

Admitted students will be charged a $\$ 150$ tuition differential until degree completion/graduation. The tuition differential provides CIB students access to all School of Business resources, including career and academic advisors within the BBA Program.

## REQUIREMENTS

The CIB program consists of six courses (four core courses and two additional breadth courses), for a total of 18 credits. Students are also responsible for any pre-requisite courses needed for core or breadth courses. Click here for pre-requisite information for core courses.

Students must take at least 12 of the 18 required credits in residence at UW-Madison. Study abroad courses taken through a UW-Madisonsponsored program will count toward the 12 credits in residence.

## Students must earn a grade of "C" or better in all required courses for the CIB.

## REQUIRED COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| ACCT I S 300 | Accounting Principles ${ }^{1}$ | 3 |
| or ACCT I S 100 | Introductory Financial Accounting |  |
| FINANCE/ECON 300 | Introduction to Finance ${ }^{2}$ | 3 |
| MARKETNG 300 | Marketing Management | 3 |
| M H R 300 | Managing Organizations | 3 |
| Breadth Course ${ }^{3}$ |  | 3 |
| Breadth Course ${ }^{3}$ |  | 3 |
| Total Credits |  | 18 |

1 CIB students are strongly encouraged to take ACCT I S 300, unless ACCT I S 100 is required by their major. Please note, however, that ACCT I S 100 is a requirement for many other upper-level accounting and finance courses. Students planning to take additional accounting or finance courses, should consult with the CIB advisor.
2 Approved courses to meet the stats prerequisite
include: GEN BUS 306, ECON 310, MATH/STAT 309, MATH/
STAT 431, PSYCH 210, STAT 301, STAT/MATH 309, STAT/
MATH 310, STAT 311, STAT 324, STAT 371, and STAT/MATH 431

- Breadth courses must be at least 3 credits
- Breadth courses must be School of Business courses (or courses crosslisted with School of Business). Breadth courses may be from the same department as the core courses
- Breadth courses must be from two different School of Business departments (or cross-listed with two different School of Business departments)
- Courses taken at another institution must be directly equivalent to a UWMadison business course and title (i.e., not elective credit)


## EXCLUSIONS

The following courses may not be used to satisfy the CIB Breadth Courses requirement:

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEN BUS 300 | Professional Communication | 3 |
| GEN BUS 306 | Business Analytics I | 3 |
| GEN BUS 310 | Fundamentals of Accounting and | 3 |
| GEN BUS 311 | Finance for Non-Business Majors |  |
|  | Fundamentals of Management and | 3 |
| GEN BUS 365 | Marketing for Non-Business Majors | 3 |
| ACCT IS 211 | Contemporary Topics | 3 |

Any business course numbered 399
Any business course cross-listed with a foreign language

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. (Accounting) Apply accounting principles to develop decision-useful accounting information that supports implementation of organizational strategy.
2. (Finance) Know and have a deep understanding of the net present value model and its components, and be able to apply the model to the valuation of assets.
3. (Management and Human Resources) Know and be able to illustrate how organizational success is a function of strategy, organizational culture, human resource management, leadership, teams, structure, managing change, and entrepreneurship.
4. (Marketing) Answer the "big questions" of the marketing planning process by explaining and demonstrating mastery of: 1) why marketing is a strategy and not a slogan, 2) how marketing is personal, 3) the importance of balancing risk, reward, cost, and time to optimize the 4 p's (product, price, place, and promotion), and 4) how marketing is a conduit between customer needs and company wants.

## ADVISING AND CAREERS

## ADVISING

Academic advising for the CIB is available in the BBA Advising Center, 3150 Grainger Hall. Questions can be directed to the CIB advisor, Katie Denzin (katie.denzin@wisc.edu).

Career advising for the CIB is available in the BBA Program Office, 3290 Grainger Hall. Career-related questions can be directed to Jamie Hinze (jamie.hinze@wisc.edu).

For more information on academic and career advising for the CIB, please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

Certificate students are qualified for many entry-level business positions. While the career opportunities available to CIB are vast, common business careers CIB students pursue following graduation include:

- Advertising
- Business analyst-information systems
- Business development
- Commercial and retail banking
- Consulting
- Event management
- Human resources
- Investment management
- Management
- Project lead/manager-information systems
- Retail (stores and corporate)
- Underwriting/claims adjusting

Other CIB students choose to pursue careers in education, engineering, the nonprofit sector or the healthcare industry, to name a few. Some CIB students attend graduate school following graduation in programs
including law school, public policy, medical school, engineering, social work, and more.

## HEALTH CARE MANAGEMENT, SPECIALIZATION

Admissions to the Health Care Management Specialization have been suspended as of summer 2018; and will be discontinued summer 2019. If you have any questions, please contact the department (wibbaadvising@wsb.wisc.edu).

Note: The last term to declare this specialization was Spring 2018. Students who have previously declared this specialization must complete their degree no later than Spring 2019 in order to receive the specialization.

The health care system is undergoing rapid change. Increasing emphasis on managed care; a growing concern for cost effectiveness; governmental priorities; and increasing concern for the elderly, mentally ill, and developmentally disabled all point to the greater need for individuals with skills in the business-management area, both to serve established needs and as a part of the reorganization of many health care delivery systems. This specialization will permit the student to explore the nature of the health care system.

A specialization in health care management is available to all undergraduate students enrolled in the School of Business. Students can add this specialization to their current business major. To complete the health care management specialization, students take the traditional business courses as well as three electives. Students learn to think about health care in an integrated business framework both in and out of the classroom from our faculty and applied learning program.

## HOW TO GET IN

Admissions to the Health Care Management Specialization have been suspended as of summer 2018; and will be discontinued summer 2019. If you have any questions, please contact the department (wibbaadvising@wsb.wisc.edu).

Note: Admission is suspended for this specialization effective spring 2018.

The healthcare specialization is only for students in the School of Business.

All undergraduate students in the School of Business are eligible to pursue this specialization. Students simply need to declare this specialization using this form (https://co1.qualtrics.com/jfe/form/ SV_8JkBSs6YnaKxb7f?_ga=1.181132327.1053526238.1463515009).

Contact your academic or career advisor for questions about pursuing the health care management specialization. Contact the program coordinator, Mark Covaleski (mcovaleski@bus.wisc.edu), with questions about the specialization, including course options.

## REQUIREMENTS

The healthcare management specialization requires you to take 3 courses from the below approved course list. If you find another course
not on this list that you believe may fit, contact Professor Covaleski (mcovaleski@bus.wisc.edu) about possible additional courses that may be relevant.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select three of the following: |  |  |
| CSCS 254 | Community \& Nonprofit Leadership Symposium | 1 |
| CSCS 460 | Civil Society and Community Leadership | 3 |
| ECON 441 | Analytical Public Finance | 3-4 |
| ECON/POP HLTH/ <br> PUB AFFR 548 | The Economics of Health Care | 3-4 |
| GEN\&WS 102 | Gender, Women, and Society in Global Perspective | 3 |
| GEN\&WS 103 | Women and Their Bodies in Health and Disease | 3 |
| MED HIST/ HIST SCI 133 | Biology and Society, 1950 - Today | 3 |
| MED HIST/ HIST SCI 212 | Bodies, Diseases, and Healers: An Introduction to the History of Medicine | 3 |
| MED HIST/ ENVIR ST 213 | Global Environmental Health: An Interdisciplinary Introduction | 3 |
| MED HIST/ HIST SCI 218 | History of Twentieth Century American Medicine | 3 |
| MED HIST/ <br> AFROAMER/ <br> HIST SCI 275 | Science, Medicine, and Race: A History | 3 |
| MED HIST/HIST SCI/ HISTORY 504 | Society and Health Care in American History | 3 |
| MED HIST/ PHILOS 505 | Justice and Health Care | 3 |
| MED HIST/HIST SCI/ HISTORY 507 | Health, Disease and Healing I | 3-4 |
| MED HIST/HIST SCI/ HISTORY 508 | Health, Disease and Healing II | 3-4 |
| MED HIST/ HIST SCI 509 | The Development of Public Health in America | 3 |
| MED HIST/ PHILOS 515 | Public Health Ethics | 3 |
| MED HIST/GEN\&WS/ HIST SCI 531 | Women and Health in American History | 3 |
| MED HIST/HIST SCI/ POP HLTH 553 | International Health and Global Society | 3 |
| MED HIST/ PHILOS 558 | Ethical Issues in Health Care | 3 |
| I SY E/MED PHYS 559 | Patient Safety and Error Reduction in Healthcare | 2 |
| NURSING/S\&A PHM/ SOC WORK 105 | Health Care Systems: Interdisciplinary Approach | 2 |
| OTM 451 | Service Operations Management | 3 |
| POLI SCI 100 | Freshman Topics Seminar (Health Policy and Politics ONLY) | 3 |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |


| POP HLTH/ | Introduction to Environmental | 3 |
| :--- | :--- | ---: |
| ENVIR ST 471 | Health |  |
| POP HLTH 664 | Prevention of Overweight and <br> Obesity | 2 |
| REAL EST 365 | Contemporary Topics (Commercial <br> Healthcare ONLY) | 3 |
| SOC 170 | Population Problems | $3-4$ |
| SOC 531 | Sociology of Medicine | 3 |
| SOC/C\&E SOC 532 | Health Care Issues for Individuals, <br> Families and Society | 3 |
| SOC/C\&E SOC 533 | Public Health in Rural \& Urban <br> Communities | 3 |
| SOC/ECON 663 | Population and Society |  |
| SOC WORK 205 | Introduction to the Field of Social <br> Work | 3 |
| SOC WORK 206 | Introduction to Social Policy | 4 |

PEOPLE

## FACULTY AND STAFF IN HEALTHCARE MANAGEMENT

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## SUPPLY CHAIN MANAGEMENT, CERTIFICATE

Note: The supply chain management certificate (https://bus.wisc.edu/degrees-programs/certificates/ undergraduate/certificate-supply-chain-management? _ga=2.256713483.1644544621.1517237577-590735409.1515598086), previously known as the supply chain management specialization, can be declared starting fall 2018. The last term to declare the specialization was spring 2018. Students who have previously declared this specialization must complete their degree no later than spring 2019 in order to receive the specialization.

The field of supply chain management (SCM) is a critical area of competitive advantage for businesses around the world. SCM integrates business functions concerned with the movement of goods, services and information along the value chain with the goal of creating value for the end customer. SCM is a cross-functional discipline involving many components of business including product development, marketing, demand/supply planning, sourcing, production, inventory, logistics, customer service, and the relationships between businesses and their channels of distribution. In today's complex business environment, there is a need to coordinate these supply chain functions not only within the firm, but with business partners and customers. As a result, SCM
is a critical, strategic component of business, and students with SCM education and expertise are in high demand in the marketplace.

The supply chain management specialization is open to all undergraduate students enrolled in the School of Business and is administered by the Grainger Center for Supply Chain Management at the School of Business. In addition to the BBA requirements, students complete an 18-credit curriculum required for the specialization. Students will also have the opportunity to interact with business leaders, participate in experiential learning and social activities, have access to a global trip/experience, and be eligible for scholarship opportunities from the Grainger Center.

Each semester, the center offers an informational workshop, From A to Z: Careers in Supply Chain Management, to help interested students learn about the specialization. At this event students will be exposed to the curriculum and potential career opportunities in the field, as well as network with current students, alumni, and corporate partners. Information about future A to Z events will be posted to the MyBiz blog (https://bus.wisc.edu/bba/mybiz).

For questions or additional information about the specialization in supply chain management, please visit the Grainger Center (3450 Grainger Hall) or call 608-262-0710.

The supply chain management specialization is only for students in the School of Business.

Students interested in pursuing the supply chain management specialization must complete an application to verify the degree plan, including a resume review by the BBA Advising Center. All applications will also include a meeting with the Grainger Center staff in 3452 Grainger Hall

## HOW TO GET IN

The supply chain management specialization is only for students in the School of Business.

## APPLICATION

Application for students in the School of Business who were admitted before fall 2016 can be found here (http://bus.wisc.edu/~/media/bus/ bba/academics/majors/scm/scmspecializationapp_students-in-wsb-prior-to-fall-2016.pdf?la=en).

Application for students in the School of Business who were admitted fall 2016 or after can be found here (https://wsb.wisc.edu/-/media/ programs/certificates/supply-chain-management-undergrad/documents/ wisconsin-supply-chain-management-scm-application.pdf).

Pre-Application Requirements:

- Meet with a professional career advisor in the BBA Advising Center for a resume review.
- After your resume has been reviewed, upload the revised copy to BuckyNet.
- Include the SCM designation on your BuckyNet profile.
- Complete the application and schedule an appointment with Danielle Zink danielle.zink@wisc.edu for review. Be sure to read the application carefully and complete all portions before scheduling an appointment.


## REQUIREMENTS

In addition to the required courses below, students are also required to attend four applied learning events each year, keep up with resume reviews and updates, and report all job and internship offers to the Grainger Center and BBA Career office.

If you are interested in this specialization, more details about the applied learning events and other benefits will be offered upon declaration. Attending these events makes students eligible for specialization benefits including scholarships, global trip, etc.

| Code | Title | Credits |
| :---: | :---: | :---: |
| REQUIRED COURSES FOR STUDENTS ADMITTED TO THE SCHOOL OF BUSINESS BEFORE FALL 2016. |  |  |
| MARKETNG/OTM $421$ | Fudamentals of Supply Chain Management | 3 |
| MARKETNG/OTM $422$ | Logistics Management | 3 |
| MARKETNG 423 | Procurement \& Supply Management | 3 |
| MARKETNG 425 | Marketing Channels | 3 |
| MARKETNG 427 | Enterprise Systems and Supply Chain Management | 3 |
| Select ONE of the following three courses: |  | 3 |
| OTM 351 | Principles and Techniques of Quality Management |  |
| OTM 451 | Service Operations Management |  |
| OTM 654 | Production Planning and Control |  |
| Total Credits |  | 18 |


| Code | Title | Credits |
| :---: | :---: | :---: |
| REQUIRED COURSES FOR STUDENTS ADMITTED TO THE SCHOOL OF BUSINESS FALL 2016 OR AFTER |  |  |
| MARKETNG/OTM 421 | Fudamentals of Supply Chain Management | 3 |
| MARKETNG/OTM $422$ | Logistics Management | 3 |
| MARKETNG 423 | Procurement \& Supply Management | 3 |
| MARKETNG 425 | Marketing Channels | 3 |
| MARKETNG 427 | Enterprise Systems and Supply Chain Management | 3 |
| Select ONE of the following three courses: |  | 3 |


| MARKETNG 365 | Contemporary Topics (Creating <br> Breakthrough New Products) |  |
| :---: | :--- | :--- |
| OTM 365 | Contemporary Topics (Operations <br> Analytics) |  |
| OTM 451 | Service Operations Management | 18 |
| Total Credits |  | 18 |

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Develop appropriate supply chain strategies, and will be able to assess the financial, marketing and operational implications of such strategies.
2. By engaging in a wide range of applied activities, students will develop an understanding of how supply chain decisions are made in real-world settings.
3. Identify relevant sources of data, know how to access that data, and will be able to analyze it using both statistical and/or optimization techniques to support supply chain decision making.
4. Identify and assess the opportunities and risks associated with sources of supply and markets for goods.
5. Communicate their ideas and recommendations to individuals in all functional areas within an organization.

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA, please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREER

Students enrolled in the supply chain management specialization consistently have access to excellent internship opportunities and earn some of the highest salaries at the School of Business. The average fulltime salary for members of the graduating class of 2016 with a supply chain management specialization was approximately $\$ 57,000$, while the average monthly internship salary was \$3,200.

Some of the companies that recruit students with a specialization in supply chain management include (but are not limited to):

- Amazon
- Best Buy
- BP Americas
- Cargill
- Chrysler
- Cisco Systems
- Georgia-Pacific
- Kimberly-Clark
- Kohler
- Kohl's Department Stores
- Macy's
- Mayo Clinic
- Nestle
- Procter \& Gamble
- Target Corporation
- Uline
- Walgreen's Corporate
- W.W. Grainger


## PEOPLE

## FACULTY AND STAFF IN SUPPLY CHAIN MANAGEMENT

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## SUPPLY CHAIN MANAGEMENT, SPECIALIZATION

Admissions to the Supply Chain Management Specialization have been suspended as of spring 2018, and will be discontinued as of spring 2019. If you have any questions, please contact the department (wibbaadvising@wsb.wisc.edu).

Note: The supply chain management specialization has been transitioned to a certificate. The last term to declare the specialization was spring 2018. Students who have previously declared this specialization must complete their degree no later than spring 2019 in order to earn the specialization. For students declaring the certificate after spring 2018 or graduating after spring 2019, please see the Supply Chain Management Certificate (p. 1316) page.

The field of supply chain management (SCM) is a critical area of competitive advantage for businesses around the world. SCM integrates business functions concerned with the movement of goods, services and information along the value chain with the goal of creating value for the end customer. SCM is a cross-functional discipline involving many components of business including product development, marketing, demand/supply planning, sourcing, production, inventory, logistics, customer service, and the relationships between businesses and their channels of distribution. In today's complex business environment, there is a need to coordinate these supply chain functions not only within the firm, but with business partners and customers. As a result, SCM is a critical, strategic component of business, and students with SCM education and expertise are in high demand in the marketplace.

The supply chain management specialization is open to all undergraduate students enrolled in the School of Business and is administered by the Grainger Center for Supply Chain Management at the School of Business. In addition to the BBA requirements, students complete an 18-credit curriculum required for the specialization. Students will also have the opportunity to interact with business leaders,
participate in experiential learning and social activities, have access to a global trip/experience, and be eligible for scholarship opportunities from the Grainger Center.

Each semester, the Center offers an informational workshop, From A to Z: Careers in Supply Chain Management, to help interested students learn about the specialization. At this event students will be exposed to the curriculum and potential career opportunities in the field, as well as network with current students, alumni, and corporate partners. Information about future A to $Z$ events will be posted to the MyBiz blog (https://bus.wisc.edu/bba/mybiz).

For questions or additional information about the specialization in supply chain management, please visit the Grainger Center (3450 Grainger Hall) or call 608-262-0710.

The Supply Chain Management Specialization is only for students in the School of Business.

Students interested in pursuing the supply chain management specialization must complete an application to verify the degree plan, including a resume review by the BBA Advising Center. All applications will also include a meeting with the Grainger Center staff in 3452 Grainger Hall

## HOW TO GET IN

Admissions to the Supply Chain Management, Specialization have been suspended as of spring 2018. If you have any questions, please contact the department (wibbaadvising@wsb.wisc.edu).

The supply chain management specialization is only for students in the School of Business.

## APPLICATION

Application for students in the School of Business who were admitted before fall 2016 can be found here (http://bus.wisc.edu/~/media/bus/ bba/academics/majors/scm/scmspecializationapp_students-in-wsb-prior-to-fall-2016.pdf?la=en).

Application for students in the School of Business who were admitted fall 2016 or after can be found here (https://wsb.wisc.edu/-/media/ programs/certificates/supply-chain-management-undergrad/documents/ wisconsin-supply-chain-management-scm-application.pdf).

Pre-Application Requirements:

- Meet with a professional career advisor in the BBA Advising Center for a resume review.
- After your resume has been reviewed, upload the revised copy to BuckyNet.
- Include the SCM designation on your BuckyNet profile.
- Complete the application and schedule an appointment with Danielle Zink danielle.zink@wisc.edu for review. Be sure to read the application carefully and complete all portions before scheduling an appointment.


## REQUIREMENTS

In addition to the required courses below, students are also required to attend 4 applied learning events each year, keep up with resume reviews
and updates, and report all job and internship offers to the Grainger Center and BBA Career office.

If you are interested in this specialization, more details about the applied learning events and other benefits will be offered upon declaration. Attending these events makes students eligible for specialization benefits including scholarships, global trip, etc.

| Code | Title | Credits |
| :---: | :---: | :---: |
| REQUIRED COURSES FOR STUDENTS ADMITTED TO THE SCHOOL OF BUSINESS BEFORE FALL 2016. |  |  |
| MARKETNG/OTM $421$ | Fudamentals of Supply Chain Management | 3 |
| MARKETNG/OTM $422$ | Logistics Management | 3 |
| MARKETNG 423 | Procurement \& Supply Management | 3 |
| MARKETNG 425 | Marketing Channels | 3 |
| MARKETNG 427 | Enterprise Systems and Supply Chain Management | 3 |
| Select ONE of the following three courses: |  | 3 |
| OTM 351 | Principles and Techniques of Quality Management |  |
| OTM 451 | Service Operations Management |  |
| OTM 654 | Production Planning and Control |  |
| Total Credits |  | 18 |
| Code | Title | Credits |
| REQUIRED COURSES FOR STUDENTS ADMITTED TO THE SCHOOL OF BUSINESS FALL 2016 OR AFTER |  |  |
| MARKETNG/OTM 421 | Fudamentals of Supply Chain Management | 3 |
| MARKETNG/OTM $422$ | Logistics Management | 3 |
| MARKETNG 423 | Procurement \& Supply Management | 3 |
| MARKETNG 425 | Marketing Channels | 3 |
| MARKETNG 427 | Enterprise Systems and Supply Chain Management | 3 |
| Select ONE of the following three courses: |  | 3 |
| MARKETNG 365 | Contemporary Topics (Creating Breakthrough New Products) |  |
| OTM 365 | Contemporary Topics (Operations Analytics) |  |
| OTM 451 | Service Operations Management |  |
| Total Credits |  | 18 |

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor".

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic)

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREER

Students enrolled in the supply chain management specialization consistently have access to excellent internship opportunities and earn some of the highest salaries at the School of Business. The average fulltime salary for members of the graduating class of 2016 with a supply chain management specialization was approximately $\$ 57,000$, while the average monthly internship salary was $\$ 3,200$.

Some of the companies that recruit students with a specialization in supply chain management include (but are not limited to):

- Amazon
- Best Buy
- BP Americas
- Cargill
- Chrysler
- Cisco Systems
- Georgia-Pacific
- Kimberly-Clark
- Kohler
- Kohl's Department Stores
- Macy's
- Mayo Clinic
- Nestle
- Procter \& Gamble
- Target Corporation
- Uline
- Walgreen's Corporate
- W.W. Grainger


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## FINANCE

The finance curriculum prepares students for careers in corporate financial management, the investments and securities business, and the management of financial institutions-e.g., banks and insurance
companies. The theory of finance and its applications are emphasized. Students learn about: security analysis and valuation, security trading, government policy and financial markets, financial forecasting, capital structure, financial risk management, venture capital, security issuance and international finance.

## DEGREES/MAJORS/CERTIFICATES

- Business: Finance, Investment, and Banking, BBA (p. 1321)


## BUSINESS: FINANCE, INVESTMENT, AND BANKING, BBA

The finance, investment, and banking (https://wsb.wisc.edu/programs-degrees/undergraduate-bba/academics/majors/\#finance-investment-and-banking) curriculum prepares students for careers in corporate financial management, the investments and securities business, and the management of financial institutions-e.g., banks and insurance companies. The theory of finance and its applications are emphasized. Students learn about: security analysis and valuation, security trading, government policy and financial markets, financial forecasting, capital structure, financial risk management, venture capital, security issuance and international finance.

A significant part of the coursework teaches you to understand risk and uncertainty, both at an intuitive level and at a technical level. More important, you learn to construct models of financial decisions-e.g., an investor's portfolio choice problem, the issuance of securities by corporations and the structure of financial investments by banks.

## RELATED STUDENT ORGANIZATIONS

Capital Management Club (https://win.wisc.edu/organization/ capitalmanagementclub)
Fantasy Sports \& Finance Club (https://win.wisc.edu/organization/fsf)
Finance \& Investment Society (http://fiswisconsin.com) Investment Banking Club (https://win.wisc.edu/organization/ibc) Society of Personal Investments (https://win.wisc.edu/organization/SPI) Wealth Management Group (https://win.wisc.edu/organization/WMG)

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to
the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

$$
\begin{array}{lll}
\text { Code } & \text { Title } & \text { Credits }
\end{array}
$$

School of Business BBA Requirements
Complete requirements: (p. 1305)
Pre-Business
Liberal Studies
Business Prep
Business Core
Business Breadth

## FINANCE MAJOR REQUIREMENTS

Undergraduate finance majors should enroll in GEN BUS 306 Business Analytics I or its equivalent as early as possible in preparation for this major. Before enrolling in FINANCE/ECON 320 Investment Theory, FINANCE 325 Corporation Finance, or FINANCE 330 Derivative Securities, students must complete:

1. FINANCE/ECON 300 Introduction to Finance;
2. MATH 213 Calculus and Introduction to Differential Equations or MATH 222 Calculus and Analytic Geometry 2;
3. Either complete or concurrently enroll for GEN BUS 307 Business Analytics II (or its equivalent).

ACCT I S 301 Financial Reporting I must be completed before enrolling for FINANCE 325 Corporation Finance.

Students planning on a major in finance should complete FINANCE/ ECON 300, GEN BUS 307 (or equivalent) and ACCT IS 301 in or before the first semester of their junior year. FINANCE/ECON 320 Investment Theory, FINANCE 325 Corporation Finance or FINANCE 410 Bank Management should be completed prior to a summer internship, where the choice from these would match the internship and/or
career focus area. FINANCE 330 Derivative Securities is usually the most quantitatively challenging of the three required courses beyond principles, and generally helps to take ECON/FINANCE 320 either prior to or concurrently with FINANCE 330. If the mathematics requirement has not been completed prior to admission to the School of Business, then MATH 213 Calculus and Introduction to Differential Equations or MATH 222 Calculus and Analytic Geometry 2 should be completed as early as possible. Finance majors should also be aware of enforced prerequisites for other finance courses.

| Code | Title C | Credits |
| :---: | :---: | :---: |
| MATH 213 | Calculus and Introduction to Differential Equations | 3 |
| or MATH 222 | Calculus and Analytic Geometry 2 |  |
| GEN BUS 307 <br> or ECON 410 <br> or STAT/ <br> MATH 310 <br> or STAT 312 | Business Analytics II ${ }^{1}$ <br> Introductory Econometrics <br> Introduction to Probability and Mathematical <br> Statistics II <br> Introduction to Theory and Methods of Mathematical Statistics II | 3-4 |
| ACCT I S 301 | Financial Reporting I | 3 |
| FINANCE/ECON 320 | Investment Theory | 3 |
| FINANCE 325 | Corporation Finance | 3 |
| FINANCE 330 | Derivative Securities | 3 |
| Select one of the following: |  | 3-4 |
| FINANCE 305 | Financial Markets, Institutions and Economic Activity |  |
| ECON 301 | Intermediate Microeconomic Theory |  |
| ECON 302 | Intermediate Macroeconomic Theory |  |
| ECON 311 | Intermediate Microeconomic Theory <br> - Advanced Treatment |  |
| ECON 312 | Intermediate Macroeconomic Theory - Advanced Treatment |  |
| ECON 330 | Money and Banking |  |
| Complete one 3-credit Finance course numbered above $400^{2}$ |  | 3 |

Total Credits
24-26
1 GEN BUS 307 Business Analytics II or its equivalent is required to fulfill other requirements within the business curriculum, therefore this requirement double-counts.
2 FINANCE 340 Fixed Income Securities and FINANCE 365 Contemporary Topics may be used to fulfill this requirement.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Work | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Explain the trade-off between risk and returns, and to explain methods of measuring and managing risk.
2. Use financial models, including those for optimal portfolios and the estimation of expected returns.
3. Distinguish between equilibrium and no-arbitrage pricing, and be able to apply both approaches.
4. Explain the costs and benefits of the separation of ownership and control in the typical large firm.
5. Understand how market frictions can influence financial decisions.
6. Explain how investment and financing decisions can create and destroy value.

## FOUR-YEAR PLAN

This is a sample four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

Freshman

| Fall | Credits Spring | Credits Summer | Credits |
| :---: | :---: | :---: | :---: |
| MATH 211 | 5 MATH 213 | 3 MARKETNG 300, M H R 300, or OTM 300 | 3 |
| PSYCH 202 | 3 ECON 101 | 4 ACCT I S 211 | 3 |
| GEN BUS 110 | 1 ACCT I S 100 | 3 |  |
| Science | 3 Ethnic Studies | 3 |  |
| Communications <br> A | s 3-4 Humanities, Literature, or Social Science | 3 |  |
|  | 15-16 | 16 | 6 |
| Sophomore |  |  |  |
| Fall | Credits Spring | Credits Summer | Credits |
| GEN BUS 306 | 3 GEN BUS 307 | 3 MARKETNG 300, M H R 300, or OTM 300 | 3 |
| FINANCE/ <br> ECON 300 | 3 GEN BUS 300 | 3-4 |  |


| ECON 102 | 4 Elective | 3 |  |
| :---: | :---: | :---: | :---: |
| ACCT I S 301 | 3 FINANCE/ ECON 320 or 325 | 3 |  |
| Communications <br> B | s 3-4 Humanities, Literature, or Social Science | 3 |  |
|  | 16-17 | 15-16 | 3 |
| Junior |  |  |  |
| Fall | Credits Spring | Credits |  |
| MARKETNG 300 M H R 300, or OTM 300 | 3 Finance Elective ${ }^{2}$ | 3 |  |
| FINANCE 330 | 3 FINANCE/ ECON 320 or 325 | 3 |  |
| FINANCE 305 | 3 Business Breadth | 3 |  |
| Ethics ${ }^{1}$ | 4 Elective | 3 |  |
|  | 13 | 12 |  |
| Senior |  |  |  |
| Fall | Credits Spring | Credits |  |
| GEN BUS 301 | 3 Finance Elective ${ }^{2}$ | 3 |  |
| Finance Elective 2 | 3 Humanities, Literature, or Social Science | 3 |  |
| Business <br> Breadth | 3 Elective | 3 |  |
| Science | 3 Elective | 3 |  |
|  | 12 | 12 |  |

Total Credits 120-123
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics
2 FINANCE/INTL BUS 445,FINANCE 457, FINANCE 340, FINANCE 610, FINANCE 635, FINANCE 365, FINANCE 365

## ADVISING AND CAREERS

## ADVISING

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If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

Finance is the integration of time, returns and risk and how they are interrelated. Two pressing questions in finance are:
-What do I invest in?

- How do I pay for it?

Organizations that focus on finance include banks, credit card companies, insurance companies, consumer finance companies, corporations, stock brokerages, investment funds, government sponsored enterprises, education, and individuals.

Students may pursue careers in many different industries, including but not limited to:

- Commercial and retail banking
- Corporate finance
- Investment banking
- Investment management
- Equity and debt capital markets
- Research
- Sales and trading

Find more details about these industries on the BBA Finance website (https://bus.wisc.edu/bba/academics-and-programs/majors/finance).

## PEOPLE

## FACULTY AND STAFF IN FINANCE

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## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022.

## INTERNATIONAL BUSINESS

## DEGREES/MAJORS/CERTIFICATES

- Business: International Business, BBA (p. 1325)


## BUSINESS: INTERNATIONAL BUSINESS, BBA

The international business (https://wsb.wisc.edu/programs-degrees/ undergraduate-bba/academics/majors/\#international-business) major helps students develop an understanding of the global macroeconomic environment and the complexities of cross-border transactions. International business is an interdisciplinary field and courses focus on knowledge acquisition as well as application of concepts. A selected regional emphasis provides a platform to gain language and area studies knowledge that often underpins successful adaptation for regional and local markets. The embedded study abroad requirement helps students develop cross-cultural awareness and skills.

International business careers span industries and economic sectors, and business functions and geographies, and often include domestic positions with global scope. Positions in international business involve strategy, leadership, research, government relations, creativity, technical expertise, and cultural fluency.

## RELATED STUDENT ORGANIZATIONS

AIESEC
International Business Student Association
International Finance Club

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for
living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

## Code

Title
Credits
School of Business BBA Requirements
Complete requirements: (p. 1305)
Pre-Business
Liberal Studies
Business Prep
Business Core
Business Breadth

## INTERNATIONAL BUSINESS MAJOR REQUIREMENTS

International business responsibilities and careers typically arise after graduates first develop skills in a functional area of business, such as marketing, finance, management and operations. This functional expertise typically drives initial career placement and advancement. Therefore, the international business major must be paired with another major within the School of Business.

Some international business issues are global in nature, but many challenges and opportunities faced by multinational firms are regional and local in nature and often arise due to differences in institutions, politics and cultures among nations. This 'glocal' reality means that international business leaders must possess both global and local awareness. To develop some perspective on regional and local cultural issues, international business majors select a geographic region of emphasis and select language and area studies courses accordingly.

Studying abroad on an approved program in the selected region of emphasis for one fall or spring semester is also required for the major.

A student must complete a minimum of 24 credits, distributed as follows:

| Code | Title | Credits |
| :---: | :---: | :---: |
| INTL BUS 200 | International Business | 3 |
| International Busine | s Coursework | 9 |
| Minimum of 3 credits must be from the International Business Department |  |  |
| INTL BUS/ GEN BUS 320 | Intercultural Communication in Business |  |
| INTL BUS 365 | Contemporary Topics |  |
| INTL BUS/ M HR 403 | Global Issues in Management |  |
| INTL BUS/ MARKETNG 420 | Global Marketing Strategy |  |
| INTL BUS/ REAL EST 430 | International Real Estate |  |
| INTL BUS/ FINANCE 445 | Multinational Business Finance |  |
| INTL BUS/A A E/ ECON 462 | Latin American Economic Development |  |
| A A E/ INTL ST 373 | Globalization, Poverty and Development |  |
| A A E/ <br> INTL ST 374 | The Growth and Development of Nations in the Global Economy |  |
| ECON 309 | Study Abroad in Intermediate Economics |  |
| ECON 409 | Study Abroad in Advanced Economics |  |
| $\begin{aligned} & \text { ECON } 364 \\ & \text { or ECON } 464 \end{aligned}$ | Survey of International Economics International Trade and Finance |  |
| ECON 467 | International Industrial Organizations |  |
| ECON/A A E 473 | Economic Growth and Development in Southeast Asia |  |
| ECON/A A E 474 | Economic Problems of Developing Areas |  |

Global Interdisciplinary Perspective
Select one course from the following:

| GEOG 340 | World Regions in Global Context |
| :--- | :--- |
| INTL ST 101 | Introduction to International Studies |
| ANTHRO 104 | Cultural Anthropology and Human <br> Diversity |
| POLI SCI 140 | Introduction to International <br> Relations |

Coursework in Foreign Language and Area Studies 9
Select 9 credits of approved coursework for the specified region (found below)

## Semester Abroad

Complete a semester abroad on an approved program within the region of emphasis selected (found below)

Total Credits

## REGIONS OF EMPHASIS

Students must take 9 credits of language or area studies courses applicable to the region of emphasis. It is recommended to take at least one 3 credit language course applicable to your study abroad destination (unless the official language of that nation is English). Students must also choose a study abroad program that aligns with their region of emphasis.

## AFRICA

## Study Abroad Programs

- South Africa, Cape Town: University of Cape Town Exchange, IAP


## Language Courses

| Code | Title | Credits |
| :--- | :--- | :--- |
| Arabic |  |  |


| AFRICAN 321 | First Semester Arabic |
| :---: | :---: |
| AFRICAN 322 | Second Semester Arabic |
| AFRICAN 323 | Third Semester Arabic |
| AFRICAN 324 | Fourth Semester Arabic |
| AFRICAN 325 | Colloquial Arabic |
| AFRICAN 329 | Fifth Semester Arabic |
| AFRICAN 330 | Sixth Semester Arabic |
| Hausa |  |
| AFRICAN 361 | First Semester Hausa |
| AFRICAN 362 | Second Semester Hausa |
| Swahili |  |
| AFRICAN 331 | First Semester Swahili |
| AFRICAN 332 | Second Semester Swahili |
| AFRICAN 333 | Third Semester Swahili |
| AFRICAN 334 | Fourth Semester Swahili |
| Wolof |  |
| AFRICAN 391 | First Semester-A Language of West Africa |
| AFRICAN 392 | Second Semester-A Language of West Africa |
| AFRICAN 393 | Third Semester-A Language of West Africa |

AFRICAN 394 Fourth Semester-A Language of West Africa
Zulu
AFRICAN 335 First Semester-A Language of Southern Africa

| AFRICAN 336 | Second Semester-A Language of <br> Southern Africa |
| :--- | :--- |
| AFRICAN 337 | Third Semester-A Language of <br> Southern Africa |
| AFRICAN 338 | Fourth Semester-A Language of <br> Southern Africa |

## Area Studies Courses

Code Title Credits
A A E/ECON 477 Agricultural and Economic 3
Development in Africa
AFRICAN 100 Introduction to African Cultural
Expression

| AFRICAN/ HISTORY 129 | Africa on the Global Stage | 3-4 |
| :---: | :---: | :---: |
| AFRICAN 201 | Introduction to African Literature | 3 |
| AFRICAN/ <br> FOLKLORE 210 | The African Storyteller | 3 |
| AFRICAN 211 | The African Autobiography | 3 |
| AFRICAN 212 | Introduction to African Popular Culture | 3-4 |
| AFRICAN/ AFROAMER 220 | HipHop, Youth Culture, and Politics in Senegal | 3 |
| AFRICAN 230 | Introduction to Yoruba Life and Culture | 3 |
| AFRICAN 231 | Introduction to Arabic Literary Culture | 3 |
| AFRICAN 232 | Introduction to Swahili Cultures | 3 |
| AFRICAN/ AFROAMER 233 | Global HipHop and Social Justice | 3 |
| AFRICAN/ FOLKLORE 270 | The Hero and Trickster in African Oral Traditions | 3 |
| AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey | 4 |
| AFRICAN/ <br> AFROAMER/ <br> HISTORY/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFRICAN 300 | African Literature in Translation | 3 |
| AFRICAN 303 | African Literature and Visual Culture | 3 |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture | 3-4 |
| AFRICAN 402 | Theory of African Literature | 3-4 |
| AFRICAN 405 | Topics in African Cultural Studies | 3 |
| AFRICAN 412 | Contemporary African Fiction | 3-4 |
| AFRICAN/ AFROAMER 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFRICAN/ <br> FRENCH 440 | African/Francophone Film | 3 |
| AFRICAN/ PORTUG 451 | Lusophone African Literature | 3 |
| AFRICAN 453 | Modern African Literature in English | 3-4 |
| AFRICAN/ FOLKLORE 471 | Oral Traditions and the Written Word | 3-4 |
| AFRICAN 500 | Language and Society in Africa | 3-4 |
| AFRICAN 605 | Advanced Topics in African Cultural Studies | 3 |
| AFRICAN 609 | Advanced Topics in Global Black Music Studies | 3 |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture | 3 |
| AFROAMER/ <br> ART HIST 242 | Introduction to Afro-American Art | 3 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |


| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| :---: | :---: | :---: |
| AFROAMER/ <br> MUSIC 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| AFROAMER/ AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |
| AFROAMER/ <br> ART 674 | Selected Topics on Afro-American Artists | 3 |
| AFROAMER 675 | Selected Topics in Afro-American Culture | 3 |
| ART HIST 579 | Proseminar in African Art | 3 |
| DANCE 118 | African Dance | 1 |
| DANCE/ <br> THEATRE 218 | African Dance Performance | 2 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| HISTORY 105 | Introduction to the History of Africa | 3-4 |
| HISTORY/ <br> RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY 444 | History of East Africa | 3-4 |
| HISTORY 445 | History of Equatorial Africa | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| POLI SCI 329 | African Politics | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |

## EAST ASIA

## Study Abroad Programs

- China, Beijing: Tsinghua University, School of Business
- Hong Kong CityU: City University - College of Business, School of Business
- Hong Kong HKUST: Hong Kong University of Science and Technology - Business School, School of Business
- Japan, Tokyo: Sophia University Exchange, International Academic Programs
- Japan, Tokyo: CIEE Tokyo Arts \& Science, School of Business
- South Korea, Seoul: Yonsei University Exchange, International Academic Programs

Language Courses
Code
Chinese

| E ASIAN 101 | First Semester Chinese |
| :--- | :--- |
| E ASIAN 102 | Second Semester Chinese |
| E ASIAN 121 | Elementary Chinese |
| E ASIAN 122 | Elementary Chinese |
| E ASIAN 201 | Third Semester Chinese |
| E ASIAN 202 | Fourth Semester Chinese |
| E ASIAN 213 | First Semester Heritage Chinese |
| E ASIAN 214 | Second Semester Heritage Chinese |
| E ASIAN 301 | Fifth Semester Chinese |
| E ASIAN 302 | Sixth Semester Chinese |
| E ASIAN 321 | First Year Classical Chinese |
| E ASIAN 322 | First Year Classical Chinese |


| E ASIAN 333 | Chinese Conversation |
| :---: | :---: |
| E ASIAN 341 | Classical Chinese for Non-Majors |
| E ASIAN 342 | Classical Chinese for Non-Majors |
| E ASIAN 351 | Survey of Chinese Literature |
| E ASIAN 352 | Survey of Chinese Literature |
| E ASIAN/ <br> RELIG ST 363 | Introduction to Confucianism |
| E ASIAN 371 | Topics in Chinese Literature |
| E ASIAN 372 | Topics in Chinese: Study Abroad |
| E ASIAN 379 | Business Chinese |
| E ASIAN 401 | Seventh Semester Chinese |
| E ASIAN 402 | Eighth Semester Chinese |
| E ASIAN 431 | Introduction to Chinese Linguistics |
| E ASIAN 432 | Introduction to Chinese Linguistics |
| E ASIAN 501 | Fifth-year Chinese |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China |
| E ASIAN 571 | Readings in Classical Chinese Literature |
| E ASIAN 622 | Teaching of Chinese |
| E ASIAN 631 | History of the Chinese Language |
| E ASIAN 632 | History of the Chinese Language |
| E ASIAN 651 | History of Chinese Literature |
| E ASIAN 652 | History of Chinese Literature |
| E ASIAN 671 | Literary Studies in Chinese Drama |
| E ASIAN 672 | Literary Studies in Chinese Fiction |
| Japanese |  |
| ASIAN 355 | Modern Japanese Literature |
| E ASIAN 103 | First Semester Japanese |
| E ASIAN 104 | Second Semester Japanese |
| E ASIAN 123 | Elementary Japanese |
| E ASIAN 124 | Elementary Japanese |
| E ASIAN 203 | Third Semester Japanese |
| E ASIAN 204 | Fourth Semester Japanese |
| E ASIAN 303 | Fifth Semester Japanese |
| E ASIAN 304 | Sixth Semester Japanese |
| E ASIAN 323 | First Year Classical Japanese |
| $\begin{aligned} & \text { EASIAN/ } \\ & \text { EPD } 330 \end{aligned}$ | Basic Technical Japanese I |
| EASIAN/ EPD 332 | Basic Technical Japanese II |
| E ASIAN 335 | Intermediate Japanese Conversation |
| E ASIAN 353 | Survey of Japanese Literature |
| E ASIAN 358 | Language in Japanese Society |
| E ASIAN 361 | Masterworks of Japanese Literature: The Tale of Genji |
| E ASIAN 367 | Japanese Poetic Tradition |
| E ASIAN 368 | Topics in Japanese Professional Communication |
| E ASIAN 373 | Topics in Japanese: Study Abroad |
| E ASIAN/ <br> EPD 374 | Intermediate Technical Japanese I |


| EASIAN/ <br> EPD 375 | Intermediate Technical Japanese II |
| :---: | :---: |
| E ASIAN 376 | Manga. |
| EASIAN/ <br> EPD 377 | Business Japanese Communication |
| E ASIAN 378 | Anime |
| E ASIAN 403 | Seventh Semester Japanese |
| E ASIAN 404 | Eighth Semester Japanese |
| E ASIAN 434 | Introduction to Japanese Linguistics |
| E ASIAN 573 | Readings in Classical Japanese Literature |
| E ASIAN 574 | Readings in Classical Japanese Literature |
| EASIAN/ <br> EPD 601 | Japanese for Business and Industry |
| E ASIAN/ <br> EPD 602 | Japanese for Politics and Government |
| E ASIAN 623 | Teaching of Japanese as a Foreign Language |
| Korean |  |
| E ASIAN 105 | Elementary Korean |
| E ASIAN 106 | Elementary Korean |
| E ASIAN 345 | Third Semester Korean |
| E ASIAN 346 | Fourth Semester Korean |
| E ASIAN 347 | Fifth Semester Korean |
| E ASIAN 348 | Sixth Semester Korean |
| E ASIAN 405 | Seventh Semester Korean |
| E ASIAN 406 | Eighth Semester Korean |

## Area Studies Courses

| Code | Title | Credits |
| :---: | :---: | :---: |
| ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| ART HIST 203 | Survey of Asian Art | 3-4 |
| ART HIST 371 | Chinese Painting | 3-4 |
| ART HIST 372 | Arts of Japan | 3-4 |
| ART HIST 411 | Topics in Asian Art | 3-4 |
| ART HIST 475 | Japanese Ceramics and Allied Arts | 3 |
| ART HIST 575 | Proseminar in Japanese Art | 3 |
| ART HIST 576 | Proseminar in Chinese Art | 3 |
| ASIAN 354 | Early Modern Japanese Literature | 3 |
| E A STDS/ HISTORY 103 | Introduction to East Asian History: China | 3-4 |
| EA STDS/ HISTORY 104 | Introduction to East Asian History: Japan | 3-4 |
| E A STDS/HISTORY/ POLISCI 255 | Introduction to East Asian Civilizations | 3-4 |
| E ASIAN/KINES 277 | Kendo: Integration of Martial Arts and Liberal Arts | 2 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies | 1-3 |


| E A STDS/ HISTORY 341 | History of Modern China, 1800-1949 | 3-4 |
| :---: | :---: | :---: |
| E A STDS/ HISTORY 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| E A STDS/ HISTORY 454 | Samurai: History and Image | 3-4 |
| E A STDS/ HISTORY 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |
| E ASIAN/HISTORY/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| EASIAN/ <br> RELIG ST 350 | Introduction to Taoism | 3-4 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 353 | Survey of Japanese Literature | 3 |
| EASIAN/ <br> RELIG ST 363 | Introduction to Confucianism | 3 |
| E ASIAN 367 | Japanese Poetic Tradition | 3-4 |
| E ASIAN 371 | Topics in Chinese Literature | 2-3 |
| E ASIAN 376 | Manga. | 3 |
| E ASIAN 378 | Anime | 3 |
| E ASIAN 433 | Topics in East Asian Visual Cultures | 3 |
| E ASIAN 520 | Popular Culture and Film in Twentieth-Century China | 3 |
| E ASIAN 563 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 564 | Readings in Modern Japanese Literature | 3 |
| E ASIAN 672 | Literary Studies in Chinese Fiction | 3 |
| HISTORY/ASIAN 108 | Introduction to East Asian History Korea | 3-4 |
| HISTORY 336 | Chinese Economic and Business History. From Silk to iPhones | 3-4 |
| LITTRANS 261 | Survey of Chinese Literature in Translation | 3 |
| LITTRANS 262 | Survey of Chinese Literature in Translation | 3 |
| LITTRANS 263 | Survey of Japanese Literature in Translation | 3 |
| LITTRANS 264 | Survey of Japanese Literature in Translation | 3 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 373 | Topics in Japanese Literature | 3 |
| LITTRANS 374 | Topics in Korean Literature | 3 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 640 | Politics of Japan | 3-4 |
| POLI SCI 654 | Politics of Revolution | 3-4 |
| RELIG ST/LCA 421 | A Survey of Tibetan Buddhism | 3 |
| SOC 225 | Contemporary Chinese Society | 3 |
| THEATRE 526 | The Theatres of China and Japan | 3 |

## LATIN AMERICA AND THE CARIBBEAN

## Study Abroad Programs

- Argentina, Buenos Aires: CIEE Buenos Aires Liberal Arts, School of Business
- Chile, Santiago: CIEE Santiago Business and Culture: School of
Business
Language Courses

| Code <br> Spanish | Title |
| :--- | :--- |
| SPANISH 101 | First Semester Spanish |
| SPANISH 102 | Second Semester Spanish |
| SPANISH 203 | Third Semester Spanish |
| SPANISH 204 | Fourth Semester Spanish |
| SPANISH 223 | Introduction to Hispanic Cultures |
| SPANISH 224 | Introduction to Hispanic Literatures |
| SPANISH 226 | Intermediate Language Practice <br> with Emphasis on Writing and <br> Grammar |
| SPANISH 311 | Advanced Language Practice <br> SPANISH 319Topics in Spanish Language <br> Practice |
| SPANISH 320 | Spanish Phonetics <br> SPANISH 321The Structure of Modern Spanish |
| SPANISH 322 | Survey of Early Hispanic Literature <br> Advanced Language Practice with |
| SPANISH 323 | Emphasis on Expository Writing |

SPANISH 324 Survey of Modern Spanish
SPANISH 325 Advanced Conversation
SPANISH 326 Survey of Spanish American Literature
SPANISH 359 Spanish Business Area Studies
SPANISH/ Literatura de la Edad Media
MEDIEVAL 414 Castellana (ss. XII-XV)
SPANISH/ Introduction to the Romance
FRENCH/ITALIAN/ Languages
PORTUG 429
SPANISH 435
SPANISH 453 Literature of the Twentieth Century
SPANISH 460 Literatura Hispanoamericana
SPANISH 461 The Spanish American Short Story
SPANISH 462 Spanish American Theater and Drama
SPANISH 463 The Spanish American Novel
SPANISH 464 Spanish American Poetry and Essay
SPANISH 465 Literature and Film in Spanish America
SPANISH 466 Topics in Spanish American Literature
SPANISH/ US Latino Literature
CHICLA 467
SPANISH 468 Topics in Hispanic Culture
SPANISH/ Topics in Hispanic Cultures in the
CHICLA 469 U.S.
SPANISH 470 Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics
SPANISH 471 Topics in Hispanic Literature

| SPANISH 472 | Hispanic Screen Studies |
| :---: | :---: |
| SPANISH 473 | Study Abroad in Spanish Language Practice |
| SPANISH 474 | Study Abroad in Spanish Linguistics |
| SPANISH 475 | Study Abroad in Hispanic Literatures |
| SPANISH 476 | Study Abroad in Hispanic Cultures |
| SPANISH/ CHICLA 478 | Border and Race Studies in Latin America |
| SPANISH 501 | Survey of Spanish American Literature from the Discovery to Modernismo |
| SPANISH 502 | Survey of Spanish American Literature from Modernismo to the Present |
| SPANISH/ <br> MEDIEVAL 503 | Survey of Medieval Literature |
| SPANISH/ <br> MEDIEVAL 504 | Survey of Medieval Literature |
| SPANISH 505 | Advanced Survey of Spanish Literature |
| SPANISH 506 | Advanced Survey of Spanish Literature |
| SPANISH/ <br> MEDIEVAL 541 | Old Spanish |
| SPANISH 543 | Spanish Phonology |
| SPANISH 544 | Contemporary Issues in Applied Spanish Linguistics |
| SPANISH 545 | College Teaching of Spanish |
| SPANISH 548 | Structure of the Spanish Language: Morphology and Syntax |
| SPANISH 564 | Theory and Practice of Hispanic Theatre |
| SPANISH 627 | Historia de Teoria Literaria: de Platon AI Siglo XVIII |
| SPANISH 628 | Historia de Teoria Literaria: Siglos XIX-XX |
| SPANISH 630 | Topics in Hispanic Linguistics |
| SPANISH 681 | Senior Honors Thesis |
| SPANISH 682 | Senior Honors Thesis |
| SPANISH 691 | First Semester Senior Thesis |
| SPANISH 692 | Second Semester Senior Thesis |
| SPANISH 699 | Directed Study |
| Portuguese |  |
| PORTUG 101 | First Semester Portuguese |
| PORTUG 102 | Second Semester Portuguese |
| PORTUG 201 | Third Semester Portuguese |
| PORTUG 202 | Fourth Semester Portuguese |
| PORTUG 207 | Portuguese for Business |
| PORTUG 221 | Introduction to Luso-Brazilian Literatures |
| PORTUG 225 | Third Year Conversation and Composition |
| PORTUG 226 | Third Year Conversation and Composition |


| PORTUG 301 | Intensive Portuguese |
| :---: | :---: |
| PORTUG 302 | Intensive Portuguese |
| PORTUG 311 | Fourth Year Composition and Conversation |
| PORTUG 312 | Fourth Year Composition and Conversation |
| PORTUG 330 | History of the Portuguese Language |
| PORTUG 411 | Survey of Portuguese Literature before 1825 |
| PORTUG 412 | Survey of Brazilian Literature before 1890 |
| PORTUG/ <br> FRENCH/ITALIAN/ <br> SPANISH 429 | Introduction to the Romance Languages |
| PORTUG/ <br> GEN\&WS 450 | Brazillian Women Writers |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature |
| PORTUG 467 | Survey of Portuguese Literature since 1825 |
| PORTUG 468 | Survey of Brazilian Literature since $1890$ |
| PORTUG 640 | Topics in Luso-Brazilian Literature |
| Quechua |  |
| LACIS/ ANTHRO 361 | Elementary Quechua |
| LACIS/ ANTHRO 362 | Elementary Quechua |
| LACIS/ ANTHRO 363 | Intermediate Quechua |
| LACIS/ ANTHRO 364 | Advanced Quechua |
| Yucatec Maya |  |
| LACIS/ <br> ANTHRO 376 | First Semester Yucatec Maya |
| LACIS/ ANTHRO 377 | Second Semester Yucatec Maya |

## Area Studies Courses

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ <br> AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |
| AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| ANTHRO 237 | Cut 'n' Mix: Music, Race, and Culture in the Caribbean | 3 |
| ANTHRO 327 | Peoples of the Andes Today | 3 |
| GEN\&WS/ PORTUG 450 | Brazillian Women Writers | 3 |
| GEN\&WS/ PORTUG 460 | Carmen Miranda | 3 |
| GEOG 348 | Latin America | 4 |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |


| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| :---: | :---: | :---: |
| HISTORY/CHICLA/ LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY/ <br> CHICLA 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 525 | The World and the West from 1492 | 3-4 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 555 | History of Brazil | 3-4 |
| HISTORY/HIST SCI/ MED HIST 564 | Disease, Medicine and Public Health in the History of Latin America and the Caribbean | 3 |
| LACIS/AFROAMER/ ANTHRO/C\&E SOC/ GEOG/HISTORY/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| LACIS 440 | Topics in Latin American, Caribbean, and Iberian Studies | 1-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 252 | Spanish Literary Masterpieces in Translation | 3 |
| POLI SCI 321 | Latin-American Politics | 3-4 |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |
| $\begin{aligned} & \text { POLI SCI/ } \\ & \text { INTL ST } 423 \end{aligned}$ | Social Mobilization in Latin America | 3 |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
| PORTUG 221 | Introduction to Luso-Brazilian Literatures | 4 |
| PORTUG 230 | Brazil and Brazilians in the United States | 3 |
| PORTUG 330 | History of the Portuguese Language | 3 |
| PORTUG 361 | Portuguese Civilization | 3 |
| PORTUG 362 | Brazilian Civilization | 3 |
| PORTUG 364 | Historical and Cultural Traditions of Brazil | 2 |
| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| PORTUG 468 | Survey of Brazilian Literature since 1890 | 3 |
| PORTUG 573 | Topics in Portuguese: Study Abroad | 1-6 |
| PORTUG 640 | Topics in Luso-Brazilian Literature | 3 |
| PORTUG 642 | Topics in Luso-Brazilian Culture | 3 |
| SOC/CHICLA 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |


| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| :---: | :---: | :---: |
| SPANISH 326 | Survey of Spanish American Literature | 3 |
| SPANISH 359 | Spanish Business Area Studies | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| SPANISH 363 | Spanish American Civilization | 3 |
| SPANISH 435 | Cervantes | 3 |
| SPANISH 453 | Literature of the Twentieth Century | 3 |
| SPANISH 460 | Literatura Hispanoamericana | 3 |
| SPANISH 461 | The Spanish American Short Story | 3 |
| SPANISH 462 | Spanish American Theater and Drama | 3 |
| SPANISH 463 | The Spanish American Novel | 3 |
| SPANISH 464 | Spanish American Poetry and Essay | 3 |
| SPANISH 465 | Literature and Film in Spanish America | 3 |
| SPANISH 466 | Topics in Spanish American Literature | 1 |
| SPANISH 468 | Topics in Hispanic Culture | 3 |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics | 3 |
| SPANISH 471 | Topics in Hispanic Literature | 3 |
| SPANISH 472 | Hispanic Screen Studies | 3 |
| SPANISH 475 | Study Abroad in Hispanic Literatures | 1-4 |
| SPANISH 476 | Study Abroad in Hispanic Cultures | 1-4 |
| SPANISH 502 | Survey of Spanish American Literature from Modernismo to the Present | 3 |
| SPANISH 505 | Advanced Survey of Spanish Literature | 3 |
| SPANISH 506 | Advanced Survey of Spanish Literature | 3 |

## MIDDLE EAST

## Study Abroad Programs

- Israel: Tel Aviv, IAP

Language Courses
Code Title Credits

| Arabic |  |
| :---: | :--- |
| AFRICAN 321 | First Semester Arabic |
| AFRICAN 322 | Second Semester Arabic |
| AFRICAN 324 | Fourth Semester Arabic |
| AFRICAN 325 | Colloquial Arabic |
| AFRICAN 329 | Fifth Semester Arabic |
| AFRICAN 330 | Sixth Semester Arabic |
| Hebrew |  |
| HEBR-MOD 101 | First Semester Hebrew |
| HEBR-MOD 102 | Second Semester Hebrew |
| HEBR-MOD 201 | Third Semester Hebrew |
| HEBR-MOD 202 | Fourth Semester Hebrew |


| HEBR-MOD/ JEWISH 302 | Introduction to Hebrew Literature |  |
| :---: | :---: | :---: |
| Turkish |  |  |
| LCA LANG 339 | First Semester Turkish |  |
| LCA LANG 340 | Second Semester Turkish |  |
| LCA LANG 439 | Third Semester Turkish |  |
| LCA LANG 440 | Fourth Semester Turkish |  |
| LCA LANG 539 | Fifth Semester Turkish and Azeri |  |
| LCA LANG 540 | Sixth Semester Turkish and Azeri |  |
| LCA LANG 631 | Advanced Readings in Turkic Languages |  |
| Persian |  |  |
| LCA LANG 363 | First Semester Persian |  |
| LCA LANG 364 | Second Semester Persian |  |
| LCA LANG 463 | Third Semester Persian |  |
| LCA LANG 464 | Fourth Semester Persian |  |
| LCA LANG 563 | Fifth Semester Persian |  |
| LCA LANG 564 | Sixth Semester Persian |  |
| Area Studies Courses |  |  |
| Code | Title | Credits |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture | 3-4 |
| ART HIST 201 | History of Western Art I: From Pyramids to Cathedrals | 4 |
| ART HIST 305 | History of Islamic Art and Architecture | 3 |
| ART HIST/LCA 379 | Cities of Asia | 3 |
| ART HIST 413 | Art and Architecture in the Age of the Caliphs | 3 |
| ART HIST 440 | Art and Power in the Arab World | 3 |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY/ JEWISH 220 | Introduction to Modern Jewish History | 4 |
| HISTORY/ RELIG ST 230 | Judaism, Christianity, and Islam: Braided Histories | 3 |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/GEN\&WS/ LCA 472 | Women in Turkish Society | 3 |
| JEWISH/SOC 258 | The Jews, States, and Citizenship: A Sociological Perspective | 3 |
| JEWISH/ <br> LITTRANS 318 | Modern Jewish Literature | 3-4 |
| JEWISH 343 | Israeli Fiction in Translation | 3-4 |
| JEWISH 356 | Jerusalem, Holy City of Conflict and Desire | 3 |
| LCA/RELIG ST 206 | Introduction to the Qur'an | 4 |
| LCA 266 Introduction to the Middle East |  | 3 |
| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| LCA/RELIG ST 444 | Introduction to Sufism (Islamic Mysticism) | 3 |


| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| :--- | :--- | ---: |
| LCA/RELIG ST/ | Social Structures of Muslim |  |
| SOC 614 | Societies | 3 |
| LITTRANS 214 | Literatures of Central Asia in <br>  <br> Translation | 3 |
| RITTRANS/ | Literatures of Muslim Societies in | 3 |
| POLIG ST 257 SCI 333 | Translation | International Politics of the Middle |
| POLI SCI 529 | East | $3-4$ |
| POLI SCI/ | Arab-Israeli Conflict | $3-4$ |
| RELIG ST 618 | Political Islam | $3-4$ |
| POLI SCI/ | Israeli Politics and Society | $3-4$ |
| JEWISH 665 |  |  |

## RUSSIA, EASTERN EUROPE \& CENTRAL ASIA

## Study Abroad Programs

- Czech Republic, Prague: CET Prague, IAP
- Hungary, Budapest: CIEE Budapest, IAP
- Russia, Moscow: Moscow CIEE Business \& International Relations, School of Business


## Language Courses

Code
Czech Title Credits

Kazakh
LCA LANG 331 First Semester Kazak
LCA LANG 332 Second Semester Kazak
LCA LANG 431 Third Semester Kazak
LCA LANG 432 Fourth Semester Kazak
LCA LANG 531 Fifth Semester Kazak
LCA LANG 532 Sixth Semester Kazak
Polish
SLAVIC 111 First Semester Polish

| SLAVIC 112 | Second Semester Po |
| :--- | :--- |
| SLAVIC 207 | Third Semester Polis |

SLAVIC 208 Fourth Semester Polish
SLAVIC 277 Third Year Polish I
SLAVIC 278 Third Year Polish II
SLAVIC 301 Introduction to Intensive Polish
SLAVIC $331 \quad$ Fourth Year Polish I
SLAVIC 332 Fourth Year Polish II
SLAVIC 470 Historia literatury polskiej do roku 1863

SLAVIC 472 Historia literatury polskiej po roku 1863

## Russian

SLAVIC 101 First Semester Russian

| SLAVIC 102 | Second Semester Russian |  | HISTORY/ GEOG/POLI SCI/ SLAVIC 253 | Russia: An Interdisciplinary Survey | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SLAVIC 117 | Intensive Second Year Russian |  |  |  |  |
| SLAVIC 118 | Intensive Second Year Russian |  |  |  |  |
| SLAVIC 182 | Russian Honors Tutorial for Slavic 102 |  | HISTORY/ GEOG/POLI SCI/ SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 |
| SLAVIC 203 | Third Semester Russian |  |  |  |  |
| SLAVIC 204 | Fourth Semester Russian |  | HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| SLAVIC 275 | Third Year Russian I |  |  |  |  |
| SLAVIC 276 | Third Year Russian II |  | HISTORY 357 | The Second World War | 3-4 |
| SLAVIC 283 | Russian Honors Tutorial for Slavic 203 |  | HISTORY 359 | History of Europe Since 1945 | 3-4 |
| SLAVIC 284 | Russian Honors Tutorial for Slavic 204 |  | HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| SLAVIC 315 | Russian Language and Culture I |  | HISTORY/ | Eastern European Jews in the | 3-4 |
| SLAVIC 316 | Russian Language and Culture II |  | JEWISH 416 | United States, 1880s-1930s |  |
| SLAVIC 321 | Fourth Year Russian I |  | HISTORY 419 | History of Soviet Russia | 3-4 |
| SLAVIC 322 | Fourth Year Russian II |  | HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| SLAVIC 350 | Special Topics in Russian |  |  |  |  |
|  | Language, Literature, and Culture |  | HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| SLAVIC 405 | Women in Russian Literature |  |  |  |  |
| SLAVIC 420 | Chekhov |  | HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| SLAVIC 421 | Gogol |  |  |  |  |
| SLAVIC 422 | Dostoevsky |  | HISTORY/GEN\&WS/ LCA 472 | Women in Turkish Society | 3 |
| SLAVIC 424 | Tolstoy |  |  |  |  |
| SLAVIC 440 | Soviet Literature |  | HISTORY 475 | European Social History, 1914Present | 3-4 |
| Serbo-Croatian |  |  | HISTORY/CURRIC/ <br> JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| SLAVIC 141 | First Semester Serbo-Croatian |  |  |  |  |
| SLAVIC 142 | Second Semester Serbo-Croatian |  | HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| SLAVIC 251 | Third Semester Serbo-Croatian |  |  |  |  |
| SLAVIC 252 | Fourth Semester Serbo-Croatian |  |  |  |  |
| SLAVIC 341 | First Semester Intensive SerboCroatian |  | LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| SLAVIC 342 | Uvod u srpsku i hrvatsku literaturu |  | LCA 314 | Literatures of Central Asia | 3 |
| SLAVIC 441 | Third Semester Intensive SerboCroation |  | LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
|  |  |  | LCA/AFRICAN/ RELIG ST 370 | Islam: Religion and Culture | 3-4 |
| SLAVIC 442 | Fourth Semester Intensive SerboCroation |  |  |  |  |
|  |  |  | LCA 579 | Fiction and Ethnography in Turkey | 3 |
| SLAVIC 449 | Istorija srpske i hrvatske literature |  | LITTRANS 201 | Survey of 19th and 20th Century Russian Literature in Translation I | 3 |
| SLAVIC 454 | Moderna srpska i hrvatska literatura |  |  |  |  |
| Area Studies Courses |  |  | LITTRANS 202 | Survey of 19th and 20th Century Russian Literature in Translation II | 3 |
| Code | Title | Credits | LITTRANS 203 | Survey of 19th and 20th Century Russian Literature in Translation I | 4 |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |  |  |  |
| COM ARTS 456 | Russian and Soviet Film | 3 | LITTRANS 204 | Survey of 19th and 20th Century Russian Literature in Translation II | 4 |
| FOLKLORE/LCA 279 | Introduction to Turkish Folk Literature | 3 | LITTRANS/ GEN\&WS 205 | Women in Russian Literature in Translation | 3-4 |
| FOLKLORE/ LITTRANS 347 | In Translation: Kalevala and Finnish Folk-Lore | 3-4 | LITTRANS 208 | The Writings of Vaclav Havel: Crtitique of Modern Society | 3 |
| FOLKLORE/ RELIG ST 352 | Shamanism | 3 | LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| FOLKLORE/ <br> SLAVIC 444 | Slavic and East European Folklore | 3 | LITTRANS 220 | Chekhov in Translation | 3-4 |
|  |  |  | LITTRANS 221 | Gogol in Translation | 3-4 |
| GEOG 353 | Russia and the NIS-Topical Analysis | 3 | LITTRANS 222 | Dostoevsky in Translation | 3-4 |


| LITTRANS/ | Vladimir Nabokov: Russian and | 3 | SOUTH ASIA <br> Study Abroad Programs <br> ENGL 223 | American Writings |
| :--- | :--- | ---: | :--- | :--- |


| E ASIAN/LCA/ RELIG ST 466 | Buddhist Thought | 3 |
| :---: | :---: | :---: |
| FOLKLORE/LCA 374 | Indian Folklore | 3 |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY 229 | Explorations in Transnational/ Comparative History (Humanities) | 3 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY 463 | Topics in South Asian History | 3 |
| HISTORY/LCA/ RELIG ST 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |
| LCA/RELIG ST 274 | Religion in South Asia | 3 |
| LCA 311 | Modern Indian Literatures | 3 |
| LCA/POLI SCI 326 | Politics of South Asia | 3-4 |
| LCA/RELIG ST 355 | Hinduism | 4 |
| LCA/AFRICAN/ RELIG ST 370 | Islam: Religion and Culture | 3-4 |
| LCA/ART HIST 379 | Cities of Asia | 3 |
| LCA/RELIG ST 444 | Introduction to Sufism (Islamic Mysticism) | 3 |
| LCA/ENGL 478 | Indian Writers Abroad: Literature, Diaspora and Globalization | 3 |
| LCA 600 | Capstone Seminar in Asian Humanities | 3 |
| LCA/RELIG ST 620 | Proseminar: Studies in Religions of Asia | 3 |
| LCA/RELIG ST 623 | Yoga: Methods and Goals | 3 |
| LCA/RELIG ST 624 | Meditation in Indian Buddhism and Hinduism | 3 |
| LCA/RELIG ST 626 | Gods and Goddesses of South Asia | 3 |
| LCA 630 | Proseminar: Studies in Cultures of Asia | 3 |
| LCA 666 | Proseminar: Studies in Literatures of Asia | 3 |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| POLI SCI/ASIAN 663 | South Asia and the Global System: Economy, Security \& Culture | 3-4 |
| RELIG ST/LCA 421 | A Survey of Tibetan Buddhism | 3 |

## SOUTHEAST ASIA \& OCEANIA

## Study Abroad Programs

- Singapore: National University of Singapore, School of Business
- Thailand, Bangkok: Chulalongkorn University, School of Business
- Australia, Melbourne: Monash University Exchange, International Academic Programs
- Australia, Sydney: TEAN University of South Wales, International Academic Programs
- New Zealand: Massey University Exchange, International Academic Programs

| Language Courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Filipino (Tagalong) |  |  |
| LCA LANG 305 | First Semester Filipino |  |
| LCA LANG 306 | Second Semester Filipino |  |
| LCA LANG 405 | Third Semester Filipino |  |
| LCA LANG 406 | Fourth Semester Filipino |  |
| LCA LANG 505 | Fifth Semester Filipino |  |
| LCA LANG 506 | Sixth Semester Filipino |  |
| Hmong |  |  |
| LCA LANG 307 | First Semester Hmong |  |
| LCA LANG 308 | Second Semester Hmong |  |
| LCA LANG 407 | Third Semester Hmong |  |
| LCA LANG 408 | Fourth Semester Hmong |  |
| LCA LANG 507 | Fifth Semester Hmong |  |
| LCA LANG 508 | Sixth Semester Hmong |  |
| Indonesian |  |  |
| LCA LANG 309 | First Semester Indonesian |  |
| LCA LANG 310 | Second Semester Indonesian |  |
| LCA LANG 409 | Third Semester Indonesian |  |
| LCA LANG 410 | Fourth Semester Indonesian |  |
| LCA LANG 509 | Fifth Semester Indonesian |  |
| LCA LANG 510 | Sixth Semester Indonesian |  |
| Khmer |  |  |
| LCA LANG 313 | First Semester Khmer |  |
| LCA LANG 314 | Second Semester Khmer |  |
| LCA LANG 413 | Third Semester Khmer |  |
| LCA LANG 414 | Fourth Semester Khmer |  |
| LCA LANG 513 | Fifth Semester Khmer |  |
| LCA LANG 514 | Sixth Semester Khmer |  |
| Thai |  |  |
| LCA LANG 317 | First Semester Thai |  |
| LCA LANG 318 | Second Semester Thai |  |
| LCA LANG 417 | Third Semester Thai |  |
| LCA LANG 418 | Fourth Semester Thai |  |
| LCA LANG 517 | Fifth Semester Thai |  |
| LCA LANG 518 | Sixth Semester Thai |  |
| Vietnamese |  |  |
| LCA LANG 319 | First Semester Vietnamese |  |
| LCA LANG 320 | Second Semester Vietnamese |  |
| LCA LANG 419 | Third Semester Vietnamese |  |
| LCA LANG 420 | Fourth Semester Vietnamese |  |

## Area Studies Courses

Code Title Credits
ANTHRO 330 Topics in Ethnology 3-4
ASIAN/ Asia Enchanted: Ghosts, Gods, and 3
RELIG ST 236 Monsters
DANCE/FOLKLORE/ Javanese Performance 2

THEATRE 321
DANCE/FOLKLORE/ Javanese Performance Repertory 2
THEATRE 421
FOLKLORE/LCA 374 Indian Folklore
GEOG/HISTORY/
LCA/POLI SCI/

SOC 244 $\quad$| Introduction to Southeast Asia: |
| :--- |
| Vietnam to the Philippines |$\quad 4$

## WESTERN EUROPE

## Study Abroad Programs

- Austria, Vienna: Wirtschaftsuniversitat-Wien, School of Business
- Belgium, Leuven: K.U. Leuven, School of Business
- Belgium, Brussels: CIEE Brussels, IAP
- Denmark, Copenhagen: Copenhagen Business School, School of Business
- England, Coventry: Warwick Business School, WSB UW-Madison CoSponsored Program
- England, London: IES London City University Direct Enrollment, School of Business
- England, London: UW in London, WSB UW-Madison Co-Sponsored Program
- England, London: University of Westminster, IAP
- England, Lancaster. Lancaster University, WSB UW-Madison CoSponsored Program
- France, Paris IES: IES Paris Business \& International Affairs, School of Business
- France, Rouen: NEOMA Business School, School of Business
- France, Toulouse CIEE: CIEE Toulouse Business and Culture, School of Business
- Germany, Vallendar: WHU - Otto Beisheim School of Management, School of Business
- Ireland, Dublin: University College Dublin, School of Business
- Ireland, Galway: National University of Ireland Galway, IAP
- Italy, Milan: Bocconi University, School of Business
- Italy, Paderno del Grappa: CIMBA, School of Business
- Italy, Rome: CEA Rome Business and Communication, School of Business
- Netherlands, Amsterdam CIEE: CIEE Amsterdam Business and Culture, School of Business
- Netherlands, Maastricht: Maastricht University, School of Business
- Norway, Oslo: BI Norwegian Business School, School of Business
- Spain, Barcelona: IES Liberal Arts \& Business Program Barcelona, IAP
- Spain, Barcelona: CIEE Barcelona Business and Culture, School of Business
- Spain, Madrid: University of Carlos III Madrid, School of Business
- Spain, Pamplona: University of Navarra, School of Business
- Spain, Seville: CIEE Seville Business and Society, School of Business


## Language Courses

| Code <br> Czech | Title |
| :--- | :--- |
| SLAVIC 115 | First Semester Czech |
| SLAVIC 116 | Second Semester Czech |
| SLAVIC 217 | Third Semester Czech |
| SLAVIC 218 | Fourth Semester Czech |
| SLAVIC 351 | First Semester Intensive Czech |
| SLAVIC 352 | Second Semester Intensive Czech |
| SLAVIC 451 | Third Semester Intensive Czech |
| SLAVIC 452 | Fourth Semester Intensive Czech |

## Danish

SCAND ST 121 First Semester Danish
SCAND ST 122 Second Semester Danish
SCAND ST 221 Second Year Danish
SCAND ST 222 Second Year Danish
SCAND ST 271 Readings in Danish Literature
Dutch
GERMAN 111 First Semester Dutch
GERMAN 112 Second Semester Dutch
GERMAN 213 Third Semester Dutch
GERMAN 214 Fourth Semester Dutch 4

GERMAN 235 Dutch Conversation and
Composition
GERMAN 325 Topics in Dutch Literature
GERMAN 335 Dutch Conversation and Composition
GERMAN 445 Topics in Dutch Culture

Finnish
SCAND ST 301 Intensive Finnish I
SCAND ST 302 Intensive Finnish II
French
FRENCH 101 First Semester French
FRENCH 102 Second Semester French
FRENCH 203 Third Semester French
FRENCH 204 Fourth Semester French
FRENCH 227 Exploring French: IntermediateLevel Course for Entering Students
FRENCH 228 Intermediate Language and Culture
FRENCH 271 Introduction to Literary Analysis


| ITALIAN/FRENCH/ | Introduction to the Romance |
| :--- | :--- |
| PORTUG/ | Languages |
| SPANISH 429 |  |
| ITALIAN 601 | L'Ottocento |
| ITALIAN 621 | Il Settecento |
| ITALIAN 631 | Lineamenti Di Letteratura Italiana |
| ITALIAN 632 | Lineamenti Di Letteratura Italiana |
| ITALIAN 635 | Il Romanzo Italiano |
| ITALIAN 636 | Il Romanzo Italiano |
| ITALIAN 637 | La Poesia del Novecento |
| ITALIAN 641 | II Seicento: Ribelli, Libertini e |
| ITALIAN 651 | Ortodossi |
| ITALIAN/ Rinascimento | Dante's Divina Commedia |
| MEDIEVAL 659 |  |
| ITALIAN/ | Dante's Divina Commedia |
| MEDIEVAL 660 |  |
| ITALIAN/ | Il Duecento |
| MEDIEVAL 671 |  |

## Norwegian

SCAND ST 101 First Semester Norwegian

SCAND ST 102 Second Semester Norwegian
SCAND ST 201 Second Year Norwegian
SCAND ST 202 Second Year Norwegian
SCAND ST 251 Readings in Norwegian Literature
Polish

| SLAVIC 111 | First Semester Polish |
| :--- | :--- |
| SLAVIC 112 | Second Semester Polish |
| SLAVIC 207 | Third Semester Polish |
| SLAVIC 208 | Fourth Semester Polish |
| SLAVIC 277 | Third Year Polish I |
| SLAVIC 278 | Third Year Polish II |
| SLAVIC 301 | Introduction to Intensive Polish |
| SLAVIC 331 | Fourth Year Polish I |
| SLAVIC 332 | Fourth Year Polish II |
| SLAVIC 470 | Historia literatury polskiej do roku <br>  <br> 1863 |
| SLAVIC 472 | Historia literatury polskiej po roku <br>  |

Portuguese

| PORTUG 101 | First Semester Portuguese |
| :--- | :--- |
| PORTUG 102 | Second Semester Portuguese |
| PORTUG 201 | Third Semester Portuguese |
| PORTUG 202 | Fourth Semester Portuguese |
| PORTUG 207 | Portuguese for Business |
| PORTUG 221 | Introduction to Luso-Brazilian <br> Literatures |
| PORTUG 225 | Third Year Conversation and <br> Composition |

PORTUG 226 Third Year Conversation and Composition
PORTUG 301 Intensive Portuguese
PORTUG 302 Intensive Portuguese

| PORTUG 311 | Fourth Year Composition and Conversation |
| :---: | :---: |
| PORTUG 312 | Fourth Year Composition and Conversation |
| PORTUG 330 | History of the Portuguese Language |
| PORTUG 411 | Survey of Portuguese Literature before 1825 |
| PORTUG 412 | Survey of Brazilian Literature before 1890 |
| PORTUG/ FRENCH/ITALIAN/ SPANISH 429 | Introduction to the Romance Languages |
| PORTUG/ <br> GEN\&WS 450 | Brazillian Women Writers |
| PORTUG/ <br> AFRICAN 451 | Lusophone African Literature |
| PORTUG 467 | Survey of Portuguese Literature since 1825 |
| PORTUG 468 | Survey of Brazilian Literature since 1890 |
| PORTUG 640 | Topics in Luso-Brazilian Literature |
| Spanish |  |
| SPANISH 101 | First Semester Spanish |
| SPANISH 102 | Second Semester Spanish |
| SPANISH 203 | Third Semester Spanish |
| SPANISH 204 | Fourth Semester Spanish |
| SPANISH 223 | Introduction to Hispanic Cultures |
| SPANISH 224 | Introduction to Hispanic Literatures |
| SPANISH 226 | Intermediate Language Practice with Emphasis on Writing and Grammar |
| SPANISH 311 | Advanced Language Practice |
| SPANISH 319 | Topics in Spanish Language Practice |
| SPANISH 320 | Spanish Phonetics |
| SPANISH 322 | Survey of Early Hispanic Literature |
| SPANISH 323 | Advanced Language Practice with Emphasis on Expository Writing |
| SPANISH 324 | Survey of Modern Spanish Literature |
| SPANISH 325 | Advanced Conversation |
| SPANISH 326 | Survey of Spanish American Literature |
| SPANISH 359 | Spanish Business Area Studies |
| SPANISH/ MEDIEVAL 414 | Literatura de la Edad Media Castellana (ss. XII-XV) |
| SPANISH/ <br> FRENCH/ITALIAN/ PORTUG 429 | Introduction to the Romance Languages |
| SPANISH 435 | Cervantes |
| SPANISH 453 | Literature of the Twentieth Century |
| SPANISH 460 | Literatura Hispanoamericana |
| SPANISH 461 | The Spanish American Short Story |
| SPANISH 462 | Spanish American Theater and Drama |


| SPANISH 463 | The Spanish American Novel |
| :---: | :---: |
| SPANISH 464 | Spanish American Poetry and Essay |
| SPANISH 465 | Literature and Film in Spanish America |
| SPANISH 466 | Topics in Spanish American Literature |
| SPANISH/ <br> CHICLA 467 | US Latino Literature |
| SPANISH 468 | Topics in Hispanic Culture |
| SPANISH/ <br> CHICLA 469 | Topics in Hispanic Cultures in the U.S. |
| SPANISH 470 | Undergraduate Seminars in Hispanic Literature/Culture/ Linguistics |
| SPANISH 471 | Topics in Hispanic Literature |
| SPANISH 472 | Hispanic Screen Studies |
| SPANISH 473 | Study Abroad in Spanish Language Practice |
| SPANISH 474 | Study Abroad in Spanish Linguistics |
| SPANISH 475 | Study Abroad in Hispanic Literatures |
| SPANISH 476 | Study Abroad in Hispanic Cultures |
| SPANISH/ <br> CHICLA 478 | Border and Race Studies in Latin America |
| SPANISH 501 | Survey of Spanish American Literature from the Discovery to Modernismo |
| SPANISH 502 | Survey of Spanish American Literature from Modernismo to the Present |
| SPANISH/ <br> MEDIEVAL 503 | Survey of Medieval Literature |
| SPANISH/ <br> MEDIEVAL 504 | Survey of Medieval Literature |
| SPANISH 505 | Advanced Survey of Spanish Literature |
| SPANISH 506 | Advanced Survey of Spanish Literature |
| SPANISH/ MEDIEVAL 541 | Old Spanish |
| SPANISH 543 | Spanish Phonology |
| SPANISH 544 | Contemporary Issues in Applied Spanish Linguistics |
| SPANISH 545 | College Teaching of Spanish |
| SPANISH 548 | Structure of the Spanish Language: Morphology and Syntax |
| SPANISH 564 | Theory and Practice of Hispanic Theatre |
| SPANISH 627 | Historia de Teoria Literaria: de Platon AI Siglo XVIII |
| SPANISH 628 | Historia de Teoria Literaria: Siglos XIX-XX |
| SPANISH 630 | Topics in Hispanic Linguistics |
| SPANISH 681 | Senior Honors Thesis |
| SPANISH 682 | Senior Honors Thesis |
| SPANISH 691 | First Semester Senior Thesis |


| SPANISH 692 | Second Semester Senior Thesis |
| :---: | :--- |
| SPANISH 699 | Directed Study |
| Swedish |  |
| SCAND ST 111 | First Semester Swedish |
| SCAND ST 112 | Second Semester Swedish |
| SCAND ST 211 | Second Year Swedish |
| SCAND ST 212 | Second Year Swedish |
| SCAND ST 261 | Readings in Swedish Literature |

## Area Studies Courses

| Code | Title | Credits |
| :---: | :---: | :---: |
| ANTHRO 369 | Peoples and Cultures of Central and Eastern Europe | 3-4 |
| ART HIST 336 | Study Abroad in Renaissance/ Baroque/Northern Art | 1-6 |
| ART HIST 346 | British Art and Society from the Eighteenth Century to the Present | 3-4 |
| ART HIST 351 | 20th Century Art in Europe | 3-4 |
| ART HIST 358 | European Architecture: The Modern Movements | 3-4 |
| ART HIST 408 | Topics in Twentieth-Century Art (Modern Italian Art) | 3-4 |
| ART HIST 454 | Art in Germany, 1900-1945 | 3-4 |
| ART HIST 555 | Proseminar in 19th Century European Art | 3 |
| ART HIST 556 | Proseminar in 20th Century European Art | 3 |
| CLASSICS/ ITALIAN 350 | Rome: The Changing Shape of the Eternal City | 3-4 |
| COM ARTS 455 | French Film | 3 |
| COM ARTS/ ITALIAN 460 | Italian Film | 3 |
| COM ARTS/ | German Film | 3 |

GERMAN 655
CURRIC/HISTORY/ Holocaust: History, Memory and 3

| JEWISH 515 | Education |  |
| :--- | :--- | :--- |
| ENGL 345 | Nineteenth-Century Novel |  |

ENGL 351 Modernist Novel 3
ENGL 352 Modernist Poetry 3
ENGL 353 British Literature since 1900
ENGL $443 \quad$ Outstanding Figure(s) in Literature 3
since 1800
ENGL 453 Topic in British Literature and 3

|  | Culture since 1900 | 3 |
| :--- | :--- | :--- |

FOLKLORE/ In Translation: Mythology of 3-4
LITTRANS/ Scandinavia

MEDIEVAL/
RELIG ST 342
FOLKLORE/ In Translation: Kalevala and Finnish 3-4

| LITTRANS 347 | Folk-Lore |
| :--- | :--- |
| FOLKLORE/ | Sami Culture, Yesterday and Today |

SCAND ST 443
FRENCH 210 Sexuality and Gender in 20th- 3
FRENCH 240 Immigration and Expression 3

| FRENCH/ | Professional Communication and | 3 | GERMAN 278 | Topics in German Culture | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| INTL BUS 313 | Culture in the Francophone World |  | GERMAN 325 | Topics in Dutch Literature | 3 |
| FRENCH/ <br> INTL BUS 314 | Contemporary Issues in Government, Organizations, and Enterprise | 3 | GERMAN 362 | Topics in German Literature | 3-4 |
|  |  |  | GERMAN 367 | Study Abroad in German Literature | 2-5 |
|  |  |  | GERMAN 368 | Study Abroad in German Culture | -5 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 | GERMAN 372 | Topics in German Culture | 3-4 |
| FRENCH 325 | Visual Culture in French/ Francophone Studies | 3 | GERMAN 377 | Study Abroad in Dutch Literature | 2-5 |
|  |  |  | GERMAN 378 | Study Abroad in Dutch Culture | 2-5 |
| FRENCH 348 | Modernity Studies | 3 | GERMAN 385 | Honors Seminar in German | 3 |
| FRENCH 433 | Readings in Twentieth and TwentyFirst Century Literature | 3 |  |  |  |
|  |  |  | GERMAN 445 | Topics in Dutch Culture | 3-4 |
| FRENCH 449 | Francophone Modernity Studies | 3 | GERMAN/ | German-Jewish Culture Since the | 3 |
| FRENCH 461 | French/Francophone Literary | 3 | JEWISH 510 | 18th Century |  |
|  | Studies Across the Centuries |  | GERMAN 612 | German Literary Movements Since | 3 |
| FRENCH 462 | French/Francophone Cultural | 3 |  | 1750 |  |
|  | Studies Across the Centuries |  | GERMAN 632 | A Theme in German Literature | 3 |
| FRENCH 465 | French/Francophone Film | 3 | GERMAN 644 | Theory and Practice of German | 3 |
| FRENCH 467 | Aspects of Contemporary French | 3 |  | Drama |  |
|  | Literature |  | GERMAN 677 | Seminar in German Culture Studies | 3 |
| FRENCH 472 | French/Francophone Literature and Women | 3 | GERMAN 683 | Senior Honors Seminar in German Literature | 3 |
| FRENCH 567 | Undergraduate Seminar in French/ Francophone Literary Studies | 3 | HIST SCI/ C\&E SOC 230 | Agriculture and Social Change in Western History | 3 |
| FRENCH 568 | Undergraduate Seminar in French/ Francophone Cultural Studies | 3 | HIST SCI 339 | Technology and Its Critics Since World War II | 3 |
| FRENCH 595 | Theory and Practice of French/ Francophone Drama | 4 | HIST SCI/HISTORY/ MED HIST 543 | Doctors and Delusions: Madness and Medicine in the Modern Era | 3 |
| FRENCH 626 | Critical Approaches to French Literature | 3 | HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| GEN\&WS/ LITTRANS 270 | German Women Writers in Translation | 3 | HISTORY 124 | British History: 1688 to the Present | 4 |
|  |  |  | HISTORY/ | Introduction to Modern Jewish | 4 |
| GEOG/HISTORY/ <br> POLI SCI/ <br> SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 | JEWISH 220 | History |  |
|  |  |  | HISTORY 223 | Explorations in European History (H) | 3-4 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 | HISTORY 224 | Explorations in European History (S) | 3 |
| GEOG 349 | Europe | 3 | HISTORY 271 | History Study Abroad: European | 1-4 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |  | History |  |
|  |  |  | HISTORY/ | Environmental History of Europe | 3 |
| GERMAN 221 | Introduction to German Literature and Culture I | 3 | ENVIR ST 328 |  |  |
|  |  |  | HISTORY 349 | Contemporary France, 1914 to the | 3-4 |
| GERMAN 222 | Introduction to German Literature and Culture II | 3 |  | Present |  |
|  |  |  | HISTORY 357 | The Second World War | 3-4 |
| GERMAN 245 | Topics in Dutch Life and Culture | 3 | HISTORY 358 | French Revolution and Napoleon | 3-4 |
| GERMAN 266 | Topics in German and/or Yiddish Culture | 3 | HISTORY 359 | History of Europe Since 1945 | 3-4 |
|  |  |  | HISTORY/ | Modern Political History of the | 4 |
| GERMAN/ <br> JEWISH 267 | Yiddish Song and the Jewish Experience | 3-4 | JEWISH 374 | Jews: Era of Mass Movements, 1870-1970 |  |
| GERMAN/JEWISH/ LITTRANS 269 | Yiddish Literature and Culture in Europe | 3 | HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| GERMAN 271 | The German Immigration Experience | 3 | HISTORY/ <br> SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| GERMAN/ LITTRANS 276 | Special Topics in German and World Literature/s | 3 | HISTORY/ <br> RELIG ST 470 | Religious Thought in Modern Europe | 3-4 |
| GERMAN 272 | Nazi Culture | 3 | HISTORY 475 | European Social History, 1914- | 3-4 |
| GERMAN 275 | Kafka and the Kafkaesque | 3 |  | Present |  |


| HISTORY 503 | Irish and Scottish Migrations | 3 |
| :---: | :---: | :---: |
| HISTORY 514 | European Cultural History Since $1870$ | 3-4 |
| HISTORY/ JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| HISTORY/CLASSICS/ <br> FRENCH/ITALIAN/ <br> MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| ILS 201 | Western Culture: Science, Technology, Philosophy I | 3 |
| ILS 202 | Western Culture: Science, Technology, Philosophy II | 3 |
| ILS 203 | Western Culture: Literature and the Arts I | 3 |
| ILS 204 | Western Culture: Literature and the Arts II | 3-4 |
| ILS 205 | Western Culture: Political, Economic, and Social Thought I | 3 |
| ILS 206 | Western Culture: Political, Economic, and Social Thought II | 3 |
| ITALIAN 230 | Modern Italian Culture | 3 |
| ITALIAN 321 | Studies in Italian Literature and Culture I | 3 |
| ITALIAN 322 | Studies in Italian Literature and Culture II | 3 |
| ITALIAN/ CLASSICS 350 | Rome: The Changing Shape of the Eternal City | 3-4 |
| ITALIAN 450 | Special Topics in Italian Literature | 3 |
| ITALIAN 452 | Special Topics in Italian Studies: Culture, Film, Language | 3 |
| ITALIAN 453 | Special Topics in Italian Studies: Culture, Film, Language | 1 |
| ITALIAN/ COM ARTS 460 | Italian Film | 3 |
| ITALIAN/CLASSICS/ FRENCH/HISTORY/ MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| JEWISH 625 | The Holocaust: Facts, Trials, Verdicts, Post-Verdicts | 3 |
| LCA/GEN\&WS/ HISTORY 472 | Women in Turkish Society | 3 |
| LCA 579 | Fiction and Ethnography in Turkey | 3 |
| LITTRANS 209 | Masterpieces of French Literature and Culture | 3 |
| LITTRANS 213 | Love and Sex in Italian Comedy | 3-4 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 249 | Literature in Translation: Nineteenth-Century French Masterpieces | 3 |
| LITTRANS 252 | Spanish Literary Masterpieces in Translation | 3 |
| LITTRANS 254 | In Translation: Lit of Modern ItalyExistentialism, Fascism, Resistance | 3 |
| LITTRANS 260 | Italy and the Invention of America: from Columbus to World War II | 3 |


| LITTRANS/GERMAN/ JEWISH 269 | Yiddish Literature and Culture in Europe | 3 |
| :---: | :---: | :---: |
| LITTRANS 272 | French Pop Culture | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |
| LITTRANS 275 | In Translation: The Tales of Hans Christian Andersen | 3-4 |
| LITTRANS/ GERMAN 276 | Special Topics in German and World Literature/s | 3 |
| LITTRANS 277 | Topics in Twentieth-Century German Literature (in Translation) | 3 |
| LITTRANS/LIS 319 | Scandinavian Children's Literature | 3-4 |
| LITTRANS 324 | Topics in Scandinavian Literature | 3-4 |
| LITTRANS 326 | Topics in Dutch Literature in Translation | 3 |
| LITTRANS 331 | In Translation: Scandinavian Topics in Depth | 1-2 |
| LITTRANS 334 | In Translation: The Art of Isak Dinesen/Karen Blixen | 3-4 |
| LITTRANS/ THEATRE 335 | In Translation: The Drama of Henrik Ibsen | 3-4 |
| LITTRANS 338 | In Translation: Knut Hamsun and the 20th Century Norwegian Novel | 3-4 |
| LITTRANS 339 | In Translation: Kierkegaard and Scandinavian Literature | 3-4 |
| LITTRANS 340 | Contemporary Scandinavian Literature in Translation | 3-4 |
| LITTRANS/ <br> FOLKLORE/ <br> MEDIEVAL/ <br> RELIG ST 342 | In Translation: Mythology of Scandinavia | 3-4 |
| LITTRANS 343 | In Translation: The Woman in Scandinavian Literature | 3-4 |
| LITTRANS 350 | Scandinavian Decadence in its European Context | 3-4 |
| LITTRANS 410 | In Translation: Special Topics in Italian Literature | 3 |
| MEDIEVAL/ SCAND ST 444 | Kalevala and Finnish Folk-Lore | 4 |
| MUSIC 416 | Survey of Music in the Twentieth Century | 3 |
| MUSIC 513 | Survey of Opera | 3 |
| PHILOS/ JEWISH 442 | Moral Philosophy and the Holocaust | 3 |
| PHILOS 530 | Freedom Fate and Choice | 3 |
| PHILOS 549 | Great Moral Philosophers | 3 |
| POLI SCI 266 | The Development of Modern Western Political Thought | 3-4 |
| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| POLI SCI 538 | Politics and Policies in the European Union | 3-4 |
| POLI SCI 659 | Politics and Society: Contemporary Eastern Europe | 3-4 |
| PORTUG 361 | Portuguese Civilization | 3 |


| PORTUG 467 | Survey of Portuguese Literature since 1825 | 3 |
| :---: | :---: | :---: |
| RELIG ST/ <br> FOLKLORE/ <br> LITTRANS/ <br> MEDIEVAL 342 | In Translation: Mythology of Scandinavia | 3-4 |
| RELIG ST/ HISTORY 470 | Religious Thought in Modern Europe | 3-4 |
| SCAND ST 276 | Scandinavian Life and Civilization | 3 |
| SCAND ST 284 | The "Scandinavian Modern" Phenomenon in Arts and Literature | 3 |
| SCAND ST 374 | Masterpieces of Scandinavian Literature: the Twentieth Century | 3-4 |
| SCAND ST 375 | The Writings of Hans Christian Andersen | 3-4 |
| SCAND ST 411 | Areas in Scandinavian Literature | 1 |
| SCAND ST 419 | Scandinavian Children's Literature | 4 |
| SCAND ST 420 | The Woman in Scandinavian Literature | 4 |
| SCAND ST 422 | The Drama of Henrik Ibsen | 4 |
| SCAND ST 423 | The Drama of August Strindberg | 4 |
| SCAND ST 424 | Nineteenth-Century Scandinavian Fiction | 3-4 |
| SCAND ST 425 | Knut Hamsun and the 20th Century Norwegian Novel | 4 |
| SCAND ST 426 | Kierkegaard and Scandinavian Literature | 4 |
| SCAND ST 427 | Contemporary Scandinavian Literature | 4 |
| SCAND ST/ <br> LITTRANS 428 | Memory and Literature from Proust to Knausgard | 3 |
| SCAND ST 429 | Mythology of Scandinavia | 4 |
| SCAND ST 434 | The Art of Isak Dinesen/Karen Blixen | 4 |
| SCAND ST 436 | Topics in Scandinavian Literature | 3-4 |
| SCAND ST/ <br> FOLKLORE 443 | Sami Culture, Yesterday and Today | 4 |
| SCAND ST/ MEDIEVAL 444 | Kalevala and Finnish Folk-Lore | 4 |
| SCAND ST/ <br> FOLKLORE/ <br> MEDIEVAL 446 | Celtic-Scandinavian Cultural Interrelations | 3 |
| SCAND ST 450 | Scandinavian Decadence in its European Context | 3-4 |
| SCAND ST 476 | Scandinavian Life and Civilization II | 4 |
| SCAND ST/ HISTORY 577 | Contemporary Scandinavia: Politics and History | 3-4 |
| SCAND ST 636 | Survey of Scandinavian Literature: 1890-1920 | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| SPANISH 322 | Survey of Early Hispanic Literature | 3 |
| SPANISH 324 | Survey of Modern Spanish Literature | 3 |
| SPANISH 359 | Spanish Business Area Studies | 3 |
| SPANISH 361 | Spanish Civilization | 3 |



Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Know and be able to apply international business theories and concepts to a variety of business situations.
2. Formulate business strategies appropriate to global, regional and local contexts.
3. Know the skills necessary for cross-cultural adaptation and know how to access resources to continue future learning.

## ADVIIING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

International business careers typically develop after graduates develop skills in a functional area of business. This functional expertise typically drives initial career placement and advancement. Though the perspective, intercultural awareness and regional knowledge gained through international business studies is always relevant, they typically have the greatest career impact several years into one's career. Therefore, the international business major is designed to serve as a complement to another business major.

Careers in international business are not necessarily located oversees or even in major cities. Many positions are in U.S.-based offices or divisions of international firms.

## PEOPLE

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## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022.

## MANAGEMENT \& HUMAN <br> RESOURCES

Students in human resources management study how organizations attract, motivate, develop, and retain employees, and how they interact with organizations representing employees. Management studies focus on the activities of leadership, power, decision-making, organizational structure and change, strategy and policy, and the integration of organizational functions. Studies in entrepreneurship are designed for students who are interested in bringing new ideas to the marketplace.

The M H R major is designed to give students the choice of which option(s) to study: human resources, management, or entrepreneurship.

## DEGREES/MAJORS/CERTIFICATES

- Business: Management and Human Resources, BBA (p. 1344)
- Entrepreneurship, Certificate (p. 1355)


## BUSINESS: MANAGEMENT AND HUMAN RESOURCES, BBA

Students in human resources management (https://wsb.wisc.edu/ programs-degrees/undergraduate-bba/academics/majors/ \#management-and-human-resources) study how organizations attract, motivate, develop, and retain employees, and how they interact with organizations representing employees. Management studies focus on the activities of leadership, power, decision-making, organizational structure and change, strategy and policy, and the integration of organizational functions. Studies in entrepreneurship are designed for students who are interested in bringing new ideas to the marketplace.

## RELATED STUDENT ORGANIZATIONS

Collegiate DECA (https://win.wisc.edu/organization/deca)
Enactus (https://win.wisc.edu/organization/madisonenactus)
Sales \& Executive Leadership (https://win.wisc.edu/organization/SEL) Sigma lota Epsilon (SIE)
Society for Human Resource Management (https://win.wisc.edu/ organization/shrm)
Sports Business Club (https://win.wisc.edu/organization/ sportsbusinessclub)
Wisconsin Consulting Club (WCC) (https://win.wisc.edu/organization/ wcc)

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.
Code
Title
Credits

School of Business BBA Requirements
Complete requirements: (p. 1305)
Pre-Business
Liberal Studies
Business Prep
Business Core
Business Breadth

## MANAGEMENT AND HUMAN RESOURCES (MHR) MAJOR REQUIREMENTS

The management and human resources major has three different options to choose from, as outlined below. Credit requirements vary based upon the option(s) students choose.

| Code Title | Credits |
| :--- | ---: |
| Students may complete a major in management and <br> human resources in six different ways: | 12 |
| Complete the requirements for the Management option <br> only (students still earn a major in MHR) | 12 |
| Complete the requirements for the Human Resources <br> option only (students still earn a major in MHR) | 12 |
| Complete the requirements for the Entrepreneurship <br> option only (students still earn a major in MHR) | 18 |
|  <br> Entrepreneurship | 18 |
| Complete the requirements for Management \& Human <br> Resources | 21 |
| Complete the requirements for Entrepreneurship \& Human <br> Resources | 21 |

- Business: Management and Human Resources: Entrepreneurship (p. 1350)
- Business: Management and Human Resources: Entrepreneurship/ Human Resources (p. 1351)
- Business: Management and Human Resources: Entrepreneurship/ Management (p. 1352)
- Business: Management and Human Resources: Human Resources (p. 1352)
- Business: Management and Human Resources: Management (p. 1353)
- Business: Management and Human Resources: Management/Human Resources (p. 1354)

1
Note: Completing two options still constitutes one major. Students may not receive credit for completing all three options.
In addition, the following rules apply when combining options:

1. Students may complete only two of three options. Students interested in pursuing two options should see an academic advisor to ensure that they are taking their courses efficiently.
2. For successful completion of TWO options, a student must take a minimum of 18-21 credits from among the listed courses.
3. Double (or triple) counting of M H R 399 Reading and ResearchManagement across options within the management major is prohibited.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. (Human Resources and Management Tracks) Understand that the management of human resources is vital to a successful business strategy and organizational effectiveness.
2. (Human Resources Track) Analyze organization compensation strategy to identify problems and develop solutions that support the organization's strategy.
3. (Human Resources Track) Discern which staffing techniques are poor, fair, and good predictors of employees' future job performance.
4. (Human Resources Track) Identify and address the various challenges currently facing labor and employment relations.
5. (Human Resources Track) Apply appropriate tactics in competitive and cooperative negotiations individually and as part of a negotiation team.
6. (Human Resources Track) Design work systems and roles that allow employees to contribute to organizational performance.
7. (Entrepreneurship Track) Develop innovative solutions to challenging problems and generate economic and socially valuable outcomes.
8. (Entrepreneurship Track) Create, assess, shape, and act on opportunities in a variety of contexts and organizations.
9. (Entrepreneurship Track) Make decisions based on mindfulness of relevant stakeholders, ethical reflections, and an attempt to create and sustain social, environmental, and economic value.
10. (Entrepreneurship Track) Incorporate cultural context and complexities when managing in a global environment.
11. (Entrepreneurship Track) Exercise appropriate leadership, value diverse perspectives, and work collaboratively to accomplish organizational objectives in a dynamic environment.
12. (Management Track) Develop successful team structures that mitigate decision-making pitfalls and interpersonal conflict while maximizing team performance.
13. (Management Track) Design successful organization structures to achieve strategic objectives and execute operational plans within a global business environment.
14. (Management Track) Diagnose management and organizational problems from an internal or external consultant's perspective and design interventions to enhance organizational effectiveness.
15. (Management Track) Evaluate an organization's internal capabilities and external pressures and maximize its competitive advantage within an industry.

## FOUR-YEAR PLAN

This is a sample four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

There are three named options for the MHR major from which students must choose. Students may also select any combination of two options. There are six plans below representing these options.

## MANAGEMENT

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 211 | 5 ECON 101 | 4 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |
| Communications 3 Science 3 <br> A 3 Humanities, <br> Social Science, <br> or Literature 3 <br> Ethnic Studies 12 13$\$ l$ |  |  |



| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| M H R 422 | $\begin{aligned} & 3 \text { M H R 399, } \\ & \text { FINANCE } 457 \text {, } \\ & \text { M H R 305, M } \\ & \text { H R } 310, \text { M H R } \\ & 365, \text { M H R } 401 \text {, } \\ & \text { M H R } 403, \text { M } \\ & \text { H R 412, M H R } \\ & 423, \text { M H R } 441 \text {, } \\ & \text { or M H R } 628 \end{aligned}$ | 3 |
| Ethics ${ }^{1}$ | 3-4 Business Breadth | 3 |
| Communications <br> B | s 3-4 Elective | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 |  |
|  | 15-17 | 12 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| GEN BUS 301 | 3 M H R 427 | 3 |
| Humanities, Social Science, or Literature | 3 Business Breadth | 3 |
| Humanities, Social Science, or Literature | 3 Science | 3 |
| Elective | 3 Elective | 3 |
|  | 12 | 12 |

Total Credits 110-112
1 Students must choose one of the following courses: PHILOS 241
Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341
Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental
Ethics

## MANAGEMENT \& HUMAN RESOURCES

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 211 | 5 ECON 101 | 4 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |
| Communications 3 Science 3 <br> A 3 Humanities, <br> Social Science, <br> or Literature 3 <br> Ethnic Studies 12 13 |  |  |


| Sophomore |  |  |  |
| :--- | :---: | :---: | ---: |
| Fall | Credits Spring | Credits Summer | Credits |
| ECON 102 | 4 GEN BUS 307 | 3 FINANCE/ | 3 |
| GEN BUS 306 | 3 ACCT I S 211 | 3 |  |
| GEN BUS 300 | 3 OTM 300 | 3 |  |
| ACCT I S 100 | 3 MARKETNG 300 | 3 |  |
| M H R 300 | 3 M H R 305 | 3 | 3 |

Junior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| Communications B | s $\quad 3-4 \mathrm{M} \mathrm{HR} 423$ | 3 |
| Ethics ${ }^{1}$ | 3-4 Business Breadth | 3 |
| Elective | 3 Humanities, Social Science, or Literature | 3 |
| $\begin{aligned} & \text { M H R 401, 399, } \\ & 403 \text {, or } 412 \end{aligned}$ | 3 Humanities, Social Science, or Literature | 3 |
|  | 12-14 | 12 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| GEN BUS 301 | 3 M H R 612 | 3 |
| Elective | 3 Business Breadth | 3 |
| M HR 610 or 611 | 3 Science | 3 |
| Elective | $\begin{aligned} & 3 \text { M H R 401, 399, } \\ & 403,412,310 \text {, } \\ & 365,422,427 \text {, or } \\ & 628 \end{aligned}$ | 3 |
|  | 12 | 12 |
| Total Credits 107-109 |  |  |
| Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics |  |  |

## MANAGEMENT \& ENTREPRENEURSHIP

Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 211 | 5 ECON 101 | 4 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |
| Communications 3 Science 3 <br> A 3 Humanities, <br> Social Science, <br> or Literature 3 <br> Ethnic Studies 12 13 |  |  |

Sophomore

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| ECON 102 | 4 GEN BUS 307 | 3 FINANCE/ | 3 |
| GEN BUS 306 | 3 ACCT I S 211 | 3 |  |
| ACCT I S 100 | 3 OTM 300 | 3 |  |
| GEN BUS 300 | 3 MARKETNG 300 | 3 |  |
| M H R 300 | 3 M H R 305, 399, | 3 |  |
|  | 401,403, or 412 |  | 3 |


| Junior |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| M HR 422 | 3 Business Breadth | 3 |
| M HR 423 | 3 Humanities, Social Science, or Literature | 3 |
| Communications <br> B | s 3-4 Elective | 3 |
| Ethics ${ }^{1}$ | 3-4 Elective | 3 |
| Elective | $\begin{array}{r} 3 \text { M H R 305, 399, } \\ 401,403 \text {, or } 412 \end{array}$ | 3 |
|  | 15-17 | 15 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| M H R 434, 399, or FINANCE 457 | 3 MHR 427 | 3 |
| Humanities, Social Science, or Literature | 3 Business Breadth | 3 |
| GEN BUS 301 | 3 Science | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 |  |
|  | 15 | 12 |

Total Credits 116-118
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

## ENTREPRENEURSHIP \& HUMAN RESOURCES

Freshman

| Fall | Credits Spring | Credits |  |
| :---: | :---: | :---: | :---: |
| MATH 211 | 5 ECON 101 | 4 |  |
| GEN BUS 110 | 1 PSYCH 202 | 3 |  |
| Ethnic Studies | 3 Science | 3 |  |
| Communications A | 3 Humanities, Social Science, or Literature | 3 |  |
|  | 12 | 13 |  |
| Sophomore |  |  |  |
| Fall | Credits Spring | Credits Summer | Credits |
| ECON 102 | 4 GEN BUS 307 | 3 FINANCE/ ECON 300 | 3 |
| GEN BUS 306 | 3 ACCT I S 211 | 3 |  |
| ACCT IS 100 | 3 OTM 300 | 3 |  |
| GEN BUS 300 | 3 MARKETNG 300 | 3 |  |
| M H R 300 | 3 M H R 305 | 3 |  |
|  | 16 | 15 | 3 |

## Junior

Fall Credits Spring Credits
M HR 422
3 M H R 434, 399, 3 or FINANCE 457

| Ethics ${ }^{1}$ | 3-4 Business <br> Breadth | 3 |
| :---: | :---: | :---: |
| Communications <br> B | s 3-4 Humanities, Social Science, or Literature | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
|  | 15-17 | 15 |
| Senior |  |  |
| Fall <br> M H R 610, 611 , <br> 365, 399, 423, <br> 471, or 628 | Credits Spring | Credits |
|  | 3 M H R 612 | 3 |
| MHR 610 or 611 | 3 M H R 427 | 3 |
| GEN BUS 301 | 3 Business Breadth | 3 |
| Humanities, Social Science, or Literature | 3 Science | 3 |
|  | 12 | 12 |

Total Credits 113-115
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

Students who pursue a major in management go on to careers in a wide range of fields. To find more information about common industries that management majors work in following graduation, please visit our website (https://bus.wisc.edu/bba/academics-and-programs/majors/ management-human-resources/management).

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## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-022.

| BUSINESS: MANAGEMENT AND HUMAN RESOURCES: ENTREPRENEURSHIP |  |  |
| :---: | :---: | :---: |
| REQUIREMENTS |  |  |
| ENTREPRENEURSHIP OPTION <br> A student must take a minimum of 12 credits, distributed as follows: |  |  |
| Code | Title | Credits |
| mhr 422 | Entrepreneurial Management | 3 |
| MHR 427 | Entrepreneurial Growth Strategies |  |
| Select two of following courses OR one from below and one |  |  |

Select two of following courses OR one from below and one6 from the elective options:

| M H R 399 | Reading and Research- <br> Management (Double counting of <br> MHR 399 across options within the |
| :--- | :--- |
|  | MHR major is prohibited.) |


| M H R 305 | Human Resource Management |
| :--- | :--- |
| M H R/ | Challenges \& Solutions in Business |
| ENVIR ST 310 | Sustainability |
| M H R 365 | Contemporary Topics |
| M H R 399 | Reading and Research- <br> Management (Double counting of <br> MHR 399 across options within the <br> MHR major is prohibited.) |
| M H R 401 | The Management of Teams |
| M H R/ | Global Issues in Management |
| INTL BUS 403 | Management Consulting |
| M H R 412 | Strategic Management |
| M H R 423 | Technology Entrepreneurship |

## FOUR-YEAR PLAN

Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 211 | 5 ECON 101 | 4 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |
| Communications | 3 Science | 3 |
| A | 3 Humanities, <br> Social Science, <br> or Literature | 3 |
|  | 12 | 13 |

Sophomore

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| M H R 300 | 3 GEN BUS 307 | 3 FINANCE/ | 3 |
| GEN BUS 306 | 3 ACCT I S 211 | 3 |  |
| ECON 102 | 4 OTM 300 | 3 |  |
| ACCT I S 100 | 3 M H R 434 | 3 |  |
| GEN BUS 300 | 3 MARKETNG 300 | 3 |  |
|  | 16 | 15 | 3 |

## Junior

Fall
M H R 422
Credits Spring
Credits
3 M H R 399,
3
FINANCE 457,
M H R 305, M
HR310, M HR
365, M H R 401,
M H R 403, M
HR412, M HR
423, M H R 441, or M H R 628

| Ethics $^{1}$ | $3-4$ Business <br> Breadth | 3 |
| :--- | ---: | :--- |
| Communications <br> B | $3-4$ Elective | 3 |
| Elective | 3 Elective | 3 |


| Elective | 3 |  |
| :--- | :---: | ---: |
|  | $15-17$ | 12 |
| Senior | Credits Spring | Credits |
| Fall | 3 M H R 427 | 3 |
| GEN BUS 301 | 3 Business | 3 |
| Humanities, <br> Social Science, <br> or Literature | Breadth |  |
| Humanities, | 3 Science | 3 |
| Social Science, <br> or Literature | 3 Elective | 3 |
| Elective | 12 | 12 |
|  |  |  |

Total Credits 110-112
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

## BUSINESS: MANAGEMENT AND HUMAN RESOURCES: ENTREPRENEURSHIP/HUMAN RESOURCES

## REQUIREMENTS

ENTREPRENEURSHIP \& HUMAN RESOURCES OPTION
This double option requires 21 credits; the layout of classes are found below:

| Code | Title | Credits |
| :--- | :--- | ---: |
| M H R 305 | Human Resource Management | 3 |
| M H R 422 | Entrepreneurial Management | 3 |
| M H R 427 | Entrepreneurial Growth Strategies | 3 |
| M H R 434 | Venture Creation | 3 |
| or FINANCE 457 | Entrepreneurial Finance |  |
| or M H R 399 | Reading and Research-Management |  |
| Complete 3 of the following OR 2 of the following and one | 9 |  |

elective:

| M H R 610 | Compensation: Theory and <br> Administration |
| :---: | :--- |
| M H R 611 | Personnel Staffing and Evaluation |
| M H R 612 | Labor-Management Relations |
| Electives: |  |
| M H R 399 | Reading and Research- <br> Management |
| M H R 423 | Strategic Management |
| M H R 471 | Seminar: Human Resources Issues |
| M H R 628 | Negotiations |


| R M I 620 | Employee Benefits Management |
| :---: | :---: |
| Total Credits | 21 |

## FOUR-YEAR PLAN

| Freshman |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| MATH 211 | 5 ECON 101 | 4 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |
| Ethnic Studies | 3 Science | 3 |
| Communications | 3 Humanities, | 3 |
| ASocial Science, <br> or Literature |  |  |
|  | 12 | 13 |

## Sophomore

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| ECON 102 | 4 GEN BUS 307 | 3 FINANCE/ | 3 |
|  |  | ECON 300 |  |
| GEN BUS 306 | 3 ACCT I S 211 | 3 |  |
| ACCT I S 100 | 3 OTM 300 | 3 |  |
| GEN BUS 300 | 3 MARKETNG 300 | 3 |  |
| M H R 300 | 3 M H R 305 | 3 |  |
|  | 16 | 15 | 3 |

## Junior

Fall Credits Spring Credits

MHR422 3 M HR 434, 399, 3 or FINANCE 457

| Ethics ${ }^{1}$ | 3-4 Business Breadth | 3 |
| :---: | :---: | :---: |
| Communications B | 3-4 Humanities, Social Science, or Literature | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
|  | 15-17 | 15 |
| Senior |  |  |
| Fall <br> M H R 610, 611, <br> 365, 399, 423, <br> 471, or 628 | Credits Spring | Credits |
|  | 3 M H R 612 | 3 |
| M HR 610 or 611 | 3 M H R 427 | 3 |
| GEN BUS 301 | 3 Business Breadth | 3 |
| Humanities, Social Science, or Literature | 3 Science | 3 |
|  | 12 | 12 |

Total Credits 113-115
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

## BUSINESS: MANAGEMENT AND HUMAN RESOURCES: ENTREPRENEURSHIP/ MANAGEMENT

REQUIREMENTS
MANAGEMENT \& ENTREPRENEURSHIP OPTION
This double option requires 18 credits; the layout of classes is found below:

| Code | Title | Credits |
| :---: | :---: | :---: |
| M HR 422 | Entrepreneurial Management | 3 |
| M HR 423 | Strategic Management | 3 |
| M HR 427 | Entrepreneurial Growth Strategies | 3 |
| M HR 434 or FINANCE 457 or M H R 399 | Venture Creation <br> Entrepreneurial Finance <br> Reading and Research-Management | 3 |
| Choose two of the following: |  | 6 |
| M HR 305 | Human Resource Management |  |
| M HR 399 | Reading and ResearchManagement |  |
| M HR 401 | The Management of Teams |  |
| MHR/ <br> INTL BUS 403 | Global Issues in Management |  |
| M H R 412 | Management Consulting |  |
| Total Credits |  | 18 |

FOUR-YEAR PLAN

Freshman

| Fall | Credits Spring | Credits |  |
| :---: | :---: | :---: | :---: |
| MATH 211 | 5 ECON 101 | 4 |  |
| GEN BUS 110 | 1 PSYCH 202 | 3 |  |
| Communications <br> A | s 3 Science | 3 |  |
| Ethnic Studies | 3 Humanities, Social Science, or Literature | 3 |  |
|  | 12 | 13 |  |
| Sophomore |  |  |  |
| Fall | Credits Spring | Credits Summer | Credits |
| ECON 102 | 4 GEN BUS 307 | 3 FINANCE/ <br> ECON 300 | 3 |
| GEN BUS 306 | 3 ACCT IS 211 | 3 |  |
| ACCT IS 100 | 3 OTM 300 | 3 |  |
| GEN BUS 300 | 3 MARKETNG 300 | 3 |  |
| M H R 300 | $\begin{array}{r} 3 \text { M H R 305, } 399 \text {, } \\ 401,403 \text {, or } 412 \end{array}$ | 3 |  |
|  | 16 | 15 | 3 |


| Junior |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| M H R 422 | 3 Business Breadth | 3 |
| M H R 423 | 3 Humanities, Social Science, or Literature | 3 |
| Communications B | s 3-4 Elective | 3 |
| Ethics ${ }^{1}$ | 3-4 Elective | 3 |
| Elective | $\begin{array}{r} 3 \text { M H R 305, } 399 \text {, } \\ 401,403 \text {, or } 412 \end{array}$ | 3 |
|  | 15-17 | 15 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| M H R 434, 399, or FINANCE 457 | 3 M H R 427 | 3 |
| Humanities, Social Science, or Literature | 3 Business Breadth | 3 |
| GEN BUS 301 | 3 Science | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 |  |
|  | 15 | 12 |

Total Credits 116-118
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

## BUSINESS: MANAGEMENT AND HUMAN RESOURCES: HUMAN RESOURCES

## HUMAN RESOURCES OPTION

Students in human resources management study how organizations attract, motivate, develop, and retain employees, and how they interact with organizations representing employees. Topics covered include recruiting, external and internal staffing, compensation theory and administration, performance management, training and development, labor-management relations, and equal employment opportunity. This concentration is pursued by students seeking staff jobs in the human resources department, supervisory and team leader jobs, and entry into management training programs that precede job placement. It is appropriate for those who seek positions in both public and private sector organizations.

## REQUIREMENTS

A student must take a minimum of 12 credits, distributed as follows:

| Code | Title | Credits |
| :--- | :--- | ---: |
| M HR 305 | Human Resource Management | 3 |


| Complete 3 of the following OR two of the following and one elective: |  | 9-10 |
| :---: | :---: | :---: |
| M H R 610 | Compensation: Theory and Administration |  |
| M H R 611 | Personnel Staffing and Evaluation |  |
| M H R 612 | Labor-Management Relations |  |
| Electives |  |  |
| M H R 365 | Contemporary Topics |  |
| M H R 399 | Reading and Research- <br> Management (Double counting of MHR 399 across options within the MHR major is prohibited.) |  |
| M H R 423 | Strategic Management |  |
| M H R 471 | Seminar: Human Resources Issues |  |
| R M I 620 | Employee Benefits Management |  |
| M H R 628 | Negotiations |  |
| ECON 450 | Wages and the Labor Market |  |

## FOUR-YEAR PLAN

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 211 | 5 ECON 101 | 4 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |
| Communications | 3 Science | 3 |
| A | 3 Humanities, <br> Social Science, <br> or Literature | 3 |
| Ethnic Studies | 12 | 13 |

## Sophomore

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| ECON 102 | 4 GEN BUS 307 | 3 FINANCE/ | 3 |
| GEN BUS 306 | 3 ACCT I S 211 | 3 |  |
| ACCT I S 100 | 3 OTM 300 | 3 |  |
| M H R 300 | 3 MARKETNG 300 | 3 |  |
| GEN BUS 300 | 3 M H R 305 | 3 |  |
|  | 16 | 15 | 3 |


| Junior |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| M HR 610 or 611 | 3 M H R 612 | 3 |
| Communications <br> B | 3-4 Business Breadth | 3 |
| Ethics ${ }^{1}$ | 3-4 Elective | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 |  |
|  | 15-17 | 12 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| GEN BUS 301 | 3 Business Breadth | 3 |


| Elective | 3 Science | 3 |
| :---: | :---: | :---: |
| Humanities, Social Science, or Literature | 3 Elective | 3 |
| Humanities, Social Science, or Literature | $\begin{aligned} & 3 \text { M H R 612, 365, } \\ & 399,423,471 \text {, } \\ & 628 \text {, or R M I } \\ & 620 \end{aligned}$ | 3 |
|  | 12 | 12 |

## Total Credits 110-112

1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

# BUSINESS: MANAGEMENT AND HUMAN RESOURCES: MANAGEMENT 

## MANAGEMENT OPTION

This major focuses on the activities of management in organizations. Course material covers leadership, power, decision-making, organizational structure and change, strategy and policy, and the integration of organizational functions (such as marketing and finance). The topics apply to business, government, health care, and other service organizations. This concentration is especially appropriate for students who seek roles as general managers and administrators at all levels of an organization, rather than roles as technical specialists. Students are also helped in developing a long-term perspective of both their own careers and the function of management in organizations and society.

## REQUIREMENTS

Students must take a minimum of 12 credits, distributed as follows:

| Code | Title | Credits |
| :---: | :---: | :---: |
| M H R 423 | Strategic Management | 3 |
| Complete 3 of the following OR 2 of the following and one elective |  | 9 |
| M H R 305 | Human Resource Management |  |
| M H R 399 | Reading and Research- <br> Management (Double counting of MHR 399 across options within the MHR major is prohibited.) |  |
| M H R 401 | The Management of Teams |  |
| M H R/ <br> INTL BUS 403 | Global Issues in Management |  |
| M H R 412 | Management Consulting |  |
| Electives: |  |  |
| M H R/ ENVIR ST 310 | Challenges \& Solutions in Business Sustainability |  |
| M H R 365 | Contemporary Topics |  |
| M H R 422 | Entrepreneurial Management |  |
| M H R 427 | Entrepreneurial Growth Strategies |  |


| M H R 628 | Negotiations |
| :--- | :--- |
| ECON/POP HLTH/ <br> PUB AFFR 548 | The Economics of Health Care |
| COM ARTS 575 | Communication in Complex <br> Organizations |
| PSYCH/I SY E 653 | Organization and Job Design |
| PSYCH/I SY E 349 | Introduction to Human Factors |
| SOC 632 | Sociology of Organizations |
| SOC/ | Sociology of Work and Employment |
| C\&E SOC 649 |  |

Total Credits

## FOUR-YEAR PLAN

| Freshman |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall Cr | Credits Spring | Credits |  |
| MATH 211 | 5 ECON 101 | 4 |  |
| GEN BUS 110 | 1 PSYCH 202 | 3 |  |
| Communications A | S 3 Science | 3 |  |
| Ethnic Studies | 3 Humanities, Social Science, or Literature | 3 |  |
|  | 12 | 13 |  |
| Sophomore |  |  |  |
| Fall | Credits Spring | Credits Summer | Credits |
| ECON 102 | 4 GEN BUS 307 | 3 FINANCE/ <br> ECON 300 | 3 |
| GEN BUS 306 | 3 ACCT IS 211 | 3 |  |
| ACCT I S 100 | 3 OTM 300 | 3 |  |
| M H R 300 | 3 MARKETNG 300 | 3 |  |
| GEN BUS 300 | $\begin{array}{r} 3 \text { M H R } 305,399, \\ 401,403 \text {, or } 412 \end{array}$ | 3 |  |
|  | 16 | 15 | 3 |


| Junior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| M H R 423 | M H R 305, 399, <br> 401,403, or 412 | 3 |
| Ethics ${ }^{1}$ | $3-4$ Business <br> Breadth | 3 |
| Communications | $3-4$ Elective | 3 |
| B | 3 Elective | 3 |
| Elective | $12-14$ | 12 |


| Senior |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| GEN BUS 301 | 3 M H R 305, 399, | 3 |
|  | $401,403,412$, |  |
|  | $310,365,422$, |  |
|  | 427, or 628 |  |
| Humanities, | 3 Business | 3 |
| Social Science, | Breadth |  |
| or Literature |  |  |


| Humanities, <br> Social Science, <br> or Literature | 3 Elective | 3 |
| :--- | ---: | ---: |
| Elective | 3 Science | 3 |
|  | 12 | 12 |

Total Credits 107-109

## BUSINESS: MANAGEMENT AND HUMAN RESOURCES: MANAGEMENT/HUMAN RESOURCES

## REQUIREMENTS

## MANAGEMENT \& HUMAN RESOURCES OPTION

This double option requires 18 credits; the layout of classes is found below:

| Code | Title | Credits |
| :--- | :--- | ---: |
| M H R 305 | Human Resource Management | 3 |
| M H R 423 | Strategic Management | 3 |
| Complete two of the following: | 6 |  |
| M H R 610 | Compensation: Theory and |  |
|  | Administration |  |
| M H R 611 | Personnel Staffing and Evaluation |  |
| M H R 612 | Labor-Management Relations | 6 |
| Complete 2 of the following OR one of the following and one |  |  | elective:


| M H R 399 | Reading and Research- <br> Management |
| :--- | :--- |
| M H R 401 | The Management of Teams |
| M H R/ | Global Issues in Management |
| INTL BUS 403 |  |
| M H R 412 | Management Consulting |
| Electives: |  |
| M H R/ | Challenges \& Solutions in Business |
| ENVIR ST 310 | Sustainability |
| M H R 365 | Contemporary Topics |
| M H R 422 | Entrepreneurial Management |
| M H R 427 | Entrepreneurial Growth Strategies |
| M H R 628 | Negotiations |
| Total Credits |  |

## FOUR-YEAR PLAN

Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 211 | 5 ECON 101 | 4 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |
| Communications | 3 Science | 3 |


| Ethnic Studies | 3 Humanities, Social Science, or Literature | 3 |  |
| :---: | :---: | :---: | :---: |
|  | 12 | 13 |  |
| Sophomore |  |  |  |
| Fall | Credits Spring | Credits Summer | Credits |
| ECON 102 | 4 GEN BUS 307 | 3 FINANCE/ ECON 300 | 3 |
| GEN BUS 306 | 3 ACCT IS 211 | 3 |  |
| GEN BUS 300 | 3 OTM 300 | 3 |  |
| ACCT I S 100 | 3 MARKETNG 300 | 3 |  |
| M H R 300 | 3 M H R 305 | 3 |  |
|  | 16 | 15 | 3 |
| Junior |  |  |  |
| Fall | Credits Spring | Credits |  |
| Communications B | s 3-4 M H R 423 | 3 |  |
| Ethics ${ }^{1}$ | 3-4 Business Breadth | 3 |  |
| Elective | 3 Humanities, Social Science, or Literature | 3 |  |
| M H R 401, 399, 403 , or 412 | 3 Humanities, Social Science, or Literature | 3 |  |
|  | 12-14 | 12 |  |
| Senior |  |  |  |
| Fall | Credits Spring | Credits |  |
| GEN BUS 301 | 3 MHR 612 | 3 |  |
| Elective | 3 Business Breadth | 3 |  |
| M H R 610 or 611 | 3 Science | 3 |  |
| Elective | $\begin{aligned} & 3 \text { M H R 401, 399, } \\ & 403,412,310 \text {, } \\ & 365,422,427 \text {, or } \\ & 628 \end{aligned}$ | 3 |  |
|  | 12 | 12 |  |

Total Credits 107-109
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

## ENTREPRENEURSHIP, CERTIFICATE

The undergraduate certificate in entrepreneurship (https://bus.wisc.edu/ degrees-programs/certificates/undergraduate/entrepreneurship) offers opportunities for non-business undergraduates interested in starting a new venture, working for young new ventures soon or later in life, and tackling new ventures inside existing organizations. Knowledge and skills emphasize imagining new opportunities, taking steps to create a new organization, finding funding for new ventures, and managing growth or
exit events, along with critical analysis of the role of entrepreneurship in society.

This certificate program offers a distinct bundle of courses that span business entrepreneurship courses and the curricula of several colleges and schools at UW-Madison. It emphasizes skills in entrepreneurship, creativity, and innovation along with the ability to analyze the role of entrepreneurship in society.

Entrepreneurship in this context refers to the process of imagining opportunities and taking action to create value through new ventures. The ability to create value through new ventures is a crucial life skill. Further, new firm creation can be a critical factor in global economic growth, and entrepreneurial capabilities can be crucial in bringing new technologies and services to society.

## HOW TO GET IN

The certificate is open to undergraduate students who have home departments outside of the School of Business and are in good standing. Business undergraduates should explore the entrepreneurship major option.

To declare the certificate in entrepreneurship, please complete the declaration form (https://buswisc.qualtrics.com/jfe/form/ SV_8JkBSs6YnaKxb7f).

## REQUIREMENTS

A total of 15 credits is required to complete the certificate. The required foundation course, advanced entrepreneurship coursework, and electives from across the campus are used to earn the 15 credits. Coursework options available for fulfilling the certificate program is shown in the accompanying tables. Students are strongly encouraged to participate in related non-credit entrepreneurship immersion experiences such as competitions and student organizations.

## Students will:

1. Take one 3-credit required foundation course (M H R 322 OR M H R 422)
2. Choose 3 additional credits from a list of related School of Business advanced entrepreneurship coursework
3. Choose 9 credits of additional courses from a list of other elective coursework or advanced entrepreneurship coursework.

At least 9 of the required 15 credits for the certificate must be completed in residence.

Students must earn a 2.5 cumulative GPA in all certificate in entrepreneurship coursework.
REQUIRED FOUNDATION COURSEWORK

## Code

M HR 322
or MHR422

Title
Introduction to Entrepreneurial
Management (restricted to non-
business majors)
Entrepreneurial Management

## ADVANCED ENTREPRENEURSHIP COURSEWORK ${ }^{1}$

Students must choose at least 3 credits from the following list of courses:

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEN BUS 310 | Fundamentals of Accounting and Finance for Non-Business Majors ${ }^{2}$ | 3 |
| or ACCT IS 100 | Introductory Financial Accounting |  |
| or ACCT IS 300 | Accounting Principles |  |
| M HR 434 | Venture Creation | 3 |
| M HR 427 | Entrepreneurial Growth Strategies | 3 |
| M HR 441 | Technology Entrepreneurship | 3 |
| FINANCE 457 | Entrepreneurial Finance | 3 |

1 Some courses listed have pre-requisites, so please make sure those are satisfied before selecting a course.
2 Non-business majors are strongly recommended to take GEN BUS 310 instead of ACCT I S 100 or ACCT I S 300.

## ELECTIVE COURSEWORK

9 credits of other elective coursework (below) can be counted toward the required 15 certificate credits.

| Code <br> BUSINESS | Title | Credits |
| :---: | :---: | :---: |
| GEN BUS 365 | Contemporary Topics (Business and the Social Side of Sustainability OR Issues in Family Business Ownership) | 1-3 |
| GEN BUS 600 | Topics on Sustainable Business Practices | 3 |
| GEN BUS/ <br> ENVIR ST 601 | Systems Thinking and Sustainable Businesses | 3 |
| GEN BUS 311 | Fundamentals of Management and Marketing for Non-Business Majors | 3 |
| M HR 300 | Managing Organizations | 3 |
| M HR 305 | Human Resource Management | 3 |
| M HR 321 | Social Entrepreneurship (restricted to ERLC students) | 1 |
| M HR 365 | Contemporary Topics (Summer Internship) | 3 |
| M HR 365 | Contemporary Topics (Leadership Development I) | 3 |
| M HR 365 | Contemporary Topics (Leadership Development II) | 3 |
| M H R 365 | Contemporary Topics (Introduction to Arts Entrepreneurship OR Entrepreneurship in Arts \& Cultural Organizations) ${ }^{7}$ | 3 |
| MHR/AAE 540 | Intellectual Property Rights, Innovation and Technology | 3 |
| MARKETNG 300 | Marketing Management | 3 |
| MARKETNG 355 | Marketing in a Digital Age | 3 |


| MARKETNG 365 | Contemporary Topics (Developing Breakthrough New Products) | 1-3 |
| :---: | :---: | :---: |
| R M I 300 | Principles of Risk Management | 3 |
| R M I 650 | Sustainability, Environmental and Social Risk Management | 3 |
| REAL EST/A A E/ ECON/URB R PL 306 | The Real Estate Process | 3 |
| REAL EST 415 | Valuation of Real Estate | 3 |
| ENVIRONMENTAL STUDIES |  |  |
| ENVIR ST 402 | Special Topics: Social Perspectives in Environmental Studies (ONLY <br> 'People, Environment, and Sustainability') | 1-4 |
| COLLEGE OF LETTERS | S AND SCIENCE |  |
| COM ARTS 355 | Introduction to Media Production | 4 |
| ECON/A A E/ ENVIR ST/ URB R PL 671 | Energy Economics | 3 |
| INTL ST/A A E 373 | Globalization, Poverty and Development | 3 |
| JOURN 447 | Strategic Media Planning | 4 |
| PHILOS 243 | Ethics in Business | 3-4 |
| SOC/C\&E SOC 245 | Technology and Society | 3 |
| SOC 496 | Topics in Sociology (Leadership Seminar) | 1-3 |
| STS 201 | Where Science Meets Society | 3 |
| COLLEGE OF AGRICULTURAL AND LIFE SCIENCES |  |  |
| A A E/INTL ST 373 | Globalization, Poverty and Development | 3 |
| A A E/M HR 540 | Intellectual Property Rights, Innovation and Technology | 3 |
| A A E/ECON/ ENVIR ST/ URB R PL 671 | Energy Economics | 3 |
| LSC 250 | Research Methods in the Communication Industry | 3 |
| LSC 270 | Communication in Life Science Industries | 3 |
| LSC 350 | Visualizing Science and Technology | 3 |
| LSC 431 | Advertising in the Life Sciences | 3 |
| LSC 432 | Social Media for the Life Sciences | 3 |
| LSC 435 | Theory and Practice of Integrated Marketing Communication | 3 |
| LSC 440 | Contemporary Communication Technologies and Their Social Effects | 3 |
| LSC 625 | Risk Communication | 3 |
| LSC 640 | Case Studies in the Communication of Science and Technology | 3 |
| COLLEGE OF ENGINEERING |  |  |
| EP D 690 | Special Topics in Engineering Professional Development (Business and Entrepreneurism for Engineers) | 1-3 |


| INTEREGR 601 | Topics in Interdisciplinary <br> Engineering (Process Innovation: <br> Concept-Select-Commercialize) | 1-3 |
| :---: | :---: | :---: |
| I SYE 313 | Engineering Economic Analysis | 3 |
| I SYE/M E 513 | Analysis of Capital Investments | 3 |
| ISYE/BME 662 | Design and Human Disability and Aging | 3 |
| I SY E/OTM/INFO SYS 671 | E-Business: Technologies, Strategies and Applications | 3 |
| M E 349 | Engineering Design Projects | 3 |
| M E 351 | Interdisciplinary Experiential Design Projects I | 3 |
| M E 352 | Interdisciplinary Experiential Design Projects II | 3 |
| M E 549 | Product Design | 3 |
| SCHOOL OF HUMAN ECOLOGY |  |  |
| CSCS 455 | Entrepreneurialism and Society | 3 |
| CNSR SCI 250 | Retail Leadership Symposium | 1 |
| CNSR SCI 257 | Introduction to Retailing | 2 |
| CNSR SCI 555 | Consumer Strategy \& Evaluation | 3 |
| CNSR SCI 561 | Retail Channel Strategy \& OmniChannel Retailing | 3 |
| CNSR SCI 567 | Product Development Strategies in Retailing | 3 |
| MUSIC/THEATRE/ART |  |  |
| ART 338 | Service Learning in Art | 2 |
| INTEGART 320 | Introduction to Arts Entrepreneurship ${ }^{1}$ | 3 |
| or INTEGART 322 | Entrepreneurship in Arts and Cultural Organizations |  |
| THEATRE 501 | The Business of Acting | 3 |
| THEATRE 619 | Special Topics in Theatre and Drama (The Business of the Business) | 1-3 |

1 Students may choose only one of the following courses towards the certificate:

- M H R 365 Contemporary Topics (Introduction to Arts Entrepreneurship)/INTEGART 320 Introduction to Arts Entrepreneurship
- M H R 365 Contemporary Topics (Entrepreneurship in Arts \& Cultural Organizations)/INTEGART 322 Entrepreneurship in Arts and Cultural Organizations
- M H R 365 Contemporary Topics (Art Enterprise: Art as Business as Art)/MUSIC 469/ART 469/THEATRE 469 Interdisciplinary Studies in the Arts


## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Correctly demonstrate knowledge of basic market discovery techniques and apply basic market discovery techniques.
2. Demonstrate proficiency in knowing the basic steps taken to start a new venture.
3. Demonstrate knowledge of career paths in entrepreneurship (M H R 322 Introduction to Entrepreneurial Management/M H R 422 Entrepreneurial Management).

## ADVISING AND CAREERS

## ACADEMIC ADVISING

Academic advising for the CIE is available in the BBA Advising Center, 3150 Grainger Hall. Questions can be directed to the CIE Advisor, Katie Denzin (katie.denzin@wisc.edu).

Career advising for the CIE is available in the BBA Program Office, 3290 Grainger Hall. Career-related questions can be directed to Jamie Hinze (jamie.hinze@wisc.edu).

## MARKETING

Marketing creates exchanges between organizations and customers. It includes planning, designing, pricing, promoting and distributing goods and services that satisfy organizational and customer needs. in the high-level economy of the United States and many other countries, marketing has become a critical and comprehensive business function. The concept of marketing is becoming increasingly broad and important. Students may pursue career opportunities in advertising, product/ brand management, consulting, marketing research, retailing, sales management, business-to-business marketing, and supply chain management.

Contemporary marketing managers must understand not only the traditional areas of marketing channels, sales management, advertising, and research, but must also be familiar with consumer and dealer motivation. The manager must be able to translate knowledge of consumer behavior into marketing strategy. The marketing program is broad enough to permit a major to develop knowledge in these several areas, but flexible enough so that students may focus on special interest areas.

## DEGREES/MAJORS/CERTIFICATES

- Business: Marketing, BBA (p. 1357)


## BUSINESS: MARKETING, BBA

Marketing facilitates exchanges between organizations and customers and is a critical, dynamic, and multi-faceted area of business. The marketing function is found throughout organizations and businesses from global enterprises to start-ups; for services such as healthcare and banking; for nonprofits and municipalities. Students may pursue a variety of careers in marketing including brand/product management, marketing research/analytics, sales management, advertising, business-to-business marketing, digital and social media, consulting, and supply chain management.

In the marketing major, students learn the foundations of marketing -product, place, price, promotion-and how these concepts impact
business strategy and execution in different industries and contexts, as well as the importance of relationships with customers and channel partners. Marketing professionals possess and develop a variety of skills including qualitative and quantitative analysis, critical thinking, creativity, communications, and problem solving. The marketing major (https:// wsb.wisc.edu/programs-degrees/undergraduate-bba/academics/majors/ \#marketing) provides a robust foundation in the marketing discipline, coupled with the flexibility to pursue several areas of interest in the discipline.

## RECOGNITION

In 2016, the marketing department at the School of Business was ranked 9th in the United States by U.S. News \& World Report.

## RELATED STUDENT ORGANIZATIONS

Mu Kappa Tau (MKT) (https://win.wisc.edu/organization/MKT) American Marketing Association (AMA) (https://win.wisc.edu/ organization/amauwmadison)

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with
courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

| Code Title $\quad$ Credits |
| :--- |
| School of Business BBA Requirements |
| Complete requirements: (p. 1305) |
| Pre-Business |
| Liberal Studies |
| Business Prep |
| Business Core |
| Business Breadth |

## MARKETING MAJOR REQUIREMENTS

All marketing majors must take MARKETNG 300 Marketing Management, which is a business core course and a prerequisite for most of the undergraduate marketing courses. In addition to MARKETNG 300, the major consists of three required marketing courses plus three additional elective marketing courses. These required and elective courses can be taken in any order, with the exception of MARKETNG 460 Marketing Strategy. MARKETNG 460 should be taken after completing MARKETNG 305 Consumer Behavior and MARKETNG 310 Marketing Research and preferably in the final year of the major.

| Code | Title | Credits |
| :---: | :---: | :---: |
| MARKETNG 305 | Consumer Behavior | 3 |
| MARKETNG 310 | Marketing Research | 3 |
| MARKETNG 460 | Marketing Strategy | 3 |
| Elective Coursework ${ }^{1}$ |  |  |
| Select three of the fo | lowing: | 9 |
| MARKETNG 335 | Brand Management \& Strategy |  |
| MARKETNG 355 | Marketing in a Digital Age |  |
| MARKETNG 365 | Contemporary Topics (Developing Breakthrough New Products or Sports Marketing) |  |
| MARKETNG 399 | Reading and Research-Marketing |  |
| MARKETNG 415 | Marketing Communications |  |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy |  |
| MARKETNG/ OTM 421 | Fudamentals of Supply Chain Management |  |
| MARKETNG/ OTM 422 | Logistics Management |  |
| MARKETNG 423 | Procurement \& Supply Management |  |
| MARKETNG 425 | Marketing Channels |  |
| MARKETNG 427 | Enterprise Systems and Supply Chain Management |  |
| MARKETNG 430 | Strategic Pricing |  |
| MARKETNG 450 | Marketing Analytics |  |
| MARKETNG 635 | Sales Management |  |
| MARKETNG 640 | Strategic Retailing |  |

1 Elective coursework may follow a specific "track" if students choose. Below are options for coursework related to specific marketing career tracks.

## POTENTIAL MARKETING CAREER AND COURSEWORK TRACKS

These tracks are provided to guide elective choices. They are not official major tracks or emphasis areas.

## PRODUCT/BRAND MANAGEMENT

| Code | Title | Credits |
| :---: | :---: | :---: |
| Recommended Electives |  |  |
| MARKETNG 335 | Brand Management \& Strategy | 3 |
| MARKETNG 365 | Contemporary Topics (Developing Breakthrough New Products) | 3 |
| MARKETNG 415 | Marketing Communications | 3 |
| MARKETNG/ INTL BUS 420 | Global Marketing Strategy | 3 |
| MARKETNG 425 | Marketing Channels | 3 |
| MARKETNG 460 | Marketing Strategy | 3 |

## RETAILING AND WHOLESALING

| Code | Title | Credits |
| :--- | :--- | ---: |
| Recommended Electives |  |  |
| MARKETNG 335 | Brand Management \& Strategy | 3 |
| MARKETNG 365 | Contemporary Topics | 3 |
| MARKETNG 415 | Marketing Communications | 3 |
| MARKETNG/ | Fudamentals of Supply Chain | 3 |
| OTM 421 | Management |  |
| MARKETNG 423 | Procurement \& Supply Management | 3 |
| MARKETNG 425 | Marketing Channels | 3 |
| MARKETNG 640 | Strategic Retailing | 3 |

## SALES MANAGEMENT; BUSINESS-TO-BUSINESS MARKETING; SUPPLY CHAIN MANAGEMENT

| Code | Title | Credits |
| :--- | :--- | ---: |
| Recommended Electives |  |  |
| MARKETNG 365 | Contemporary Topics | 3 |
| MARKETNG 415 | Marketing Communications | 3 |
| MARKETNG/ | Fudamentals of Supply Chain | 3 |
| OTM 421 | Management | 3 |
| MARKETNG/ | Logistics Management |  |
| OTM 422 |  | 3 |
| MARKETNG 423 | Procurement \& Supply Management | 3 |
| MARKETNG 425 | Marketing Channels | 3 |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

Residency
Res
Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Demonstrate the ability to formulate and implement marketing strategies related to product, place/distribution, price, promotion.
2. Demonstrate the ability to evaluate and analyze appropriate market segments and generate effective marketing plans.
3. Locate, evaluate, and leverage relevant sources to determine and support their marketing actions.
4. Apply analytical rigor to marketing decisions.

## FOUR-YEAR PLAN

This is a sample four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

## Freshman

Fall Credits Spring Credits Summer Credits

ECON 10
4 ECON 102 4 OTM 300, 3 FINANCE 300, or M H R 300
$\left.\begin{array}{lccc}\text { PSYCH } 202 & 3 \text { MATH 211 } & 5 \\ \text { Science } & 3 \text { Communications } & 3 \\ & \text { A }\end{array}\right)$

## Sophomore

Fall Credits Spring Credits Summer Credits

GEN BUS 3063 GEN BUS $307 \quad 3$ OTM 300, M 3
H R 300, or
FINANCE 300

| ACCT IS 100 | 3 ACCT I S 211 | 3 |
| :--- | :--- | :--- |
| MARKETNG 300 | 3 MARKETNG 305 | 3 |
| Humanities, <br> Social Science, <br> or Literature | 3 GEN BUS 300 | 3 |


| Communication B | s 3-4 OTM 300, M H R 300, or FINANCE 300 | 3 |  |
| :---: | :---: | :---: | :---: |
|  | 15-16 | 15 | 3 |
| Junior |  |  |  |
| Fall | Credits Spring | Credits |  |
| MARKETNG 310 | 3 Marketing Elective 2 | 3 |  |
| Marketing Elective 1 | 3 Business Breadth | 3 |  |
| Ethics ${ }^{1}$ | 4 Elective | 3 |  |
| Humanities, Social Science, or Literature | 3 Elective | 3 |  |
|  | 13 | 12 |  |
| Senior |  |  |  |
| Fall | Credits Spring | Credits |  |
| MARKETNG 460 | 3 Business Breadth | 3 |  |
| GEN BUS 301 | 3 Elective | 3 |  |
| Marketing Elective 3 | 3 Elective | 3 |  |
| Elective | Elective | 3 |  |
|  | 9 | 12 |  |

Total Credits 111-112
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, PHILOS/ENVIR ST 441 Environmental Ethics

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business
advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. Marketing is creating and delivering customer value through decisions about product and service offerings. It's more than just a transaction. It's about understanding and building relationships.

## PEOPLE

## FACULTY AND STAFF IN MARKETING

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## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022.

## OPERATIONS AND INFORMATION

The Department of Operations and Information Management administers both the operations and technology management major and the information systems major.

The operations and technology management (OTM) major focuses on the design, production, and delivery of products and services to satisfy customer needs. It equips students with the essential tools and strategies to use resources efficiently, make desirable trade-offs, and strategically redesign or restructure operations. OTM majors distinguish themselves by strong analytical and problem-solving capabilities together with the ability to provide high-level managerial insights into value-based service and production management.

Built on a solid foundation of a business and information technology (IT) curriculum, the major in information systems delivers a unique
blend of business acumen, industry standards, and practical computing instruction. Students enjoy successful placement and satisfying careers because they possess both the in-depth knowledge of business processes and the ability to readily translate business requirements into value-added IT solutions. The curriculum is designed to prepare effective leaders in the design, development, and management of information systems-the lifeblood of a successful business model. Students learn how to use computer technologies to analyze business problems and processes in order to design and implement computer-based information systems which support business operations, decision-making, and planning. Career opportunities exist in management consulting and in industry in the areas of systems development, database administration, network management and as corporate information systems managers.

## DEGREES/MAJORS/CERTIFICATES

- Business: Information Systems, BBA (p. 1362)
- Business: Operations and Technology Management, BBA (p. 1365)


## BUSINESS: INFORMATION SYSTEMS, BBA

Built on a solid foundation of a business and information technology (IT) curriculum, the major in information systems (https://wsb.wisc.edu/ programs-degrees/undergraduate-bba/academics/majors/\#informationsystems) delivers a unique blend of business acumen, industry standards, and practical computing instruction. Students enjoy successful placement and satisfying careers because they possess both the in-depth knowledge of business processes and the ability to readily translate business requirements into value-added IT solutions. The curriculum is designed to prepare effective leaders in the design, development, and management of information systems-the lifeblood of a successful business model. Courses emphasize both individual and team projects based on actual applications of the subject matter.

The major in information systems is administered by the Department of Operations and Information Management.

## RELATED STUDENT ORGANIZATIONS

Association of Information System Professionals National Organization for Business and Engineering

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core
of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

$$
\text { Code } \quad \text { Title } \quad \text { Credits }
$$

School of Business BBA Requirements
Complete requirements: (p. 1305)
Pre-Business
Liberal Studies
Business Prep
Business Core
Business Breadth

## INFORMATION SYSTEMS MAJOR REQUIREMENTS

The information systems major is a total of 15 credits, distributed as follows:

| Code | Title | Credits |
| :--- | :--- | ---: |
| COMP SCI 301 | Introduction to Data Programming | 3 |
| INFO SYS 365 | Contemporary Topics | 3 |
| INFO SYS/ | Technology of Computer-Based | 3 |
| COMP SCI 371 | Business Systems |  |
| INFO SYS 422 | Computer-Based Data Management | 3 |
| INFO SYS 424 | Analysis and Design of Computer- <br>  Based Systems | 3 |

SUGGESTED ELECTIVES RELATED TO INFORMATION SYSTEMS

| Code | Title | Credits |
| :---: | :---: | :---: |
| COMP SCI 300 | Programming II | 3 |
| COMP SCI 400 | Programming III | 3 |
| INFO SYS 365 | Contemporary Topics | 1-3 |
| ISYE/PSYCH 349 | Introduction to Human Factors | 3 |
| I SYE575 | Introduction to Quality Engineering | 3 |
| ISYE601 | Special Topics in Industrial Engineering | 1-3 |
| MARKETNG 310 | Marketing Research | 3 |
| MARKETNG/ OTM 421 | Fudamentals of Supply Chain Management | 3 |
| MARKETNG 427 | Enterprise Systems and Supply Chain Management | 3 |
| M HR 412 | Management Consulting | 3 |
| M HR 422 | Entrepreneurial Management | 3 |
| M HR 423 | Strategic Management | 3 |
| OTM 351 | Principles and Techniques of Quality Management | 3 |
| OTM 365 | Contemporary Topics (Project Management) | 3 |
| OTM 365 | Contemporary Topics (Operations Analytics) | 3 |
| OTM 451 | Service Operations Management | 3 |
| OTM 654 | Production Planning and Control | 3 |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Understand how to manage data, model information, and apply appropriate information technology to create effective business solutions.
2. Understand how to use computer technologies to analyze business problems and processes.
3. Design and implement computer\#based information systems which support business operations, decision-making, and planning.
4. Develop proficiency in project management, consulting, teamwork, conflict resolution, time management, and oral and written communication skills.
5. Effectively lead organizations in the design, development, and management of information systems.

## FOUR-YEAR PLAN

This is a sample four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

## Freshman

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| MATH 211 | 5 ECON 101 | 4 M HR 300 | 3 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |  |
| Ethnic Studies | 3 Literature | 3 |  |
| Science | 3 Science | 3 |  |
| Communications | 3 |  | 3 |
| A |  | 13 |  |
|  | 15 |  |  |
| Sophomore |  | Credits |  |
| Fall | Credits Spring | 3 |  |
| ECON 102 | 4 GEN BUS 307 | 3 |  |
| ACCT IS 100 | 3 GEN BUS 300 | 3 |  |
| GEN BUS 306 | 3 FINANCE/ | 3 |  |
|  | ECON 300 |  |  |
| OTM 300 | 3 MARKETNG 300 | 3 | 3 |
|  | ACCT I S 211 | 3 | 15 |

## Junior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| COMP SCI 301 | 3 INFO SYS/ COMP SCI 371 | 3 |
| Business Breadth | 3 Business Breadth | 3 |
| Communications B | s 3-4 Humanities | 3 |
| Elective | 3 Ethics ${ }^{1}$ | 3-4 |
|  | 12-13 | 12-13 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| INFO SYS 365 | 1-3 INFO SYS 424 | 3 |
| INFO SYS 422 | 3 GEN BUS 301 | 3 |
| Social Science | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
|  | 10-12 | 12 |

## Total Credits 105-109

1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341

Contemporary Moral Issues, ENVIR ST/PHILOS 441 Environmental Ethics

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic)

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

Information systems professionals help clients address some of their most complex business problems through the effective use of technology. They see pathways to solutions of highly complex technical issues and are key leaders in conceptualizing and sourcing the best solutions. Information systems professionals collect, store, and analyze information and data to assist organizations and departments in executing business initiatives and making informed decisions.

In addition, they use hardware, software, technology infrastructure combined with input from internal or external clients to develop tools to solve and track business objectives.

For more information about careers in information systems, please visit our BBA Info Systems website (https://bus.wisc.edu/bba/academics-and-programs/majors/information-systems).

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## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022.

## BUSINESS: OPERATIONS AND TECHNOLOGY MANAGEMENT, BBA

The operations and technology management (https://wsb.wisc.edu/ programs-degrees/undergraduate-bba/academics/majors/\#operations-and-technology-management) (OTM) major focuses on the design, production, and delivery of products and services to satisfy customer needs. It equips students with the essential tools and strategies to use resources efficiently, make desirable trade-offs, and strategically redesign or restructure operations. OTM majors distinguish themselves by strong analytical and problem-solving capabilities together with the ability to provide high-level managerial insights into value-based service and production management.

OTM majors have many career opportunities due to their process orientation and analytical training. They are especially well-equipped for positions in supply chain management and logistics, business
analytics, management consulting, service operations management, and manufacturing management.

Students choosing this major may find the Certificate in Supply Chain Management ( p .1316 ) particularly attractive due to complementary coursework and overlapping job opportunities.

## RELATED STUDENT ORGANIZATIONS

Badger Operations Association (https://win.wisc.edu/organization/BOA) Council of Supply Chain Management Professionals (CSCMP) (https:// cscmp.org)
American Society for Quality
APICS—The Association for Operations Management (http:// www.apics.org/about/contact)

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies
Requirements, Business Preparatory Requirement, Business Core
Requirement, Business Breadth Requirement, and Credits for BBA Degree.
Code Title Credits
School of Business BBA Requirements
Complete requirements: (p. 1305)
Pre-Business
Liberal Studies
Business Prep
Business Core
Business Breadth

## OPERATIONS AND TECHNOLOGY MANAGEMENT (OTM) MAJOR REQUIREMENTS

It is recommended that the undergraduate core course OTM 300 Operations Management be taken as early as possible in preparation for this major.


Business: Operations and Technology Management: Operations Research (p. 1369)

## OTM SUGGESTED ELECTIVE COURSES

Any OTM course taken after fulfilling the requirements above will count as an elective course. Non-OTM School of Business courses on the OTM electives list will be used to satisfy the OTM elective requirement first. If the OTM elective requirement is fulfilled, these courses can be used to satisfy the School of Business breadth requirement, provided they are not cross-listed with OTM.

## SUPPLY CHAIN MANAGEMENT

| Code | Title | Credits |
| :--- | :--- | ---: |
| OTM 351 | Principles and Techniques of | 3 |
| OTM 370 | Quality Management | 3 |
| OTM 442 | Sustainable Approaches to System <br> Improvement | 3 |
|  | Database Management and <br> Applications | 3 |


| OTM 451 | Service Operations Management | 3 |
| :--- | :--- | ---: |
| OTM 654 | Production Planning and Control | 3 |
| OTM/MARKETNG | Fudamentals of Supply Chain <br> 421 | 3 |
| Management <br> 422 | Logistics Management | 3 |
| MARKETNG 365 | Contemporary Topics (Supply Chain <br> Capital Management) | $1-3$ |
| MARKETNG 423 | Procurement \& Supply Management | 3 |
| MARKETNG 427 | Enterprise Systems and Supply <br> Chain Management | 3 |

## BUSINESS ANALYTICS

| Code | Title | Credits |
| :--- | :--- | ---: |
| OTM 365 | Contemporary Topics (Operations <br> Analytics) | 3 |
| OTM 442 | Database Management and <br> Applications | 3 |
| OTM 640 | Business Logistics Analysis | 3 |
| MARKETNG 310 | Marketing Research | 3 |
| INFO SYS 365 | Contemporary Topics | 3 |
| INFO SYS/ | Technology of Computer-Based | 3 |
| COMP SCI 371 | Business Systems | 3 |
| INFO SYS 422 | Computer-Based Data Management | 3 |
| INFO SYS 424 | Analysis and Design of Computer- <br>  <br> Based Systems | 3 |
| OTM 671 | E-Business: Technologies, | 3 |

## BUSINESS PROCESS DESIGN AND IMPROVEMENT

Code Title Credits

OTM 351 Principles and Techniques of 3
OTM 365 Contemporary Topics (Operations 3 Analytics)
OTM 370 Sustainable Approaches to System 3 Improvement
OTM 442 Database Management and 3 Applications
OTM 451 Service Operations Management 3
OTM 640 Business Logistics Analysis 3
ACCT I S 310 Cost Management Systems. 3
INFO SYS 365 Contemporary Topics 3
INFO SYS/ Technology of Computer-Based 3

| COMP SCI 371 | Business Systems | 3 |
| :--- | :--- | :--- |
| INFO SYS 422 | Computer-Based Data Management |  |

INFO SYS 424 Analysis and Design of Computer- 3

Based Systems
I SY E 515 Engineering Management of 3
Continuous Process Improvement

[^47]Human Factors Engineering

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Understand how to analyze and evaluate business processes combined with a capability for improving those processes.
2. Understand how the effects of increased utilization and variability impact process capacity and flow times, and will be able to suggest approaches to improve system performance.
3. Build analytical models to solve business problems.
4. Articulate the commonalities and differences between service and manufacturing processes, and be able to manage and make improvements within either context.
5. Apply principles of supply chain management in business contexts.
6. Analyze and implement operational business decisions from both strategic and tactical perspectives.

## FOUR-YEAR PLAN

This is a sample four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

## Freshman

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| ECON 101 | 4 MATH 211 | 5 MARKETNG 300 | 3 |
| PSYCH 202 | 3 Communications | 3 |  |
|  | A |  |  |
| Science | 3 Ethnic Studies | 3 |  |
| Social Science | 3 ECON 102 | 4 |  |
| GEN BUS 110 | 1 |  | 3 |
|  | 14 | 15 | 3 |

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| GEN BUS 306 | 3 GEN BUS 307 | 3 |
| ACCT I S 100 | 3 ACCT I S 211 | 3 |
| OTM 300 | 3 GEN BUS 300 | 3 |
| M H R 300 | 3 FINANCE/ | 3 |
|  | ECON 300 |  |
| Elective | 3 Elective | 3 |

Junior


## Senior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| Business | 3 Business | 3 |
| Breadth | Breadth |  |
| OTM Elective | 3 OTM Elective | 3 |
| Literature | 3 Elective | 3 |
| GEN BUS 301 | 3 Elective | 3 |
|  | 12 | 12 |

Total Credits 110-112
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, ENVIR ST/PHILOS 441 Environmental Ethics

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

All products and services-from cars to surgeries-are delivered by organized systems. It's the job of operations managers to make sure those activities occur when they are planned, in the right way, in the right quantity, and with the right quality. Operations management transforms inputs-such as labor, equipment, facilities, materials, energy, and information-into goods and services for customers. To make this all happen, the operations function is responsible for critical activities such as materials management, resource planning, purchasing, scheduling, and quality.

## Common Career Paths

## Production Management

- Production management involves the design, operations, and improvement of processes used to manufacture goods valued by end users. Key tasks involve planning and control of materials and resources to enable these processes and make them error-free, fast, and low cost.


## Service Operations Management

- Service operations management is concerned with the design, operations, and improvement of processes used to produce and deliver services to end customers. Key tasks involve planning control of resources (including training of service personnel) to enable these processes and make them error-free, fast, and low cost.


## Technology Management

- Technology management allows an organization to manage its technological fundamentals to create a competitive advantage. The role of technology management is to understand the value technologies can have for an organization and for its customers-and to decide when to invest in technology development and/or when to withdraw from using it.


## Supply Chain Management

- Supply chain management focuses on the movement of products and information along the value chain. The organizations that make up the supply chain are "linked" together through physical flows and information flows. Key tasks are focused on integrating marketing, sourcing, production, logistics, and information systemsnot only within the organization, but also with business partners and customers. A specialization in supply chain management is available to all undergraduate students enrolled in the Wisconsin School of Business and may be added to any current business major. The specialization is housed in and coordinated by the Grainger Center for Supply Chain Management.


## Consulting

- Operations consulting is the process of assisting various types of businesses to assess the current status of internal procedures and strategies, and enhance the overall operation of the company. While operations consulting is often thought to focus on manufacturing plants or production facilities, the scope of operations consulting is actually broader than that. Even businesses that are service-based rather than product-based can benefit from operations consulting.


## Project Management

- Project management is the application of processes, methods, knowledge, skills, tools, and experience to achieve project goals. Projects are separate to business-as-usual activities, requiring people to come together temporarily to focus on specific project objectives

Please visit our website (https://bus.wisc.edu/bba/academics-and-programs/majors/operations-technology-management) for further details about potential career areas and responsibilities.

## PEOPLE

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## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022.

## BUSINESS: OPERATIONS AND TECHNOLOGY MANAGEMENT: OPERATIONS RESEARCH

The Operations and Technology: Operations Research named option is not currently admitting students.

## REAL ESTATE AND URBAN LAND ECONOMICS

The undergraduate program in real estate provides concentrated coursework in all aspects of the real estate enterprise. The program is nationally renowned for its ability to develop real estate professionals with superb analytical skills. Many of the graduates of the program go on to work as managers of and advisors to pension funds, insurance companies, real estate investment trusts, and investment banks. Other graduates of the program go on to take public and private industry jobs in real estate development, appraisal, corporate real estate asset management, and real estate analysis.

## DEGREES/MAJORS/CERTIFICATES

- Business: Real Estate and Urban Land Economics, BBA (p. 1369)


## BUSINESS: REAL ESTATE AND URBAN LAND ECONOMICS, BBA

The undergraduate program in real estate (https://wsb.wisc.edu/ programs-degrees/undergraduate-bba/academics/majors/\#real-estate) provides concentrated coursework in all aspects of the real estate enterprise. The program is nationally renowned for its ability to develop real estate professionals with superb analytical skills. Many of the graduates of the program go on to work as managers of and advisors to pension funds, insurance companies, real estate investment trusts, and investment banks. Other graduates of the program go on to take public and private industry jobs in real estate development, appraisal, corporate real estate asset management, and real estate analysis.

## RECOGNITION

Our real estate program is ranked 2 nd in the U.S. by U.S. News \& World Report 2016.

## RELATED STUDENT ORGANIZATIONS

Real Estate Club (http://www.realestateclub.org) Wisconsin Real Estate Alumni Association (https://bus.wisc.edu/ centers/james-a-graaskamp-center-for-real-estate/alumni-and-friends)

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

Complete requirements: (p. 1305)
Pre-Business
Liberal Studies
Business Prep
Business Core
Business Breadth

## REAL ESTATE MAJOR REQUIREMENTS

Students should take REAL EST/A A E/ECON/URB R PL 306 The Real Estate Process as early as possible, as it is a prerequisite for many other real estate courses.

REAL EST 312 Real Estate Law should also be taken early, ideally the semester after REAL EST/A A E/ECON/URB R PL 306.

Please note that the scheduling of REAL EST 312 occasionally conflicts with that of REAL EST/ECON/URB R PL 420 Urban and Regional Economics in the spring semester.

It is strongly recommended that students take REAL EST 415 Valuation of Real Estate before REAL EST 410 Real Estate Finance, or that REAL EST 410 Real Estate Finance and REAL EST 415 be taken concurrently.

REAL EST 611 Residential Property Development should be taken after REAL EST 410 and REAL EST 415.

| Code | Title | Credits |
| :--- | :--- | ---: |
| REAL EST/A A E/ | The Real Estate Process | 3 |
| ECON/URB R PL 306 |  | 3 |
| REAL EST 312 | Real Estate Law | 3 |
| REAL EST 410 | Real Estate Finance | 3 |
| REAL EST 415 | Valuation of Real Estate | 3 |
| REAL EST/ECON/ | Urban and Regional Economics | 3 |
| URB R PL 420 |  | 18 |
| REAL EST 611 | Residential Property Development |  |
| or REAL EST 661 | Real Estate Investment Analysis and Presentation |  |
| Total Credits |  |  |

## ADDITIONAL COURSES

Undergraduate students are encouraged to take additional electives from among the following real estate and related courses within the School of Business. Electives are typically not offered every semester.

## REAL ESTATE ELECTIVES

Code Title Credits

REAL EST 365 Contemporary Topics ${ }^{1} 3$
REAL EST/A A E/ Community Economic Analysis 3
URB R PL 520
REAL EST 651 Green - Sustainable Development 3
1 The real estate department regularly offers innovative and cuttingedge electives under REAL EST 365 Contemporary Topics. Students should check the Course Guide every semester.

## RELATED COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| FINANCE 305 | Financial Markets, Institutions and | 3 |
|  | Economic Activity |  |
| FINANCE/ECON 320 | Investment Theory | 3 |
| OTM/I SY E 578 | Facilities Location Models | 3 |
| OTM 444 | Economics of Transportation | 3 |

## RECOMMENDED NON-BUSINESS ELECTIVES

Electives may also be selected outside the business-economics core from among a number of courses elsewhere in the university, which will provide greater professional awareness and more specialized tools.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ENVIR ST/GEOG 325 | Analysis of the Physical Environment | 4 |
| ENVIR ST/ SOIL SCI 575 | Assessment of Environmental Impact | 3 |
| BSE/LAND ARC 356 | Sustainable Residential Construction | 3 |
| LAND ARC 250 | Survey of Landscape Architecture Design | 3 |
| LAND ARC 351 | Housing and Urban Design | 4 |
| LAND ARC 451 | Open Space Planning and Design | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| CIV ENGR 340 | Structural Analysis I | 4 |
| CIV ENGR 498 | Construction Project Management | 3 |
| ART HIST 368 | American Architecture: The 19th Century | 3-4 |
| GEOG/CIV ENGR/ ENVIR ST 377 | An Introduction to Geographic Information Systems | 4 |
| URB R PL/GEOG 305 | Introduction to the City | 3-4 |
| URB R PL/ LAND ARC 463 | Evolution of American Planning | 3 |
| URB R PL 601 | Site Planning | 3 |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Gather, process and analyze market, linkage and macroeconomic data for the purpose of forecasting real estate trends and making prudent investment decisions.
2. Understand how to optimally source capital to execute on growth and development opportunities, prepare for and manage the crises and contingencies that pervade real estate ventures, and improve efficiencies in the operation of revenue generating properties.
3. Recognize, measure, and create value in real estate in the strict respect of all ethical and legal norms and with full awareness of their responsibility to the communities, investors and users they aspire to serve as real estate professionals.
4. Successfully communicate the merits of beneficial real estate projects to its various stakeholders.
5. Develop a deeper network with local, regional and international professionals to gather market data, perspectives, investment ideas and employment leads.

## FOUR-YEAR PLAN

This is a sample four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

## Freshman

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| ECON 101 | 4 ECON 102 | 4 ACCT I S 100 | 3 |
| GEN BUS 110 | 1 MATH 211 or | 5 |  |
|  | 221 |  |  |
| Communications | $3-4$ PSYCH 202 | 3 |  |
| A |  |  | 3 |
| Ethnic Studies | $3-4$ |  | 3 |
| Science | 3 | 12 |  |
|  | $14-16$ |  |  |

Total Credits 29-31
1 Direct Admits who wish to do an internship during their first summer will need to take ACCT I S 100 during their second semester.

## Sophomore

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| GEN BUS 306 | 3 GEN BUS 307 | 3 |
| ACCT I S 211 | 3 GEN BUS 300 | 3 |
| M H R 300 | 3 MARKETNG 300 | 3 |
| REAL EST/A A E/ECON/ <br> URB R PL 306 | 3 FINANCE/ECON 300 | 3 |
| Humanities, Social <br> Sciences or Literature <br> course | 3 OTM 300 | 3 |
|  | 15 | 15 |

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## Senior

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| REAL EST 410 | 3 REAL EST 611 or 661 ${ }^{3}$ | 3 |
| REAL EST/ECON/ URB R PL 420 | 3 Business Breadth | 3 |
| Science | 3 Humanities, Social Sciences or Literature | 3 |
| Elective | 3 Elective | 3-6 |
|  | 12 | 12-15 |

Total Credits 24-27
3 REAL EST 611 or REAL EST 661 can also be taken in the fall semester of senior year.

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business
advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

Real estate as a career encompasses a wide range of activities-from development and construction to financing; from brokerage and leasing to property management; from appraisal and assessment to insurance and regulation; from research to urban planning, government affairs and more. Job responsibilities vary by function and can be office-based or in the field. Qualifications also vary from licensing and certification to advanced degrees.

Please visit our website (http://bus.wisc.edu/bba/mybiz/academics/ curriculum-degree-requirements/majors-specializations-certificates/realestate) to learn more about careers in real estate.

## PEOPLE

## FACULTY AND STAFF IN REAL ESTATE

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## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022.

## RISK AND INSURANCE

Actuarial science deals with the application of mathematics, statistics, and the principles of finance to the construction and management of insurance and pension systems. The curriculum prepares students for careers with insurance companies, consulting firms, and governmental agencies. Courses offered cover the material of the associateship examinations of the Society of Actuaries and the Casualty Actuarial Society, although it is not expected that a student will complete these examinations in the course of the undergraduate program.

The major in risk management and insurance prepares students to identify, analyze, and manage risks that are inherent in the operation of profit and not-for-profit institutions. Besides professional careers in risk management, the major cultivates skills required for challenging opportunities in organizations that accept these risks-private and governmental insurers, as well as brokerage/agency and consulting organizations.

## DEGREES/MAJORS/CERTIFICATES

- Business: Actuarial Science, BBA (p. 1373)
- Business: Risk Management and Insurance, BBA (p. 1377)


## BUSINESS: ACTUARIAL SCIENCE, BBA

Actuarial science deals with the application of mathematics, statistics, and the principles of finance to the construction and management of insurance and pension systems. The Actuarial Science (https:// wsb.wisc.edu/programs-degrees/undergraduate-bba/academics/majors/ \#actuarial-science) major curriculum prepares students for careers with insurance companies, consulting firms, and governmental agencies. Courses offered cover the material of the associateship examinations of the Society of Actuaries and the Casualty Actuarial Society, although it is not expected that a student will complete these examinations in the course of the undergraduate program.

## MISSION

The actuarial science program distinguishes itself through leadership, innovation, community, connections, networks, and recognition.

## RELATED ORGANIZATIONS

Actuarial Club (http://win.wisc.edu/organization/actclub)
Co-Curricular Learning Board (http://bus.wisc.edu/knowledge-expertise/ academic-departments/actuarial-science-risk-management-insurance/ beyond-degrees/co-curriculuar-learning-board)

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

| Code Title |
| :--- |
| School of Business BBA Requirements |
| Complete requirements: $(\mathrm{p} .1305)$ |
| Pre-Business |
| Liberal Studies |
| Business Prep |
| Business Core |
| Business Breadth |

## ACTUARIAL SCIENCE MAJOR REQUIREMENTS

The following courses are required for actuarial science majors. The Risk and Insurance Department also has course sequence information. Please be aware of stated prerequisites for major courses (including business core courses) that need to be completed before taking the
course. Specific prerequisites can be found by clicking on the course number below.


## RECOMMENDED ELECTIVES

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 234 | Calculus--Functions of Several | 4 |
|  | Variables |  |
| MATH 340 | Elementary Matrix and Linear <br> Algebra | 3 |
| R M I 300 | Principles of Risk Management | 3 |
| FINANCE/ECON | 320 | Investment Theory |
| COMP SCI 200 | Programming I | 3 |
| or COMP SCI 301 | Introduction to Data Programming | 3 |

Students are encouraged to take MATH 234 Calculus--Functions of Several Variables before taking probability (MATH/STAT 431 Introduction to the Theory of Probability, STAT/MATH 309 Introduction to Probability and Mathematical Statistics I, or STAT 311 Introduction to Theory and Methods of Mathematical Statistics I), courses in risk management and insurance; finance; and computer science.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| Wrade point average specified by the school, college, or |  |
|  | academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Recognize and explain the concept of risk, and apply the knowledge to the development of insurance products that are used to manage risk for the consumer as well as the risk of those products on the insurance organization.
2. Describe the actuarial profession, including the major professional organizations, the professional obligations of being an actuary, and the requirements to obtain and maintain a professional actuarial designation.
3. Demonstrate skills in critical thinking, quantitative analysis, and communication, as well as to develop an appreciation for actuarial theory, research, and the link to practical application.
4. Demonstrate the soft skills of being a professional.
5. Communicate their experiences and inspire others across the WSOB learning community.

## FOUR-YEAR PLAN

This is a sample four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

## Freshman

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| MATH 221 | 5 MATH 222 | 4 ACCT I S 100 | 3 |
| ECON 101 | 4 ECON 102 | 4 |  |
| GEN BUS 110 | 1 PSYCH 202 | 3 |  |
| Communications 3 Ethnic Studies 3 <br> A  14 |  |  |  |

## Sophomore

| Fall | Credits Spring | Credits Summer | Credits |
| :--- | :---: | :---: | ---: |
| MATH 234 | 4 STAT/ | 3 M H R 300 or |  |
| MATH 309, 311, | MARKETNG 300 |  |  |

$\left.\begin{array}{llll}\text { GEN BUS 300 } & \begin{array}{c}3 \text { M HR } 300 \text { or } \\ \text { MARKETNG 300 }\end{array} & 3\end{array}\right]$

## Junior

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| ACT SCI 300 | 1 ACT SCI 653 | 3 |
| ACT SCI 652 | 3 ACT SCI 654 or | 3 |
|  | 655 |  |
| STATI | 3 Humaties | 3 |


| STAT/ | 3 Humanities, | 3 |
| :--- | :---: | :---: |
| MATH 310 or | Social Science, <br> or Literature |  |
| 312 | 3 Humanities, | 3 |
| Humanities, <br> Social Science, <br> or LiteratureSocial Science, <br> or Literature |  |  |

Elective $\quad 3$ Communications $\quad$ 3-4

| B |  |  |
| :--- | :---: | ---: |
|  | 13 | $15-16$ |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| ACT SCI 650 | 3 ACT SCI 651 | 3 |
| ACT SCI 654 or | 3 FINANCE 330 | 3 |
| 655 |  |  |
| Science 3 GEN BUS 301 | 3 |  |
| Ethics $^{1}$ | 4 Science | 3 |
| FINANCE/ | 3 Elective | 3 |
| ECON 320 |  |  |
|  | 16 | 15 |

Total Credits 121-122
1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, ENVIR ST/PHILOS 441 Environmental Ethics

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned
advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

The Actuarial Club offers advising nights every fall semester to help students plan their course sequencing and professional exams. In addition, students should use these documents (https://bus.wisc.edu/ bba/mybiz/academics/majors-specializations-certificates/~/media/ b3b6dcc2c14c4884a4aae031 ebc4de65.ashx) to help them prepare their course and exam schedule.

## CAREERS

Actuaries are problem solvers with expertise in understanding and managing financial risk. They use historical information and models to help predict the future. Actuaries may specialize in life and health (risk of illness, disability or death), pensions (develop and analyze retirement programs) or property and casualty (personal property risks and risks associated with businesses).

Find out more about common industries and essential skills needed to be an actuary on the BBA Actuarial Science website (https://bus.wisc.edu/ bba/academics-and-programs/majors/actuarial-science).

## PEOPLE

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## CERTIFICATION/LICENSURE

There are several exams and credentials from the Casualty Actuarial Society (http://www.casact.org) and the Society of Actuaries (https://www.soa.org) that we prepare students to obtain during their undergraduate career. Students are encouraged to pass at least two actuarial exams before graduation in order to obtain an internship and/or job.

## RESOURCES AND SCHOLARSHIPS

If you are good at math and are interested in pursuing a career as an actuary, apply for our High School Actuarial Scholarship. The first place award of \$2,000 per year for four years will be given to a high school senior on the basis of mathematical aptitude and expressed interest in an actuarial career. The deadline for application is March 1, 2017. You can download the scholarship application here (http://bus.wisc.edu/ \%7E/media/bus/knowledge-expertise/academic-departments/asrmi/hs-outreach/hs-application-2017.pdf?la=en).

## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022.

## BUSINESS: RISK MANAGEMENT AND INSURANCE, BBA

The major in risk management and insurance (https://wsb.wisc.edu/ programs-degrees/undergraduate-bba/academics/majors/\#risk-management-and-insurance) prepares students to identify, analyze, and manage risks that are inherent in the operation of profit and not-for-profit institutions. Besides professional careers in risk management, the major cultivates skills required for challenging opportunities in organizations that accept these risks-private and governmental insurers, as well as brokerage/agency and consulting organizations.

The program of study may be structured to aid students seeking professional designations of Chartered Property and Casualty Underwriter (CPCU) and Associate in Risk Management (ARM).

## RECOGNITION

Our risk management and insurance program is ranked 4th in the U.S. by U.S. News \& World Report 2016.

## RELATED ORGANIZATIONS

Risk Management and Insurance Society (https://win.wisc.edu/ organization/rmis)

Co-Curricular Learning Board (http://bus.wisc.edu/knowledge-expertise/ academic-departments/actuarial-science-risk-management-insurance/ beyond-degrees/co-curriculuar-learning-board)

## HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see Entering the School (p. 1299).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (p. 1305) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

## Code

Title
Credits
School of Business BBA Requirements
Complete requirements: (p. 1305)
Pre-Business
Liberal Studies
Business Prep
Business Core

Business Breadth

## RISK MANAGEMENT \& INSURANCE (R M I) MAJOR REQUIREMENTS

The risk management and insurance major consists of 12 required credits. R M I 300 should be completed prior to any other R M I coursework, as it is a prerequisite for all other courses.

| Code | Title | Credits |
| :---: | :---: | :---: |
| R M I 300 | Principles of Risk Management | 3 |
| Complete 3 of the following courses OR 2 from below and 1 from electives |  | 9 |
| R M I 640 | Management of Insurance Enterprise |  |
| R M I 645 | Commercial Insurance |  |
| R M I 655 | Risk Financing Techniques |  |
| R M I 660 | Risk Analytics and Behavioral Science |  |
| Electives ${ }^{1}$ |  |  |
| R M I 620 | Employee Benefits Management |  |
| R M I 650 | Sustainability, Environmental and Social Risk Management |  |
| FINANCE 325 | Corporation Finance |  |
| FINANCE 330 | Derivative Securities |  |
| ACT SCI 650 | Actuarial Mathematics I |  |
| ACT SCI 652 | Loss Models I |  |
| ACT SCI 654 | Regression and Time Series for Actuaries |  |
| ACT SCI 655 | Health Analytics |  |

1 None of the elective courses listed may be used to satisfy the business breadth requirement.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Integrate a holistic risk management process (framework) across all dimensions of an organization, implementing risk management decisions that add value.
2. Use appropriate statistical techniques and data analysis to support risk management decisions.
3. Apply fundamental insurance principles that support economic development through insurance markets.
4. Identify decision-making challenges, and implement strategies to address those challenges, in environments involving risk and uncertainty.
5. Demonstrate strong critical thinking skills as observed through their ability to debate various positions, ask skeptical questions, and probe underlying assumptions.
6. Demonstrate leadership qualities in moving the profession forward.

## FOUR-YEAR PLAN

This is a sample four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

## Freshman

| Fall | Credits Spring | Credits Summer | Credits |
| :---: | :---: | :---: | :---: |
| MATH 211 or 221 | 5 ECON 101 | 4 ACCT IS 100 | 3 |
| GEN BUS 110 | 1 PSYCH 202 | 3 |  |
| Elective | 3 Ethnic Studies | 3 |  |
| Communications <br> A | ¢ 3-4 Science | 3 |  |
|  | 12-13 | 13 | 3 |
| Sophomore |  |  |  |
| Fall | Credits Spring | Credits |  |
| ECON 102 | 4 GEN BUS 307 | 3 |  |
| GEN BUS 306 | 3 ACCT I S 211 | 3 |  |
| R M I 300 or FINANCE 300 | 3 R M I 300 or FINANCE 300 | 3 |  |
| M H R 300, OTM 300, or MARKETNG 300 | 3 M H R 300, OTM 300, or MARKETNG 300 | 3 |  |
| GEN BUS 300 | 3 Non-bus/econ elective | 3 |  |
|  | 16 | 15 |  |
| Junior |  |  |  |
| Fall | Credits Spring | Credits |  |
| M H R 300, OTM 300, or MARKETNG 300 | 3 Communications B | $\text { s } \quad 3-4$ |  |
| Humanities, Social Science, or Literature | 3 R M I 660 | 3 |  |


| Humanities, Social Science, or Literature | 3 R M I 645 (or elective) | 3 |
| :---: | :---: | :---: |
| R M I 640 | 3 Elective | 3 |
| R M I 655 (or RMI Elective) | RMI Elective) |  |
|  | 15 | 12-13 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| Business <br> Breadth | 3 R M I 645 (or elective) | 3 |
| Science | 3 Business Breadth | 3 |
| Ethics ${ }^{1}$ | 4 GEN BUS 301 | 3 |
| R M I 655 (or RMI elective) | 3 Humanities, Social Science, or Literature | 3 |
|  | 13 | 12 |

## Total Credits 111-113

1 Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issuess, ENVIR ST/PHILOS 441 Environmental Ethics

## ADVISING AND CAREERS

## ADVISING

Advising is an integral part of any student's educational journey in the School of Business BBA Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. BBA academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

BBA career advisors help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career advisor once they arrive on campus.

BBA advisors want students to succeed. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

## ASSIGNED ACADEMIC AND CAREER ADVISORS

For admitted BBA students, advisors are assigned by academic major. If you have more than one major, you may have more than one assigned advisor. You can find your assigned advisor by logging into your student center and looking on the right hand menu under "Program Advisor."

For students not yet admitted to the WSB, we have a team of prebusiness advisors available to you. Information on pre-business advising can be found here (https://bus.wisc.edu/bba/mybiz/advising/ \#academic).

## ACCESSING ADVISING

If you have a quick question, no more than 15 minutes, please utilize our drop-in advising. You can find up-to-date information regarding drop-in hours here (https://bus.wisc.edu/bba/mybiz/advising/\#academic).

You may schedule (https://bus.wisc.edu/bba/mybiz/advising) a 30minute appointment with an academic and career advisors. Advisors are trained, and have knowledge regarding all ten majors in the BBA, so if your assigned advisor is not available you can be confident to schedule an appointment with any of the BBA advisors.

Pre-business students may also schedule (https://bus.wisc.edu/bba/ mybiz/advising) an appointment with a pre-business academic advisor.

If you have a quick yes/no question you may always send an email to your assigned advisor.

For more information on academic and career advising in the BBA please see Advising (https://bus.wisc.edu/bba/mybiz/advising/\#academic) on the school's website.

## CAREERS

Risk professionals identify, develop, and analyze solutions to manage risk (financial, credit, operational, etc.) at both the organizational and consumer level. Effective risk management encompasses all divisions of an organization, allowing the organization to grow safely and to be more resilient. Insurance is a key solution for managing risk and is deployed by risk professionals working as brokers, underwriters, claims adjusters, product developers, and a host of other potential insurance careers.

To learn more about careers in risk management and insurance, please visit the BBA RMI website (http://bus.wisc.edu/bba/mybiz/academics/ curriculum-degree-requirements/majors-specializations-certificates/risk-management-insurance).

## PEOPLE

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## ACCREDITATION

## ACCREDITATION

AACSB International-The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu)

Accreditation status: Accredited. Next accreditation review: 2021-2022

## SCHOOL OF EDUCATION

The School of Education at UW-Madison is consistently ranked as one of the finest schools of education in the United States, and among the
best in the world. The school embraces fields of study that define the human experience: education to challenge minds, health to improve lives, and the arts to enhance creative spirits, and also conducts world-class research to drive conversation forward. The school prepares students in a variety of disciplines and for a range of professional roles, including artist, teacher, and therapist.

Approximately 1,500 undergraduates are enrolled each year in the School of Education. While many students are pursuing teacher certification, a significant number are completing programs in the performing and visual arts, human movement, and human services.

The School of Education offers a broad array of undergraduate programs that reflect the wide range of disciplines housed in the school. Although undergraduate majors are not offered in all departments, all ten departments do offer courses to undergraduate students. The school's departments include: Art (p. 1406), Counseling Psychology (http:// counselingpsych.education.wisc.edu), Curriculum and Instruction (p. 1435), Dance (p. 1581), Educational Leadership and Policy Analysis (http://elpa.education.wisc.edu), Educational Policy Studies (p. 1599), Educational Psychology (p. 1605), Kinesiology (p. 1608), Rehabilitation Psychology and Special Education (p. 1634), and Theatre and Drama (p. 1652)

Most School of Education students, including those interested in teacher education, begin their academic careers with a "preprofessional" designation. Application to the professional component of the undergraduate program is made as prerequisite coursework is completed. Students admitted to the university as art, education studies, or theatre and drama majors enter directly into their professional program. Dance majors are admitted based on an audition.

Many programs within the school are selective and competitive. School of Education faculty seek committed, creative, and reflective students who are sensitive to differing perspectives. For this reason, most of the school's limited-enrollment programs use criteria beyond grade point average to determine professional program admission. For this reason, too, the school consistently encourages students to challenge themselves and their initial career choices through volunteer experiences, service learning courses, internships or paid work experiences, and study abroad.

Students find that the School of Education is their academic and administrative home-a source of advising, guidance, support, and community. Small class sizes in many pre-professional and professional courses allow students to develop a strong sense of community and to get ample individual attention from professors, instructors, and teaching assistants. Teaching staff are extremely willing to get to know their students and work with them to meet their goals. School of Education courses also provide students the chance to get to know their classmates well. The School of Education works to offer a caring, secure, and supportive environment that encourages taking risks, expanding personal boundaries, and developing into a professional

## DEGREES/MAJORS/CERTIFICATES

All students pursuing their undergraduate degree in the School of Education must fulfill the following requirements:

- University-wide General Education Requirements (p. 22)
- School of Education Liberal Studies Requirements (p. 1389)
- Major/Degree Program Requirements (see below)
- Art Education, B.S. (p. 1407)
- Art, B.S. (p. 1416)
- Art, BFA (p. 1423)
- Athletic Training, B.S. (p. 1608)
- Chinese, BSE (p. 1438)
- Communication Sciences and Disorders, BSE (p. 1450)
- Dance, B.S. (p. 1581)
- Dance, BFA (p. 1587)
- Dance, Certificate (p. 1592)
- Education and Educational Services, Certificate (p. 1606)
- Education Studies, B.S. (p. 1599)
- Educational Policy Studies, Certificate (p. 1605)
- Elementary Education, BSE (p. 1457)
- French, BSE (p. 1475)
- Game Design, Certificate (http://guide.wisc.edu/undergraduate/ education/curriculum-instruction/game-design-certificate)
- German, BSE (p. 1489)
- Individual Major, BSE (p. 1595)
- Introductory Studies in Dance/Movement Therapy, Certificate (p. 1594)
- Italian, BSE (p. 1505)
- Japanese, BSE (p. 1517)
- Kinesiology, B.S. (p. 1617)
- Latin, BSE (p. 1528)
- Physical Education, B.S. (p. 1624)
- Pilates, Certificate (p. 1594)
- Portuguese, BSE (p. 1545)
- Rehabilitation Psychology, B.S. (p. 1634)
- Spanish, BSE (p. 1569)
- Special Education, BSE (p. 1640)
- Studio Art, Certificate (p. 1432)
- Theatre and Drama, B.S. (p. 1653)

Note: Students at UW-Madison become certified to teach middle and high school English, Mathematics, Science and Social Studies subjects only through graduate-level coursework, not as undergraduates. Information about the master's degree program is available at uwteach.org (http://www.uwteach.org) and on the Curriculum and Instruction (http://ci.education.wisc.edu) website. Science certification areas include Biology, Chemistry, Earth and Space Science, Environmental Studies, Physics, and Broad Field Science. UW-Madison offers certification in the Social Studies areas of Economics, Geography, History, Political Science, Psychology, Sociology and Broad Field Social Studies.

## POLICIES AND REGULATIONS

## ACADEMIC CONCERNS AND STATUS ACADEMIC ACTIONS AND EXCEPTIONS

Academic actions and exceptions are used to record a student's progress through the university and to document various administrative and academic situations. Actions can be grouped into two broad categories:

- those that permit exceptions to program requirements and school/university policies and
- those that affect a student's standing in the university -e.g., probation or transferring from one program to another.

As the undergraduate dean's office, Education Academic Services (EAS) is responsible for reviewing, approving, documenting, and sometimes initiating academic actions and exceptions. To be posted to a student's record, exceptions must go through several steps. Exceptions may be initiated either by program faculty/staff or by EAS staff. EAS staff and faculty/staff often consult about a specific exception. Once an exception has been approved, it is processed either as an official "Dean's action" or as a DARS exception. Students can find a record of dean's actions on their printed unofficial transcript (also called the student record) or on their DARS report. A DARS exception will be reflected in the individual student's DARS report.

Exceptions to faculty approved program requirements generally include course substitutions and rarely involve course or program requirement waivers. Exceptions to campus or School policies include permission for adding or dropping a course beyond the deadlines, waiving senior or major residency requirements, extending the deadline for meeting a deficiency or finishing an Incomplete, and permitting students to repeat a course for credit. A request for an exception requires careful consideration from all parties involved. Students should be prepared to explain the reasoning behind a request and offer supporting documentation.

Substantial consultation time with faculty, staff, and/or deans may be required, so students should not expect to receive an immediate answer to a request during the initial appointment.

## ACADEMIC STANDING: DEAN'S LIST, ACADEMIC PROBATION, ETC.

To remain in good academic standing in the School of Education, students must earn both a semester grade point average (GPA) and a cumulative grade point average of at least 2.5 . While the 2.5 grade point average may not be sufficient to permit students to be considered for admission to their program of choice, it is the minimum required to remain in the School of Education. This may be substantially higher than minimum grade point average requirements in other schools/colleges on campus.

## Dean's List

Students have at least a 2.5 cumulative GPA and 3.5 or higher for the semester. Students must have received no incompletes in graded courses, no unreported grades, or end-of-semester academic actions for the semester. Credit/no credit and pass/fail courses are not considered in meeting the requirements for the Dean's List.

## Probation

A student's grade point average for a particular semester falls below 2.5 , while the cumulative campus GPA remains at or above 2.5 . Students must earn a minimum 2.5 grade point average on the next semester's coursework to be removed from probation status.

## Strict Probation

Strict Probation occurs when either (1) a student's cumulative GPA falls below a 2.5 OR (2) a student already on probation earns less than a 2.5 grade point average for the subsequent semester. To be in good standing, students on strict probation must earn both a 2.5 GPA on the next semester's coursework and also have a cumulative GPA of 2.5 by the end of the next semester. Students on Strict

Probation status have an enrollment hold placed on their record for the subsequent semester. These students are not permitted to enroll until they have met with an EAS advisor.

## Continued Strict Probation

A student already on strict probation obtained a 2.5 GPA or above on the next semester's coursework, but the cumulative GPA is still below 2.5. Once both grade point averages are at or above 2.5 , the student will be in good academic standing. Students on Continued Strict Probation status have an enrollment hold placed on their record for the subsequent semester. These students are not permitted to enroll until they have met with an EAS advisor.

## May Not Continue in the School of Education

Students on strict probation or continued strict probation who earn less than a 2.5 GPA on the next semester's work will receive notice that they may not continue in the School of Education. Students on May Not Continue status who do not seek or are not granted permission to continue may be withdrawn from the university and dropped from courses ("disenrolled"). Students are expected to contact EAS immediately to discuss options, including transfer to another school or college on campus, transfer to another university, or withdrawal from UW-Madison.

## CONTINUATION REQUIREMENT: DEPARTMENT OF KINESIOLOGY

All students admitted to undergraduate programs in the Department of Kinesiology, including Physical Education, must maintain a cumulative grade point average (GPA) of at least 2.75, based on all UW-Madison campus coursework. A student whose GPA falls below 2.75 will be placed on probation for the following semester. If the GPA remains below a 2.75 at the end of the probationary semester, the student will receive a discontinuation letter indicating that they must transfer out of the Department of Kinesiology. A hold will be placed on the student's registration for the second semester following the probationary semester, until the transfer is complete. Students in this situation must transfer to another School of Education program, another UW-Madison school/ college, to another institution altogether, or must withdraw from the university.

If a student wishes to appeal being discontinued in the department, it must be done in writing to the Chair of the Undergraduate Studies Committee within 30 days of the date of the notification letter. The Undergraduate Studies Committee may request that the student appear in person at an Undergraduate Studies Committee meeting to present the case.

If a negative decision is reached by the Undergraduate Studies Committee, a student may choose to appeal in writing to the Department of Kinesiology Student Affairs Committee within 30 days of the date of the notification.

If a negative decision is reached by the Department's Student Affairs Committee, a student may choose to appeal in writing to the Chair of the Department of Kinesiology within 30 days of the date of the notification.

If a negative decision is reached by the Chair of the Department of Kinesiology, a student may choose to follow the School of Education Grievance Policy.

In the event of a positive decision at any level, the student will be allowed to continue for one semester in order to raise the GPA to 2.75 or higher. A 2.75 cumulative GPA is required to graduate from the Department of Kinesiology.

## GRIEVANCE POLICY IN THE SCHOOL OF EDUCATION

Any student who feels that he or she has been treated unfairly by a faculty or staff member has the right to complain about the treatment and to receive a prompt hearing of the grievance, following these grievance procedures. The complaint may concern course grades, classroom treatment, program admission, or other issues. To insure a prompt and fair hearing of any complaint, and to protect both the rights of the student and the person at whom the complaint is addressed, the procedures below are used in the School of Education.

The person whom the complaint is directed against must be an employee of the School of Education. Any student or potential student may use these procedures unless the complaint is covered by other campus rules or contracts. The following steps are available within the School of Education when a student has a grievance:

1. The student should first talk with the person against whom the grievance is directed. Most issues can be settled at this level. If the complaint is directed against a teaching assistant, and the student is not satisfied, the next step would be to talk to the TA's supervisor, who is usually the course professor. If the complaint is not resolved satisfactorily, the student may continue to step 2.
2. If the complaint does not involve an academic department, the procedure outlined in Step 4 below should be followed. If the complaint involves an academic department, the student should contact the chair of the department. The chair will attempt to resolve the problem informally. If this cannot be done to the student's satisfaction, the student may submit the grievance to the chair in writing. This must be done within 60 calendar days of the alleged unfair treatment.
3. On receipt of a written complaint, the chair will refer the matter to a departmental committee, which will obtain a written response from the person at whom the complaint is directed. This response shall be shared with the person filing the grievance. The chair will provide a timely written decision to the student on the action taken by the committee.
4. If either party is not satisfied with the decision of the department, he or she has five working days from receipt of the decision to contact the dean's office (at the number below), indicating the intention to appeal. If the complaint does not involve an academic department in the school, the student must contact the dean's office within 60 calendar days of the alleged unfair treatment.
5. In either case, there will be an attempt to resolve the issue informally by the associate dean. If this cannot be done, the complaint can be filed in writing with the dean's office. This must be done within 10 working days of the time the appealing party was notified that informal resolution was unsuccessful.
6. On receipt of such a written complaint, the associate dean will convene a subcommittee of the school's Equity


#### Abstract

\& Diversity Committee. This subcommittee may ask for additional information from the parties involved and may hold a hearing at which both parties will be asked to speak separately. The subcommittee will then make a written recommendation to the dean of the School of Education who will render a decision. Unless a longer time is negotiated, this written decision shall be made within 20 working days from the date when the grievance was filed with the dean's office.


Questions about these procedures can be directed to the School of Education Dean's Office, 377 Education Building, 1000 Bascom Mall, 608-262-1763.

State law contains additional provisions regarding discrimination and harassment. Wisconsin Statutes 36.12 reads, in part: "No student may be denied admission to, participation in or the benefits of, or be discriminated against in any service, program, course or facility of the system or its institutions or center because of the student's race, color, creed, religion, sex, national origin, disability, ancestry, age, sexual orientation, pregnancy, marital status or parental status." In addition, UW-System prohibits discrimination based on gender identity or gender expression. Students have the right to file discrimination and harassment complaints with the Office for Equity and Diversity, 179A Bascom Hall, 608-263-2378, kate.oconnor@wisc.edu, (kate.oconnor@wisc.edu) relay calls accepted.

## PART-TIME ENROLLMENT STATUS

Students who choose part-time enrollment status or who anticipate falling below full-time enrollment status due to dropping a course should consult with an EAS advisor. Part-time enrollment may have important implications for any number of issues, including health insurance coverage or financial aid. It is especially important that athletes and international students consult with EAS and other advisors if considering part-time enrollment. Students who drop below 12 credits need not leave university housing.

## RE-ENTRY TO CAMPUS AFTER AN ABSENCE

Students wishing to reenter UW-Madison after an absence of a semester or more must file a reentry application form. This form is available from the UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu). If an applicant is not in good academic standing, the reentry application will be referred to the associate dean.

Students admitted to the professional part of a program may leave UW-Madison for a maximum of two consecutive semesters (excluding summer sessions) and be eligible to reenter directly into the program. Students in this situation are not guaranteed immediate placement in a practicum or student teaching placement upon reentry, and graduation may be delayed because of prior commitments to continuing students. Students who leave the program for more than two consecutive semesters (excluding summer sessions) may be considered for readmission only on an individual basis. Lack of space in a program may preclude readmission directly into a program for any future semester. Given the individual circumstances, a student may be required to reapply to the program altogether.

The general policy above may be modified by any particular program so that the conditions of reentry match the structure of the professional program. Some programs require that students obtain
prior approval to interrupt the program sequence. All students intending to be absent should leave with a firm understanding of the conditions guiding their reentry into their professional program. Consult with the appropriate faculty advisor and with Education Academic Services.

## RESIDENCY (MAJOR \& SENIOR) REQUIREMENTS

## Major Residency

Students must complete at UW-Madison at least 15 credits in upper-level courses in the major. Some programs, e.g., Art, require more credits to meet major residency requirements. Upperlevel courses are generally defined as those numbered 300 and above, but this varies by program area. Retroactive credits and credits granted by examination do not count toward the residency requirement.

## Senior Residency

Seniors in the School of Education must complete the last 30 credits in residence. Special permission to take a portion of senior work either at another institution or by correspondence (via UWExtension) must be obtained in advance from Education Academic Services. Coursework taken as part of a UW-Madison sponsored study abroad program does not count against senior residency. Students should discuss senior residency issues with their EAS advisor. Retroactive credits and credits granted by examination do not count toward the residency requirement.

## EXCESS CREDIT AND SATISFACTORY PROGRESS

## Excess Credits

Wisconsin resident undergraduates who have accumulated more than 165 completed credits will be assessed a $100 \%$ tuition surcharge on credits over 165 , as required by the UW System Board of Regents. This policy was effective beginning Fall 2004. See Excess Cumulative Credits (http://registrar.wisc.edu/ excess_cumulative_credits.htm) on the registrar's website for more information about this policy and the criteria used in counting cumulative, completed credits. Note: Students who have already been awarded a Bachelor's degree from any accredited institution are exempt from the tuition surcharge. Special students are also exempt.

## Satisfactory Progress: Second degree candidates and Education Special (non-degree-seeking) Students

The School of Education is enriched by admitting students with a previous degree to our programs. We welcome these students and encourage them to apply to our the School. At the same time, admission as a second-degree or Education Special (designated EDS or EDCS) student is a privilege granted by the School of Education. Second-degree and Education Special students are expected to make the same timely progress toward program completion as are initial-degree students.

To ensure satisfactory progress, second-degree and Education Special students who are identified to have met any one of the criteria below will be required to confer with her/his program coordinator and the undergraduate academic dean for purposes of developing a formal plan for program completion:

- Student has earned over 200 total credits.
- Student enrolled for two consecutive semesters without completing requirements for the professional program to which the student was initially admitted.
- Student withdrew from classes for two consecutive semesters.
- Student failed to enroll in a required course when it was available, particularly those that are intermittently offered.
- Student engages in other course selection patterns that result in his/her failing to make progress toward completion of initial program.

Students who do not meet the terms of the plan for program completion may be restricted to enrollment in specific courses or departments, prevented from enrolling entirely, or withdrawn from classes by the academic undergraduate dean after consultation with program faculty. Students may appeal the terms of the plan or any of the dean's actions above under the provisions of the School of Education Grievance Policy.

## WITHDRAWING FROM UW-MADISON

Formal withdrawal procedures must be observed by individuals who wish to leave the university before completing the semester in progress. Students who leave the university without formally withdrawing may receive failing grades in all courses.

## COURSES AND COURSE ENROLLMENT ATTENDANCE POLICIES

Faculty and instructors may require students to attend scheduled meetings of a class and/or to participate in other course-related activities, including distance activities. Students are responsible for materials presented in such meetings or activities. Because courses are designed and conducted in diverse ways, faculty and instructors are expected to inform students in writing at the beginning of each course if there are specific expectations for attendance/ participation, including whether any component of the grade is based on such attendance/participation.

## AUDITING A COURSE

A student may audit a course only if the instructor consents and if no laboratory or performance skills are required. (The second restriction usually prevents students from auditing Dance or Art courses.) Auditors do not participate in classroom discussions or take examinations, but are expected to attend with reasonable regularity and do some assigned work.

Audited courses carry no degree credits, are not graded, do not count in determining full-time/part-time load for enrollment certification in an academic term, and do not meet degree requirements for School of Education students. Students interested in auditing a course should confer with their EAS advisor. The deadline to change a course from credit to audit is the end of the fourth week of classes; no exceptions to this deadline are permitted.

## CONCURRENT ENROLLMENT AT TWO INSTITUTIONS

School of Education students may occasionally choose to take courses at another institution-e.g., Madison College or Independent Learning through UW-Extension-while being a fully enrolled student on the UW-Madison campus. This is generally permitted, but does require a specific dean's action. Full-time or part-time student status is usually determined by the credits taken at UW-Madison only; thus, students who take only nine credits
on campus and three credits at another institution may not be considered full-time students.

## CREDIT OVERLOAD PERMISSION

The School of Education allows students to carry a maximum of 18 credits per semester without special permission. School of Education undergraduates may, with an academic dean's permission, enroll for more than 18 credits in a semester. Students must confer with a School of Education academic dean about such a request. Students must be in excellent academic standing to be considered for a credit overload and will be liable for the additional tuition costs beyond 18 credits.

During summer sessions, students may, as a rule, carry one credit per week of instruction. The maximum credit load for Education students for the entire summer session is 12 . Session-specific limits follow the rule of 1 credit per week of instruction, except 9 credits are allowed in the Eight-Week General Session. Students must obtain permission from an academic dean to carry an overload in any of the summer sessions.

## DIRECTED/INDEPENDENT STUDY

Directed Study, also called Independent Study, offers the student an opportunity to work with a School of Education faculty member on an individual topic of interest. Most School of Education departments make directed study courses available to students on the basis of the student's preparation and motivation and a faculty member's willingness to accept the student in such an endeavor. Directed Study courses are generally numbered 199, 299, 399, and 699.

This study option is intended primarily for advanced students who have a depth of knowledge in a field, the self-discipline necessary for independent work, and strong motivation to pursue a special project. Some program areas limit the number of Directed Study credits that can be applied to major or minor requirements.

Directed Study is taken as a supplement to, but not as a replacement for, available course offerings. In this way, it may be used to expand areas of particularly strong interest. Extra responsibility is required from the faculty member involved, and no member of the faculty is obligated to accept a proposal for a directed study project. Students should have a well-defined outline of the topic to be studied before discussing the project with a faculty member.

Both the student and instructor must follow UW-Madison's Policy on Directed/Independent Study for Undergraduates (https:// kb.wisc.edu/page.php?id=36263). Important components of this document include, but are not limited to:

- The student's responsibility to develop a written study plan, in collaboration and agreement with the instructor, consistent with the responsibilities of the instructor. The study plan will include expectations for learning and student work, the time and place for regular meetings, the number of credits to be earned, and any other issues related to the learning experience.
- Guidelines for assigning the appropriate number of credits to the Directed Study.
- Responsibilities of the Directed Study instructor.
- The approval process for enrolling in a Directed Study after the course add deadline (usually the end of the second week of class in fall and spring semesters).


## INDEPENDENT LEARNING COURSE ENROLLMENT

Students occasionally elect to take an Independent Learning (https://continuingstudies.wisc.edu/independent-learning/ independent-learning-courses) course through the University of Wisconsin-Extension. Many of the courses offered through Independent Learning (IL) can count toward specific degree requirements and students have an entire year to complete the coursework. Individuals interested in enrolling in an Independent Learning course should note the following important issues:

## Course Equivalencies

Independent Learning courses are not automatically transferable as equivalent UW-Madison campus courses-even when the Independent Learning course carries the same number and title. Use the Transfer Information System (TIS) (http://www.uwsa.edu/ tis) to ensure that the Independent Learning course is equivalent to the campus required course. Faculty and dean's offices may have some discretion in permitting courses to count for requirements even when they are not coded as exactly equivalent; students should see their EAS advisor.

## Concurrent Enrollment

UW-Extension is an entirely separate institution from UWMadison. Thus, UW-Madison students must have permission from their academic dean to be enrolled concurrently in another higher education institution. Permission for concurrent enrollment is granted routinely for School of Education students through EAS. Students should go to the registrar's office website for the permission form (https://registrar.wisc.edu/documents/ independent_learning_form.pdf). The completed form indicates permission for concurrent enrollment and, in some circumstances, provides for a waiver of the tuition for the Independent Learning course (see additional information below). Students should take this form to Education Academic Services, 139 Education Building, 1000 Bascom Mall, and meet with an advisor. Send it to Independent Learning after it has been approved at EAS.

## Tuition Waiver

The tuition for an Independent Learning course may be waived with the academic dean's permission, although the student is still responsible for other course enrollment fees. Students are eligible for a tuition waiver if they register for an Independent Learning course during the semester they are concurrently enrolled at UWMadison. In some cases, students may be allowed to register for Independent Learning classes once they have enrolled in courses for the subsequent semester, linking their Independent Learning registration with the credits for the succeeding semester. Students interested in receiving a tuition waiver must be enrolled full time (at least 12 credits) at UW-Madison, and have no more than 18 credits after adding the Independent Learning course. Students should see their EAS advisor for additional information on these policies. As indicated above, download and complete the form (https:// registrar.wisc.edu/documents/independent_learning_form.pdf) and submit to EAS, 139 Education Building, 1000 Bascom Mall. This stamped form must then be sent to Independent Learning, with a copy remaining at EAS.

## Posting Independent Learning courses to the UW-Madison transcript

Independent Learning courses are posted to the campus transcript by staff at the Office of Admissions and Recruitment (http:// admissions.wisc.edu). A official transcript for an Independent Learning course must be submitted to this office.

## Timing for course completion and degree posting

Independent Learning courses require a substantial time commitment. Students should not plan to begin an Independent Learning course only a few weeks before it must be completed! Perhaps even more important, students completing an Independent Learning course to meet degree requirements during their last semester on campus should be aware that the Independent Learning course must be completed prior to the University's official graduation date for that semester. The completion date listed on the UW-Extension transcript must be on or before the UWMadison degree completion date or the student's degree will be awarded after the subsequent semester. For example, if a student's UW-Extension transcript indicates a course completion date of May 25, but the UW-Madison degree completion date is May 23, the student's degree will be posted for the subsequent August graduation date, not for the May graduation day. This could create serious problems for teacher education students hoping to secure a position. For this reason, students completing final degree requirements via Independent Learning should consult carefully with EAS and Independent Learning staff regarding the timing of their course completion and degree posting.

## LATE COURSE ADDS OR DROPS

Course enrollment regulations must be followed when adding and dropping courses. Students are responsible for knowing and complying with the published deadlines; see the registrar's website (http://www.registrar.wisc.edu) for deadlines. Students are expected to check their academic records routinely to minimize the need for late drops based on enrollment errors.

## Late Course Add

Students must obtain instructor, departmental, and dean's approval to add a course after the course add deadline. See the registrar's website (http://www.registrar.wisc.edu) for instructions.

## Late Course Drop

After the drop deadline, courses may be dropped only with the permission of Education Academic Services. Such permission is not granted routinely, but only in unusual circumstances. Students seeking a late drop will be required to complete a formal request form and may be asked to supply a written justification, medical or other documentation, and/or proof of having consulted with the course instructor. Requests for backdated drops due to ignorance of campus drop deadlines or to remove a "DR" from the student's record will not be honored. Students seeking a late drop must schedule a meeting with an EAS advisor.

The student will meet with the advisor to discuss the drop request. The advisor will collect information about the circumstances around the request. If appropriate, the advisor will warn about the drop's possible consequences for financial aid, insurance coverage, student status (for international students), etc. The decision around the late drop may or may not be made during this meeting. Advisors may confer with instructors as needed to verify students' reports and obtain additional information. Advisors may also require students to contact the instructor and may also consult with one
another and with the associate dean about specific cases. Students will be informed via email or telephone about the disposition of their request.

## REPEATING COURSES

Most courses on the UW-Madison campus may be taken only once for purposes of credit. Some courses may be repeated a limited number of times for credit. Other courses may be repeated an unlimited number of times for credit. When courses are taken more than once, all grades and their associated grade points are included in the cumulative campus grade point average.

Some School of Education professional programs may permit students to retake courses for admission eligibility purposes only. Students should consult EAS staff with questions regarding repeated courses.

## DEGREES, "DOUBLE MAJORS," AND GRADUATION

## ADDITIONAL MAJOR OR "DOUBLE MAJOR"

School of Education students may be permitted to complete an additional major with their School of Education degree program. Students must be admitted to the professional part of their degree program to be eligible to add an additional major; pre-professional students cannot add another major.

Education students wishing to complete an additional major in the College of Letters \& Science must complete these steps:

1. Contact the department that houses the major of interest. Meet with the undergraduate major advisor there, if appropriate. Complete the Major Declaration form and obtain departmental approval (usually a signature or stamp).
2. Take the form to Education Academic Services, 139 Education Building, 1000 Bascom Mall, and ask for a dean's action to permit the additional major. Staff at EAS will take the action and send the form to the registrar's office. Note: Students in the School of Education should not take the form to the L\&S Student Academic Affairs office-even if this is the advice of departmental staff. Requests for an additional major will be rejected by the registrar's office for lack of the appropriate dean's approval.

Students will be granted a degree at the end of the fall, spring, or summer semesters in which all School of Education degree requirements are complete. Graduation will not be postponed if students have an unfinished additional major or certificate program that is not required for the degree.

Exceptions to the requirements of an additional major or certificate program must be approved by the department and school/college dean's office in which the major or certificate program is located.

## CREDITS-TO-DEGREE

School of Education programs require a minimum of 120 credits in all programs for graduation, although programs may require more. To earn 120 credits in four years (eight semesters), students must average 15 credits per semester. The number of credits carried each
semester may depend upon a student's preparation, motivation, course selection, employment, and extracurricular activities.

## DEGREE AUDIT REPORTING SYSTEM (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## DUAL DEGREES

Students may be permitted to complete two degrees simultaneously. For example, students may complete two degree programs in the School of Education or may choose a degree program in the College of Agricultural and Life Sciences along with their School of Education degree. Not all schools/colleges permit dual degrees-e.g., this is not permitted by the College of Letters \& Science or by the College of Engineering. Students should confer with an academic dean regarding the ability and feasibility of completing two degrees programs simultaneously. Students wishing to earn two undergraduate degrees must follow these academic policies:

- If the two degrees to be earned are within the School of Education, at least 30 additional credits and all course and grade point average requirements for the second degree must be completed for the second degree. When the first degree requires 120 credits, a minimum of 150 credits for most majors will be required. The two degree programs must differ sufficiently to permit the total credits to be accumulated. Courses may count toward the fulfillment of both degree programs. Permission to complete two degrees simultaneously requires the academic dean's approval. This approval, and the formal academic action permitting the dual degree work, should be sought as early as possible to ensure that it is feasible to complete both degrees.
- If the two degrees to be earned are from two different schools/colleges (one degree in Education and one degree in another school or college on this campus), the following academic policies shall be followed:

1. Permission to complete two degrees simultaneously requires academic dean's approval from both schools/colleges. Students should see their current dean's office for the required paperwork.
2. Admission into the other school/college shall be based on the admission criteria for that particular school/college and, when necessary, particular program.
3. The two degree programs must differ sufficiently so that the combined total requirements for the two degrees are at least 150 credits.
4. The student's program must be reviewed and approved in both colleges before the start of a student's senior year in residence.
5. The degree from each college will be awarded simultaneously.
6. Exceptions to degree requirements must be taken by staff from the school/college linked to the particular degree.

## GRADES AND GRADING

## Grading System

See Enrollment and Records (p. 25) for detailed information on the campus grading system, including the list of possible grades and their impact on a student's grade point average.

## Credit/No Credit Courses

Courses designated as being offered on a Credit/No Credit basis are indicated on the transcript as either CR, meaning the student earned the credits for which the course was offered, or N , meaning that the student did not earn any credit even though enrolled for the course. Students may not take such courses on any other basis.

## "F" Grade Policies

If the course is repeated, the original $F$ will remain on the transcript and will be included in computing the GPA. If a grade of $F, N$ (no credit), or $U$ (unsatisfactory) is received in student teaching or in courses within required practica, the course may be repeated only if the faculty adviser, the supervisor of the practicum or student teaching, and the appropriate associate dean gives approval. A third attempt to register in a course under these conditions is not allowed.

## Incompletes

A grade of "Incomplete" may be reported for a student who has carried a subject with passing grades until near the end of the semester and then, because of illness or other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination, or to complete some limited amount of term work. An Incomplete is not given to a student who stays away from a final examination except as indicated above. In the absence of substantiated cause, the grade shall be F. Even with such proof, if the student's work has convinced the instructor that $\mathrm{s} /$ he cannot pass the course, the grade shall be F .

Any Incomplete taken by School of Education students must be completed by the end of the student's next semester of residence (specifically, by the last day of classes), excluding Summer Sessions. If the work is not completed by this
deadline, the Incomplete will lapse into a Failure unless the time limit has been extended in writing by the dean's office. (Note that this differs for College of Letters \& Science students: Incompletes must be completed by the end of the fourth week of classes of the student's next semester of residence at UW-Madison, excluding Summer Sessions.)

## Pass/Fail Grading

All undergraduate students are eligible to take a course on a pass/fail basis if they request the option prior to the deadline and are in good academic standing at the time of the request. Good academic standing for this purpose means that students have a minimum 2.5 cumulative grade-point average based on UW-Madison coursework. Undergraduates may carry one course on a pass/fail basis per term. (Each year's summer sessions collectively count as a single term.)

Pass/fail can be chosen only for elective courses. Required courses cannot be taken on a pass/fail basis. The School of Education may reject pass/fail requests for non-elective work, but it is the student's responsibility to be sure that the requested course is an elective. Courses taken on a pass/fail basis will not count for non-elective requirements-even if they would normally count toward such requirements.

Students may submit pass/fail requests via their Student Center link from the time that they register until midnight on the Friday at the end of the fourth week of fall and spring semesters. For modular and summer session courses, pass/ fail requests must be submitted by midnight Friday of the week in which the session is one-fourth completed. Students may not cancel or add the pass/fail option after the deadline for submitting Pass/Fail Option Forms.

Instructors are not notified when a student elects the pass/ fail option. (Students can see whether a course is pass/fail in their Student Center.) When a course is taken on a pass/fail basis, the instructor reports a letter grade, which is converted by the registrar to an S (satisfactory) or U (unsatisfactory). The grade of $S$ shall be recorded by the registrar in place of instructors' grades of $A, A B, B, B C$, or $C$. The grade of $U$ shall be recorded by the registrar in place of instructors' grades of $D$ or F. Neither the $S$ nor the $U$ is used in computing the grade-point average. A student must earn at least a C to receive credit for the course.

Please note that courses completed on a pass/fail basis do not apply toward Liberal Studies, major, minor, or professional education requirements for graduation. Students planning graduate study should not take courses on a pass/fail basis if these are pre-professional requirements for admission to graduate and/or professional programs. Individuals who are undecided about a major should avoid taking a course on a pass/fail basis that might later become a required course needed to complete a major. Students may wish to consult with an advisor before taking a course on a pass/fail basis.

## Six-Weeks (Midterm) Grades

Only first-year students receive midterm, or "six-weeks" grades. Midterm grades for first-year students are prepared at the end of the sixth week of classes and are made available to students in their Student Center in My UW on Monday of the eighth week. An email is sent out to all students with six-
week grades informing them of their availability in the Student Center.

The midterm grade report provides students with important feedback about course enrollment and performance before the course drop deadline. Students should check their six-week grade report to make sure all courses are listed and grades indicated. An "NW" means that "No Work" has been turned in; students who have been attending the course should contact the instructor immediately. In the case of a course registration problem, students should see their EAS advisor immediately.

## Grades from Transfer Courses

Grades from transfer courses are not posted to the UWMadison transcript; however, the School of Education uses all attempted transferable coursework to determine program admission eligibility and selection grade point average. Students should be aware that grades earned at another institution will be included in admission calculations. (Courses for which an " $F$ " is earned do not transfer to UW-Madison.) Student should see their School of Education advisor if they have additional questions about this policy.

## PROGRAM ADMISSIONS LAST 60 CREDIT RULE

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

1. all transferable college level coursework attempted, and
2. the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.)

The use of the last 60 credits does not supersede other eligibility requirements. For example, when a minimum GPA on prerequisite courses is required, or a minimum major GPA is required to be eligible for admission, all required courses will be used in calculating this GPA. This will include courses taken prior to the last 60 credits. A cumulative GPA, however, will still be calculated based on the last 60 college credits attempted.

Currently, retention and graduation GPAs are based on all credits attempted at UW-Madison as an undergraduate student. If each semester's GPA after admission to the program meets the required GPA for retention, the student will be allowed to continue and complete the program.

This policy does not apply to certification programs in Music Education, as the degree is granted from the College of Letters and Science, not the School of Education.

Contact EAS for additional information regarding the interpretation of this policy.

## STUDENTS WITH A PREVIOUS DEGREE

A prospective student who already holds an undergraduate degree is admitted to the School of Education as either an Education Special student or a Second Degree student, depending
on the academic area of interest and the individual's previous coursework. The term "Special Student" indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; the student does not receive a second degree for this "certification only" coursework. Second undergraduate degree students are seeking a second degree from the School of Education in an area that is different from the major coursework of the first degree. This degree may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission.

## Special Students

Applicants must file an undergraduate application with the Office of Admissions and Recruitment (http://admissions.wisc.edu). Education Special students not yet admitted to a professional program are given an EDS classification, are not eligible for financial aid, and enroll last with the other special students on campus. Candidates seeking Special student status in open enrollment programs must obtain written permission for admission from the relevant program coordinator and must submit a professional program application to Education Academic Services. Candidates seeking admission to a limited enrollment program must meet all admission eligibility requirements for the program and must compete with other eligible candidates for program admission. Applicants admitted to a certification professional program become Education Certification Special students (EDCS classification) to distinguish them from Special students not so admitted. Students with an EDCS classification may be eligible for financial aid. Continuing EDCS students may register with undergraduates having junior status.

## Second Degree Candidates

Students who wish to earn a second baccalaureate degree in the School of Education must file an undergraduate application with the Office of Admissions and Recruitment (http:// admissions.wisc.edu) and must file a professional program application with Education Academic Services. Second degree students not yet admitted to a professional program are given a preprofessional classification. Second degree candidates must:

- be seeking a new major that is substantially different from their previous degree work;
- complete at least 15 upper-level credits in the new major;
- complete at least 30 credits beyond their previous coursework.

The determination of whether a student should be admitted as a second degree candidate or Education Special student is made by the faculty advisor in consultation with EAS staff after analyzing the student's remaining requirements. The faculty advisor will determine the specific remaining requirements for students admitted to a program. In addition to completing the requirements specific to the program(s) of interest, returning students must also complete any relevant campus-wide requirements, complete the requirements specific to individual program areas such as the Environmental Education requirement, and satisfy any high school deficiencies identified at the time of admission to UW-Madison. Students are strongly encouraged to discuss their academic plans with their faculty advisor and must make satisfactory progress
toward program completion - see Satisfactory Progress/Excess credits for details.

Students seeing a second degree in Kinesiology-Exercise \& Movement Science or Athletic Training must complete PSYCH 202 Introduction to Psychology as part of the professional program if an equivalent course was not completed during the initial baccalaureate degree.

## REQUIREMENTS

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

 HOW STUDENTS MEET REQUIREMENTSThe School of Education's Liberal Studies Requirements automatically satisfy most of the University's General Education Requirements, including Ethnic Studies, Humanities/Literature, Social Studies, and Science. Students pursuing most School of Education degree program may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program.

Beginning at Student Orientation and Registration (SOAR), School of Education academic advisors help each student determine how they can meet General Education Requirements while pursuing a specific degree program, or through exploration of a variety of interests. The General Education and Liberal Studies requirements provide an opportunity to do some academic exploration. If a student cannot complete a General Education requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

Students with a previous undergraduate degree are not required to complete the Liberal Studies coursework.

## LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies coursework. Most Liberal Studies courses are offered by academic departments in the College of Letters \& Science. Each course is assigned a number of descriptors that provide information about its content. For example, a breadth designation indicates what kind of course it is-a Science course, a Literature course, etc. Level designations describe how advanced the content of a course is in relation to other courses in the department-Elementary, Intermediate, Advanced, or Intermediate/Advanced level. Course listings in both Course Guide and Schedule of Classes (Class Search) provide breadth and level designations Click on the course number to obtain this information. Students can also search for courses meeting specific breadth or level designations using either Course Guide and Schedule of Classes (Class Search).

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UW-Madison breadth designations
    Biological Science
    Humanities
    Literature
    Natural Science
    Physical Science
    Social Science
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Social or Natural Science
Humanities or Natural Science
Biological or Social Science
Humanities or Social Science

## HUMANITIES

All students must complete a minimum of 9 credits, to include:

## Literature (minimum of 2 credits)

Any course designated as Literature.

## Fine Arts (minimum of 2 credits)

The courses listed below are approved for the Fine Arts requirement. Additional courses can be considered; students may consult with an advisor in Education Academic Services.

| Code | Title | Credits |
| :---: | :---: | :---: |
| African Languages and Literature |  |  |
| AFRICAN/ AFROAMER 220 | HipHop, Youth Culture, and Politics in Senegal | 3 |
| AFRICAN/ <br> AFROAMER 233 | Global HipHop and Social Justice | 3 |
| Afro-American Studies |  |  |
| AFROAMER 154 | Hip-Hop and Contemporary American Society | 3 |
| AFROAMER 156 | Black Music and American Cultural History | 3 |
| AFROAMER/ <br> AFRICAN 220 | HipHop, Youth Culture, and Politics in Senegal | 3 |
| AFROAMER 225 | Introduction to African American Dramatic Literature | 3 |
| AFROAMER/ <br> AFRICAN 233 | Global HipHop and Social Justice | 3 |
| AFROAMER/ <br> ART HIST 241 | Introduction to African Art and Architecture | 3 |
| AFROAMER/ <br> ART HIST 242 | Introduction to Afro-American Art | 3 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women | 3 |
| AFROAMER/ <br> MUSIC 308 | Black Music (1920-Present): Rhythm Section and Combos | 2 |
| AFROAMER/ <br> MUSIC 309 | Black Music (1920-Present): Vocalist/Trombone/Misc Instrumental | 2 |
| AFROAMER/ <br> MUSIC 310 | Black Music (1920-Present): The Trumpet | 2 |
| AFROAMER/ <br> MUSIC 311 | Black Music (1920-Present): The Saxophone | 2 |
| AFROAMER/DANCE/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| AFROAMER 338 | The Black Arts Movement | 3 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| AFROAMER/ <br> MUSIC 400 | Music Cultures of the World: Africa, Europe, the Americas | 3 |
| AFROAMER/ <br> AFRICAN 413 | Contemporary African and Caribbean Drama | 3-4 |


| AFROAMER 456 | Soul Music and the African American Freedom Movement | 3 |
| :---: | :---: | :---: |
| American Indian Studies |  |  |
| AMER IND 325 | American Indians in Film | 3 |
| Art |  |  |
| Any course from the Department of Art (http:// guide.wisc.edu/courses/art) |  |  |
| Art Education |  |  |
| ART ED/CURRIC 322 | Information Design for Visual Learning (Art Education) | 3 |
| Art History |  |  |
| Any course from the Department of Art History (http:// guide.wisc.edu/courses/art_hist) |  |  |
| Communication Arts |  |  |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 357 | History of the Animated Film | 3 |
| Dance |  |  |
| Any course from the Department of Dance (http:// guide.wisc.edu/courses/dance) |  |  |
| Design Studies |  |  |
| DS 120 | Design: Fundamentals I | 3 |
| English |  |  |
| ENGL 207 | Introduction to Creative Writing: Fiction and Poetry Workshop | 3 |
| ENGL 307 | Creative Writing: Fiction and Poetry Workshop | 3 |
| Environmental Studies |  |  |
| ENVIR ST/HIST SCI/ HISTORY 125 | Green Screen: Environmental Perspectives through Film | 3 |
| Folklore |  |  |
| FOLKLORE/ MUSIC 103 | Introduction to Music Cultures of the World | 2 |
| FOLKLORE/DANCE/ THEATRE 321 | Javanese Performance | 2 |
| Gender and Women's Studies |  |  |
| GEN\&WS/ <br> AFROAMER 267 | Artistic/Cultural Images of Black Women | 3 |
| German |  |  |
| GERMAN/ JEWISH 267 | Yiddish Song and the Jewish Experience | 3-4 |
| Integrated Liberal Studies |  |  |
| ILS 203 | Western Culture: Literature and the Arts I | 3 |
| ILS 204 | Western Culture: Literature and the Arts II | 3-4 |
| Jewish Studies |  |  |
| JEWISH/ <br> GERMAN 267 | Yiddish Song and the Jewish Experience | 3-4 |
| Literature in Translation |  |  |
| LITTRANS 207 | Slavic Science Fiction through Literature and Film | 3 |
| LITTRANS 231 | Manga | 3 |
| LITTRANS 232 | Anime | 3 |
| LITTRANS 233 | Russian Life and Culture Through Literature and Art (to 1917) | 3-4 |


| LITTRANS 234 | Soviet Life and Culture Through <br> Literature and Art (from 1917) | $3-4$ |
| :--- | :--- | ---: |
| LITTRANS 272 | French Pop Culture | 3 |
| LITTRANS 329 | The Vampire in Literature and Film | 3 |
| LITTRANS/ In Translation: The Drama of Henrik <br> THEATRE 335 Ibsen | $3-4$ |  |
| LITTRANS/ In Translation: The Drama of August | $3-4$ |  |
| THEATRE 336 | Strindberg |  |

## Music

Any course from the Department of Music (http:// guide.wisc.edu/courses/music)

## Music Performance

Any course from the Department of Music Performance
(http://guide.wisc.edu/courses/mus_perf)

## Theatre

Any course from the Department of Theatre and Drama
(http://guide.wisc.edu/courses/theatre)

## Humanities Elective(s)

May include courses designated as Humanities, Literature, Humanities or Natural Science, Humanities or Social Science, elementary and intermediate level foreign language, or additional fine arts. May also count COM ARTS 105 Public Speaking, COM ARTS 181 Elements of Speech-Honors Course, and any English (http://guide.wisc.edu/courses/engl) department intermediate or advanced level creative writing or composition course toward this requirement (ESL classes and elementary level composition courses are excluded).

## SOCIAL STUDIES (SOCIAL SCIENCE)

All students must complete a minimum of 9 credits. Select from courses with a breadth designation of Social Science, Social or Natural Science, Biological or Social Science, or as Humanities or Social Science.

Teacher education, athletic training, and kinesiology students have unique requirements in this category; see below:

## Teacher Education requirement

Teacher education students must complete a Local, State, and National Government requirement by enrolling in one of the following courses as part of the 9 credits:

- POLI SCI 104 Introduction to American Politics and Government or
- POLI SCI 205 Introduction to State Government


## Athletic Training and Kinesiology-Exercise and Movement Science

Athletic Training and Kinesiology-Exercise and Movement Science students must complete PSYCH 202 Introduction to Psychology as part of the 9 credits.

## SCIENCE

All students must complete a minimum of 9 credits, including one course designated as a Biological Science course and one designated as a Physical Science course. All students must complete one science course with a laboratory. The lab course can also count toward the Biological or Physical Science requirement if it has the requisite breadth designation.

## Biological Science

Any course with a breadth designation of Biological Science, or as Biological or Social Science.

## Physical Science

Any course with a breadth designation of Physical Science.

## Science Elective(s)

Other courses with a breadth designation of Biological Science, Physical Science, Natural Science, Social or Natural Science, Humanities or Natural Science, or as Biological or Social Science.

## Laboratory requirement

Most sciences with lab sections are identified as such in Class Search and Course Guide. An AP Biology score of 4 or 5 will also fulfill the Laboratory requirement.

In addition to courses with lab sections, the following courses include some lab experience and will meet the lab requirements for students in the School of Education:

| Code |  | Credits |
| :---: | :---: | :---: |
| Course options within the College of Letters \& Science |  |  |
| ANTHRO 105 | Principles of Biological Anthropology | 3 |
| ASTRON 100 | Survey of Astronomy | 4 |
| ATM OCN 101 | Weather and Climate | 4 |
| BOTANY 100 | Survey of Botany | 3 |
| GEOSCI 100 | Introductory Geology: How the Earth Works | 3 |
| PHYSICS 109 | Physics in the Arts | 3 |
| Suggested courses options outside the College of Letters \& Science |  |  |
| AGRONOMY 100 | Principles and Practices in Crop Production | 4 |
| BOTANY/PL PATH $123$ | Plants, Parasites, and People | 3 |
| FOOD SCI/ <br> MICROBIO 324 | Food Microbiology Laboratory | 2 |
| HORT 120 | Survey of Horticulture | 3 |
| PL PATH/ BOTANY 123 | Plants, Parasites, and People | 3 |

## CULTURAL AND HISTORICAL STUDIES

All students must complete three requirements met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation. A single course cannot satisfy more than one of the three Cultural and Historical Studies requirements listed below.

## Ethnic Studies (minimum 3 credit course)

The Ethnic Studies requirement is intended to increase understanding of the culture and contributions of persistently marginalized racial or ethnic groups in the United States, and to equip students to respond constructively to issues connected with our pluralistic society and global community. Courses that meet this requirement have a specific ethnic studies designation that can be utilized in a course search.

## United States or European History (minimum 3 credits)

The courses listed below count toward this requirement. Additional courses can be considered; students may consult with an advisor in Education Academic Services.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Afro-American Studies |  |  |
| AFROAMER 154 | Hip-Hop and Contemporary American Society | 3 |
| AFROAMER 156 | Black Music and American Cultural History | 3 |
| AFROAMER 231 | Introduction to Afro-American History | 3 |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right | 3 |
| AFROAMER/ <br> AFRICAN/HISTORY/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: <br> Reconstruction to the Present | 3 |
| AFROAMER/ GEN\&WS 326 | Race and Gender in Post-World War II U.S. Society | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| AFROAMER 456 | Soul Music and the African American Freedom Movement | 3 |
| AFROAMER/ MUSIC 509 | Seminar in Afro-American Music History and Criticism | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER/ ED POL 567 | History of African American Education | 3 |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 |
| AFROAMER 671 | Selected Topics in Afro-American History | 3 |
| American Indian Studies |  |  |
| AMER IND 100 | Introduction to American Indian Studies | 3 |
| AMER IND 250 | Indians of Wisconsin | 3 |
| AMER IND/ ANTHRO 314 | Indians of North America | 3 |
| AMER IND 320 | Native Peoples of the Southwest | 3 |



| HISTORY 403 | Immigration and Assimilation in American History | 3-4 | HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HISTORY 408 | American Labor History: 1900Present | 3-4 | HISTORY 123 | English History: England to 1688 | 3-4 |
|  |  |  | HISTORY 124 | British History: 1688 to the Present | 4 |
| HISTORY/ <br> ED POL 412 | History of American Education | 3 | HISTORY 201 | The Historian's Craft ${ }^{\text {(topic must be }}$ approved) | 3-4 |
| HISTORY/ JEWISH 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 | HISTORY/ <br> RELIG ST 208 | Western Intellectual and Religious History to 1500 | 3-4 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 | HISTORY/ RELIG ST 209 | Western Intellectual and Religious History since 1500 | 3-4 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 | HISTORY/ RELIG ST 212 | The History of Western Christianity to 1750 | 4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 | HISTORY/ <br> MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 | HISTORY 223 | Explorations in European History (H) | 3-4 |
| HISTORY/ CHICLA 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 | HISTORY 224 | Explorations in European History (S) | 3 |
|  |  |  | HISTORY/ | Russia: An Interdisciplinary Survey | 4 |
| HISTORY/ <br> LEGAL ST 459 | Rule of Law: Philosophical and Historical Models | 3-4 | GEOG/POLI SCI/ SLAVIC 253 |  |  |
| HISTORY/ENVIR ST/ GEOG 460 | American Environmental History | 4 | HISTORY/ GEOG/POLI SCI/ | Eastern Europe: An Interdisciplinary Survey | 4 |
| HISTORY/ | The American West to1850 | 3-4 | SLAVIC 254 |  |  |
| CHICLA 461 |  |  | HISTORY 270 | Eastern Europe since 1900 | 3-4 |
| HISTORY/ CHICLA 462 | The American West Since 1850 | 3-4 | HISTORY 271 | History Study Abroad: European History | 1-4 |
| HISTORY 465 | Global Environmental History,The American Economy to 1865 | 3-4 | HISTORY 303 | A History of Greek Civilization | 3-4 |
|  |  |  | HISTORY 307 | A History of Rome | 3-4 |
| HISTORY/ECON 466 | The American Economy Since 1865 | 3-4 | HISTORY/ | The Crusades: Christianity and | 3-4 |
| HISTORY/ <br> CHICLA 468 | Popular Culture in the Multi-racial United States | 3-4 | MEDIEVAL/ RELIG ST 309 | Islam |  |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 | HISTORY/ MEDIEVAL/ | The Medieval Church | 3-4 |
| HISTORY/ | American Indian History | 3-4 | RELIG ST 312 |  |  |
| AMER IND 490 |  |  | HISTORY/ | Introduction to Byzantine History | 3-4 |
| HISTORY/HIST SCI/ | Society and Health Care in | 3 | MEDIEVAL 313 | and Civilization |  |
| MED HIST 504 | American History |  | HISTORY/ | Problems in Byzantine History and | 3-4 |
| HISTORY/ | History of Mass Communication | 4 | MEDIEVAL 314 | Civilization |  |
| JOURN 560 |  |  | HISTORY/ | Medieval Social and Intellectual | 3-4 |
| HISTORY/LIS 569 | History of American Librarianship | 3 | MEDIEVAL/ | History, 1200-1450 |  |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 | RELIG ST 318 |  |  |
|  |  |  | HISTORY 320 | Early Modern France, 1500-1715 | 3-4 |
| HISTORY/ <br> AFROAMER 628 | History of the Civil Rights Movement in the United States | 3 | HISTORY/ <br> HIST SCI 323 | The Scientific Revolution: From Copernicus to Newton | 3 |
| History-European History |  |  | HISTORY/ | Science in the Enlightenment | 3 |
| HISTORY/ | The Ancient Mediterranean | 4 | HIST SCI 324 |  |  |
| CLASSICS 110 |  |  | HISTORY/ | Environmental History of Europe | 3 |
| HISTORY 111 | Culture \& Society in the Ancient Mediterranean | 3-4 | ENVIR ST 328 |  |  |
|  |  |  | HISTORY 333 | The Renaissance | 3-4 |
| HISTORY/ MEDIEVAL/ | The World of Late Antiquity (200-900 C.E.) | 4 | HISTORY/ <br> RELIG ST 334 | The Reformation | 3-4 |
| RELIG ST 112 |  |  | HISTORY 348 | France from Napoleon to the Great | 3-4 |
| HISTORY 115 | Medieval Europe 410-1500 | 4 |  | War, 1799-1914 |  |
| HISTORY 119 | The Making of Modern Europe 1500-1815 | 4 | HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |


| HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| :---: | :---: | :---: |
| HISTORY 351 | Seventeenth-Century Europe | 3-4 |
| HISTORY 352 | Eighteenth Century Europe | 3-4 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 358 | French Revolution and Napoleon | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 | 3-4 |
| HISTORY 367 | Society and Ideas in Shakespeare's England | 3-4 |
| HISTORY/JEWISH/ MEDIEVAL/ <br> RELIG ST 368 | The Bible in the Middle Ages | 3 |
| HISTORY/ JEWISH 373 | Modern Political History of the Jews: 1655-1919 | 4 |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY/ GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY/ <br> RELIG ST 411 | The Enlightenment and Its Critics | 3 |
| HISTORY 417 | History of Russia | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY/ SCAND ST 431 | History of Scandinavia to 1815 | 3 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/ RELIG ST 437 | Western Christianity from Augustine to Darwin | 4 |
| HISTORY 467 | Economic and Social History of Europe 1500-1750 | 3-4 |
| HISTORY/ RELIG ST 470 | Religious Thought in Modern Europe | 3-4 |
| HISTORY 474 | European Social History, 1830-1914 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY/ LEGAL ST 476 | Medieval Law and Society | 3 |
| HISTORY/ <br> ED POL 478 | Comparative History of Childhood and Adolescence | 3 |
| HISTORY/ | Law and Colonialism | 3 |


| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
| :---: | :---: | :---: |
| HISTORY/HIST SCI/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HISTORY 514 | European Cultural History Since 1870 | 3-4 |
| HISTORY/CURRIC/ JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY/ JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| HISTORY/JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| HISTORY/CLASSICS/ FRENCH/ITALIAN/ MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| HISTORY/CLASSICS/ HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |
| HISTORY/ SCAND ST 577 | Contemporary Scandinavia: Politics and History | 3-4 |
| Medical History and Bioethics |  |  |
| MED HIST/ <br> HIST SCI 218 | History of Twentieth Century American Medicine | 3 |
| Political Science |  |  |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |

## Global Perspectives (minimum 3 credits)

Global perspectives courses include courses whose primary emphasis is on:

- cultures whose origins lie outside of the western tradition, or
- analyzing and interpreting cultural differences through the study of language, gender, race, ethnicity, religion, or class, or
- cultural pluralism within specific geographical areas.

The courses listed below count toward this requirement. Additional courses can be considered; students may consult with an advisor in Education Academic Services.

| Code | Title | Credits |
| :--- | :--- | ---: |
| African Languages \& Literature |  |  |
| AFRICAN/ | Africa on the Global Stage | $3-4$ |
| HISTORY 129 |  | 3 |
| AFRICAN 201 | Introduction to African Literature | 3 |
| AFRICAN/ | The African Storyteller |  |
| FOLKLORE 210 |  | 3 |
| AFRICAN 211 | The African Autobiography | $3-4$ |
| AFRICAN 212 | Introduction to African Popular |  |


| AFRICAN/ <br> AFROAMER 220 | HipHop, Youth Culture, and Politics in Senegal | 3 | A AE/ECON 473 | Economic Growth and Development in Southeast Asia | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AFRICAN 230 | Introduction to Yoruba Life and Culture | 3 | Agronomy | Introduction to Global Health | 3 |
|  |  |  | AGRONOMY/ |  |  |
| AFRICAN 231 | Introduction to Arabic Literary Culture | 3 | ENTOM/ <br> NUTR SCI 203 |  |  |
| AFRICAN 232 | Introduction to Swahili Cultures | 3 | AGRONOMY/ | World Hunger and Malnutrition | 3 |
| AFRICAN/ AFROAMER 233 | Global HipHop and Social Justice | 3 | A A E/INTER-AG/ NUTR SCI 350 |  |  |
| AFRICAN/ | The Hero and Trickster in African | 3 | AGRONOMY 377 | Cropping Systems of the Tropics | 3 |
| FOLKLORE 270 | Oral Traditions |  | Anthropology |  |  |
| AFRICAN/ | Africa: An Introductory Survey | 4 | ANTHRO 100 | General Anthropology | 3 |
| AFROAMER/ ANTHRO/GEOG/ |  |  | ANTHRO 102 | Archaeology and the Prehistoric World | 3 |
| HISTORY/POLI SCI/ SOC 277 |  |  | ANTHRO 104 | Cultural Anthropology and Human Diversity | 3 |
| AFRICAN/ AFROAMER/ HISTORY/ | African and African-American Linkages: An Introduction | 4 | ANTHRO 105 | Principles of Biological Anthropology | 3 |
| POLI SCI 297 |  |  | ANTHRO/ | Global Language Issues | 4 |
| AFRICAN 300 | African Literature in Translation | 3 | FOLKLORE/INTL ST/ LINGUIS 211 |  |  |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture | 4 | ANTHRO 237 | Cut ' $n$ ' Mix: Music, Race, and Culture in the Caribbean | 3 |
| Afro-American Studie |  |  | ANTHRO/ | Latin America: An Introduction | 3-4 |
| AFROAMER/ <br> AFRICAN 220 | HipHop, Youth Culture, and Politics in Senegal | 3 | AFROAMER/ C\&E SOC/GEOG/ |  |  |
| AFROAMER/ <br> AFRICAN 233 | Global HipHop and Social Justice | 3 | HISTORY/LACIS/ POLI SCI/SOC/ |  |  |
| AFROAMER/ | Introduction to African Art and | 3 | SPANISH 260 |  |  |
| ART HIST 241 | Architecture |  | ANTHRO/AFRICAN/ | Africa: An Introductory Survey | 4 |
| AFROAMER/ ANTHRO/C\&E SOC/ GEOG/HISTORY/ | Latin America: An Introduction | 3-4 | AFROAMER/GEOG/ HISTORY/POLI SCI/ SOC 277 |  |  |
| LACIS/POLI SCI/ SOC/SPANISH 260 |  |  | ANTHRO 300 | Cultural Anthropology: Theory and Ethnography | 3 |
| AFROAMER/ AFRICAN/ANTHRO/ | Africa: An Introductory Survey | 4 | ANTHRO/ AMER IND 314 | Indians of North America | 3 |
| GEOG/HISTORY/ |  |  | ANTHRO 321 | The Emergence of Human Culture | 3 |
| POLI SCI/SOC 277 |  |  | ANTHRO 322 | The Origins of Civilization | 3 |
| AFROAMER/ | African and African-American | 4 | ANTHRO 327 | Peoples of the Andes Today | 3 |
| AFRICAN/HISTORY/ POLISCI 297 | Linkages: An Introduction |  | ANTHRO 330 | Topics in Ethnology (topic must be approved) | 3-4 |
| AFROAMER/ GEN\&WS 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 | ANTHRO 333 | Prehistory of Africa | 3 |
| Agricultural and Appli | lied Economics |  | ANTHRO 350 | Political Anthropology | 3-4 |
| A A E/ENVIR ST 244 | The Environment and the Global Economy | 3 | ANTHRO 357 | Introduction to the Anthropology of Japan | 3-4 |
| A AE 319 |  | 3 | ANTHRO 358 | Anthropology of China | 3 |
|  | Economy |  | ANTHRO 365 | Medical Anthropology | 3 |
| A A E/AGRONOMY/ | World Hunger and Malnutrition | 3 | Art History |  |  |
| INTER-AG/ |  |  | ART HIST 203 | Survey of Asian Art | 3-4 |
| NUTR SCI 350 |  |  | ART HIST 205 | Global Arts | 4 |
| A A E/INTL ST 373 | Globalization, Poverty and Development | 3 | ART HIST/ AFROAMER 241 | Introduction to African Art and Architecture | 3 |
| A A E/INTL ST 374 | The Growth and Development of Nations in the Global Economy | 3 | ART HIST 305 | History of Islamic Art and Architecture | 3 |


| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century | 3 |
| :---: | :---: | :---: |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present | 3 |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present | 3-4 |
| ART HIST 371 | Chinese Painting | 3-4 |
| ART HIST 372 | Arts of Japan | 3-4 |
| ART HIST 375 | Later Japanese Painting and Woodblock Prints | 3-4 |
| ART HIST/LCA 379 | Cities of Asia | 3 |
| ART HIST 411 | Topics in Asian Art | 3-4 |
| ART HIST 412 | Topics in African and African Diaspora Art History | 3-4 |
| ART HIST 413 | Art and Architecture in the Age of the Caliphs | 3 |
| ART HIST/LCA 428 | Visual Cultures of South Asia | 3 |
| ART HIST 440 | Art and Power in the Arab World | 3 |
| ART HIST 475 | Japanese Ceramics and Allied Arts | 3 |
| ART HIST/ RELIG ST 478 | Art and Religious Practice in Medieval Japan | 3 |
| ART HIST 479 | Art and History in Africa | 3-4 |
| Asian Languages and Cultures |  |  |
| ASIAN 253 | Japanese Popular Culture | 3 |
| ASIAN 300 | Topics in Asian Studies | 3 |
| ASIAN 355 | Modern Japanese Literature | 3 |
| ASIAN 403 | Southeast Asian Literature | 3 |
| Community \& Environmental Sociology |  |  |
| C\&E SOC/SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| C\&E SOC/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| Comparative Literature |  |  |
| COMP LIT 379 | Literature and Ethnic Experience (topic must be approved) | 3-4 |
| Dance |  |  |
| DANCE 118 | African Dance | 1 |
| DANCE 165 | World Dance Cultures: Traditional to Contemporary | 3 |
| DANCE/ <br> THEATRE 218 | African Dance Performance | 2 |
| DANCE/AFROAMER/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| DANCE/FOLKLORE/ THEATRE 321 | Javanese Performance | 2 |
| East Asian Area Studies |  |  |
| E A STDS/ HISTORY 103 | Introduction to East Asian History. China | 3-4 |
| E A STDS/ HISTORY 104 | Introduction to East Asian History: Japan | 3-4 |


| E A STDS/HISTORY/ POLISCI 255 | Introduction to East Asian Civilizations | 3-4 |
| :---: | :---: | :---: |
| E A STDS/ ASIAN AM/ HISTORY 276 | Chinese Migrations since 1500 | 3-4 |
| E A STDS/ EASIAN 300 | Humanities Topics in East Asian Studies ${ }^{\text {(topic must be approved) }}$ | 1-3 |
| E A STDS 301 | Social Studies Topics in East Asian Studies (topic must be approved) | 1-3 |
| E A STDS/ HISTORY 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
| E A STDS/ HISTORY 341 | History of Modern China, 1800-1949 | 3-4 |
| E A STDS/ HISTORY 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| E A STDS/ HISTORY 363 | China and World War II in Asia | 3-4 |
| E A STDS/ HISTORY 454 | Samurai: History and Image | 3-4 |
| E A STDS/ HISTORY 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |
| East Asian Languages | \& Literature |  |
| E ASIAN/LCA/ RELIG ST 235 | Genres of Asian Religious Writing | 3 |
| E ASIAN/HISTORY/ RELIG ST 267 | Asian Religions in Global Perspective | 3 |
| E ASIAN/KINES 277 | Kendo: Integration of Martial Arts and Liberal Arts | 2 |
| $\begin{aligned} & \text { E ASIAN/ } \\ & \text { E A STDS } 300 \end{aligned}$ | Humanities Topics in East Asian Studies | 1-3 |
| E ASIAN/HISTORY/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| E ASIAN/ RELIG ST 350 | Introduction to Taoism | 3-4 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 353 | Survey of Japanese Literature | 3 |
| E ASIAN 356 | Chinese Painting | 3-4 |
| E ASIAN 361 | Masterworks of Japanese Literature: The Tale of Genji | 3 |
| E ASIAN/ RELIG ST 363 | Introduction to Confucianism | 3 |
| E ASIAN 367 | Japanese Poetic Tradition | 3-4 |
| E ASIAN 371 | Topics in Chinese Literature | 2-3 |
| E ASIAN 376 | Manga. | 3 |
| E ASIAN 378 | Anime | 3 |
| E ASIAN/LCA/ RELIG ST 466 | Buddhist Thought | 3 |
| Environmental Studies |  |  |
| ENVIR ST/GEOG 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| ENVIR ST/A A E 244 | The Environment and the Global Economy | 3 |


| ENVIR ST/GEOG 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| :---: | :---: | :---: |
| ENVIR ST/GEOG 339 | Environmental Conservation | 4 |
| ENVIR ST/HIST SCI/ RELIG ST 356 | Islam, Science \& Technology, and the Environment | 3-4 |
| ENVIR ST/ <br> M\&ENVTOX/ <br> PL PATH 368 | Environmental Law, Toxic Substances, and Conservation | 2 |
| Folklore |  |  |
| FOLKLORE 100 | Introduction to Folklore | 3 |
| FOLKLORE/ MUSIC 103 | Introduction to Music Cultures of the World | 2 |
| FOLKLORE/ AFRICAN 210 | The African Storyteller | 3 |
| FOLKLORE/ <br> ANTHRO/INTL ST/ <br> LINGUIS 211 | Global Language Issues | 4 |
| FOLKLORE/ AFRICAN 270 | The Hero and Trickster in African Oral Traditions | 3 |
| FOLKLORE/LCA 279 | Introduction to Turkish Folk Literature | 3 |
| FOLKLORE/DANCE/ THEATRE 321 | Javanese Performance | 2 |
| FOLKLORE/ RELIG ST 352 | Shamanism | 3 |
| FOLKLORE/LCA 374 | Indian Folklore | 3 |
| Gender and Women's Studies |  |  |
| GEN\&WS 102 | Gender, Women, and Society in Global Perspective | 3 |
| GEN\&WS/ HISTORY 134 | Women and Gender in World History | 3-4 |
| GEN\&WS/ <br> AFROAMER 367 | Art and Visual Culture: Women of the African Diaspora and Africa | 3 |
| GEN\&WS 427 | Global Feminisms | 3 |
| GEN\&WS/ PORTUG 450 | Brazillian Women Writers | 3 |
| Geography |  |  |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/HISTORY/ <br> LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| GEOG/HISTORY/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| GEOG/AFROAMER/ ANTHRO/C\&E SOC/ HISTORY/LACIS/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| GEOG/AFRICAN/ AFROAMER/ ANTHRO/HISTORY/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |


| GEOG/ENVIR ST 309 | People, Land and Food: <br>  <br>  <br> Comparative Study of Agriculture <br> Systems | 3 |
| :--- | :--- | :--- |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 348 | Latin America | 4 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast | Asia |

History

| HISTORY/ | Introduction to East Asian History: | $3-4$ |
| :--- | :--- | :---: |
| E A STDS 103 | China | $3-4$ |
| HISTORY/ | Introduction to East Asian History: |  |
| E A STDS 104 | Japan | $3-4$ |
| HISTORY 105 | Introduction to the History of Africa | $3-4$ |


| HISTORY/ASIAN 108 | Introduction to East Asian History - |
| :--- | :--- | :--- |
| Korea |  |$\quad 3-4$


| AFRICAN 129 |  |  |
| :--- | :--- | :--- |
| HISTORY 130 | An Introduction to World History |  |

HISTORY/ Women and Gender in World History 3-4
GEN\&WS 134 The Middle East in the 20th Century 3-4
HISTORY 142 History of South Asia to the Present 3-4
HISTORY 144 Traveling the World: South Asians in 4 Diaspora

| HISTORY 201 | The Historian's Craft (topic must be <br> approved) | $3-4$ |
| :--- | :--- | :---: |
| HISTORY/ | The Making of the Islamic World: | $3-4$ |

RELIG ST 205 The Middle East, 500-1500
HISTORY 225 Explorations in Third World History 3-4
(H)

HISTORY 228 Explorations in Transnational/ 3
Comparative History (Social Science) ${ }^{\text {(topic must be approved) }}$

| HISTORY 229 | Explorations in Transnational/ <br> Comparative History (Humanities) <br> (topic must be approved) | 3 |
| :--- | :--- | :---: |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the <br> Present | 4 |
| HISTORY/GEOG/ | Introduction to Southeast Asia: <br> LCA/POLI SCI/ | Vietnam to the Philippines |

VCI Vietnam to the Philippines
SOC 244
HISTORY/CHICLA/ Chicana and Latina History 3
GEN\&WS 245
HISTORY/ASIAN AM/ Southeast Asian Refugees of the 4

| LCA 246 | "Cold" War |
| :--- | :--- |
| HISTORY/GEOG/ | The Civilizations of India-Modern |

LCA/POLI SCI/ Period
SOC 252
HISTORY/E A STDS/ Introduction to East Asian 3-4
POLI SCI 255 Civilizations

| HISTORY/ | Latin America: An Introduction | 3-4 |
| :---: | :---: | :---: |
| AFROAMER/ <br> ANTHRO/C\&E SOC/ GEOG/LACIS/ POLI SCI/SOC/ SPANISH 260 |  |  |
| HISTORY/LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| HISTORY/E ASIAN/ RELIG ST 267 | Asian Religions in Global Perspective | 3 |
| HISTORY 273 | History Study Abroad: Non-Western History | 1-4 |
| HISTORY/ASIAN AM/ EASTDS 276 | Chinese Migrations since 1500 | 3-4 |
| HISTORY/AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/AFRICAN/ AFROAMER/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| HISTORY/E ASIAN/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones | 3-4 |
| HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY/ <br> EASTDS 363 | China and World War II in Asia | 3-4 |
| HISTORY 377 | History of Africa, 1500 to 1870 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY/ CHICLA 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |
| HISTORY/LCA/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| HISTORY/ RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 444 | History of East Africa | 3-4 |


| HISTORY 445 | History of Equatorial Africa | 3-4 |
| :---: | :---: | :---: |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY/ <br> E A STDS 454 | Samurai: History and Image | 3-4 |
| HISTORY/ <br> E A STDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since $1800$ | 3-4 |
| HISTORY 463 | Topics in South Asian History | 3 |
| HISTORY/GEN\&WS/ LCA 472 | Women in Turkish Society | 3 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |
| HISTORY/LCA/ RELIG ST 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |
| HISTORY 555 | History of Brazil | 3-4 |
| HISTORY/HIST SCI/ <br> MED HIST 564 | Disease, Medicine and Public Health in the History of Latin America and the Caribbean | 3 |
| History of Science |  |  |
| HIST SCI/ENVIR ST/ RELIG ST 356 | Islam, Science \& Technology, and the Environment | 3-4 |
| Integrated Liberal Studies |  |  |
| ILS 209 | Introduction to Global Cultures | 3 |
| Inter-AG |  |  |
| INTER-AG/A A E/ AGRONOMY/ NUTR SCI 350 | World Hunger and Malnutrition | 3 |
| International Business |  |  |
| INTL BUS 200 | International Business | 3 |
| International Studies |  |  |
| INTL ST 101 | Introduction to International Studies | 3-4 |
| INTL ST 266 | Introduction to the Middle East | 3 |
| INTL ST 310 | International Learning Community Seminar (specific topic must be approved) | 1-3 |
| INTL ST/ED POL 335 | Globalization and Education | 3 |
| INTL ST/A A E 373 | Globalization, Poverty and Development | 3 |
| INTL ST/A A E 374 | The Growth and Development of Nations in the Global Economy | 3 |
| Jewish Studies |  |  |
| JEWISH/ <br> RELIG ST 377 | Jewish Cultural History (in English) | 4 |
| Kinesiology |  |  |
| KINES/E ASIAN 277 | Kendo: Integration of Martial Arts and Liberal Arts | 2 |
| Languages and Cultures of Asia |  |  |
| LCA 100 | Introduction to Cultures of Asia | 3 |
| LCA 101 | Introduction to Literatures of Asia | 3 |
| LCA/RELIG ST 206 | Introduction to the Qur'an | 4 |


| LCA/E ASIAN/ RELIG ST 235 | Genres of Asian Religious Writing | 3 |
| :---: | :---: | :---: |
| LCA/GEOG/ HISTORY/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| LCA/ASIAN AM/ HISTORY 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| LCA/GEOG/ <br> HISTORY/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| LCA/HISTORY 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| LCA/RELIG ST 274 | Religion in South Asia | 3 |
| LCA/FOLKLORE 279 | Introduction to Turkish Folk Literature | 3 |
| LCA/E ASIAN/ <br> HISTORY/ <br> RELIG ST 308 | Introduction to Buddhism | 3-4 |
| LCA 311 | Modern Indian Literatures | 3 |
| LCA 314 | Literatures of Central Asia | 3 |
| LCA/POLI SCI 326 | Politics of South Asia | 3-4 |
| LCA/RELIG ST 355 | Hinduism | 4 |
| LCA/RELIG ST 357 | Literatures of Muslim Societies | 3 |
| LCA 361 | Survey of Indonesian Cultures | 3 |
| LCA/RELIG ST 367 | Jainism: Religion of Non-Violence | 3 |
| LCA/AFRICAN/ <br> RELIG ST 370 | Islam: Religion and Culture | 4 |
| LCA/FOLKLORE 374 | Indian Folklore | 3 |
| LCA/ART HIST 379 | Cities of Asia | 3 |
| LCA 401 | Modern Indonesian Literature | 3 |
| LCA/RELIG ST 402 | Thought of Gandhi | 3 |
| LCA 404 | Southeast Asian Literature | 3 |
| LCA/RELIG ST 421 | A Survey of Tibetan Buddhism | 3 |
| LCA/ART HIST 428 | Visual Cultures of South Asia | 3 |
| LCA/HISTORY/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| LCA 441 | Language and Society in Southeast Asia | 3 |
| LCA/RELIG ST 444 | Introduction to Sufism (Islamic Mysticism) | 3 |
| LCA/HISTORY 457 | History of Southeast Asia to 1800 | 3-4 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 |
| LCA/E ASIAN/ RELIG ST 466 | Buddhist Thought | 3 |
| Literature in Translation |  |  |
| LITTRANS 211 | Modern Indian Literatures in Traslation | 3 |
| LITTRANS 214 | Literatures of Central Asia in Translation | 3 |
| LITTRANS 226 | Introduction to Luso-Afro-Brazilian Literature | 3 |
| LITTRANS 231 | Manga | 3 |
| LITTRANS 232 | Anime | 3 |


| LITTRANS/ RELIG ST 257 | Literatures of Muslim Societies in Translation | 3 |
| :---: | :---: | :---: |
| LITTRANS 261 | Survey of Chinese Literature in Translation | 3 |
| LITTRANS 262 | Survey of Chinese Literature in Translation | 3 |
| LITTRANS 263 | Survey of Japanese Literature in Translation | 3 |
| LITTRANS 264 | Survey of Japanese Literature in Translation | 3 |
| LITTRANS 301 | Modern Indonesian Literature in Translation | 3 |
| LITTRANS 303 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 304 | Southeast Asian Literature in Translation | 3 |
| LITTRANS 368 | Modern Japanese Fiction | 3 |
| LITTRANS 372 | Classical Japanese Prose in Translation | 3 |
| LITTRANS 373 | Topics in Japanese Literature | 3 |
| LITTRANS 374 | Topics in Korean Literature | 3 |
| Medical History and Bioethics |  |  |
| MED HIST/ <br> ENVIR ST 213 | Global Environmental Health: An Interdisciplinary Introduction | 3 |
| Medieval Studies |  |  |
| MEDIEVAL/ HISTORY/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| Music |  |  |
| MUSIC/ <br> FOLKLORE 103 | Introduction to Music Cultures of the World | 2 |
| MUSIC 361 | Non-Western Music PerformanceStudy Groups | 1 |
| Nutritional Sciences |  |  |
| NUTR SCI/ AGRONOMY/ <br> ENTOM 203 | Introduction to Global Health | 3 |
| NUTR SCI/A A E/ AGRONOMY/INTERAG 350 | World Hunger and Malnutrition | 3 |
| Political Science |  |  |
| POLI SCI 120 | Politics Around the World | 4 |
| POLI SCI 182 | Politics Around the World (Honors) | 3 |
| POLI SCI/ <br> CHICLA 231 | Politics in Multi-Cultural Societies | 3-4 |
| POLI SCI/GEOG/ HISTORY/LCA/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| POLI SCI/GEOG/ HISTORY/LCA/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| POLI SCI/E A STDS/ HISTORY 255 | Introduction to East Asian Civilizations | 3-4 |


| POLI SCI/ <br> AFROAMER/ ANTHRO/C\&E SOC/ GEOG/HISTORY/ LACIS/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| :---: | :---: | :---: |
| POLI SCI/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ HISTORY/SOC 277 | Africa: An Introductory Survey | 4 |
| POLI SCI/AFRICAN/ AFROAMER/ HISTORY 297 | African and African-American Linkages: An Introduction | 4 |
| POLI SCI 321 | Latin-American Politics | 3-4 |
| POLI SCI 322 | Politics of Southeast Asia | 3-4 |
| POLI SCI 324 | Political Power in Contemporary China | 3-4 |
| POLI SCI/ <br> INTL ST 325 | Social Movements and Revolutions in Latin America | 3-4 |
| POLI SCI/LCA 326 | Politics of South Asia | 3-4 |
| POLI SCI/ <br> INTL ST 327 | Indian Politics in Comparative Perspective | 3 |
| POLI SCI 329 | African Politics | 3-4 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| Population Health |  |  |
| POP HLTH 370 | Introduction to Public Health: Local to Global Perspectives | 3 |
| Religious Studies |  |  |
| RELIG ST/ HISTORY 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| RELIG ST/LCA 206 | Introduction to the Qur'an | 4 |
| RELIG ST/E ASIAN/ LCA 235 | Genres of Asian Religious Writing | 3 |
| RELIG ST/E ASIAN/ HISTORY 267 | Asian Religions in Global Perspective | 3 |
| RELIG ST/LCA 274 | Religion in South Asia | 3 |
| RELIG ST/E ASIAN/ HISTORY/LCA 308 | Introduction to Buddhism | 3-4 |
| RELIG ST/HISTORY/ MEDIEVAL 309 | The Crusades: Christianity and Islam | 3-4 |
| RELIG ST/ <br> EASIAN 350 | Introduction to Taoism | 3-4 |
| RELIG ST/ <br> FOLKLORE 352 | Shamanism | 3 |
| RELIG ST/LCA 355 | Hinduism | 4 |
| RELIG ST/ENVIR ST/ HIST SCI 356 | Islam, Science \& Technology, and the Environment | 3-4 |
| RELIG ST/LCA 357 | Literatures of Muslim Societies | 3 |
| RELIG ST/ <br> EASIAN 363 | Introduction to Confucianism | 3 |
| RELIG ST/LCA 367 | Jainism: Religion of Non-Violence | 3 |


| RELIG ST/AFRICAN/ <br> LCA 370 | Islam: Religion and Cultur | 4 |
| :---: | :---: | :---: |
| RELIG ST/ JEWISH 377 | Jewish Cultural History (in English) | 4 |
| RELIG ST/ <br> HISTORY 379 | Islam in Iran | 3 |
| RELIG ST 400 | Topics in Religious Studies Humanities (topic must be approved) | 3-4 |
| RELIG ST 401 | Topics in Religious Studies - Social Studies ${ }^{\text {(topic must be approved) }}$ | 3-4 |
| RELIG ST/LCA 402 | Thought of Gandhi | 3 |
| RELIG ST/LCA 421 | A Survey of Tibetan Buddhism | 3 |
| RELIG ST/HISTORY/ <br> LCA 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| RELIG ST/ HISTORY 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| RELIG ST/E ASIAN/ <br> LCA 466 | Buddhist Thought | 3 |
| Sociology |  |  |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC 170 | Population Problems | 3-4 |
| SOC/C\&E SOC 222 | Food, Culture, and Society | 3 |
| SOC 225 | Contemporary Chinese Society | 3 |
| SOC/GEOG/ HISTORY/LCA/ POLI SCI 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOC/GEOG/ HISTORY/LCA/ POLI SCI 252 | The Civilizations of India-Modern Period | 4 |
| SOC/AFROAMER/ <br> ANTHRO/C\&E SOC/ GEOG/HISTORY/ <br> LACIS/POLI SCI/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| SOC/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ HISTORY/ POLI SCI 277 | Africa: An Introductory Survey | 4 |
| SOC/C\&E SOC/ <br> POP HLTH 380 | Contemporary Population Problems for Honors | 3 |
| Spanish |  |  |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/HISTORY/ <br> LACIS/POLI SCI/ <br> SOC 260 | Latin America: An Introduction | 3-4 |
| Theatre |  |  |
| THEATRE/DANCE/ FOLKLORE 321 | Javanese Performance | 2 |

## LIBERAL STUDIES ELECTIVES

Complete additional liberal studies coursework as needed to reach the required 40 Liberal Studies credits.

## IMPORTANT NOTES REGARDING THE LIBERAL STUDIES REQUIREMENTS

- Completion of the Liberal Studies requirements is not a prerequisite to professional program application or admission.
- For the most part, courses listed in School of Education departments may not be used to satisfy the Liberal Studies requirements. School of Education departments include Art, Art Education, Counseling Psychology, Curriculum and Instruction, Dance, Educational Leadership and Policy Analysis, Educational Policy Studies, Educational Psychology, Kinesiology, Rehabilitation Psychology and Special Education, and Theatre and Drama.
- For example, KINES 100 Exercise, Nutrition, and Health, cannot count toward the Liberal Studies requirement even though it is a Biological Science course. ED PSYCH 320 Human Development in Infancy and Childhood cannot count toward Liberal Studies even though it is a Social Science course.
- Exceptions include some courses that are crosslisted in departments outside the School of Education such as ED POL/HISTORY 412 History of American Education. Art and Dance department courses count toward the Humanities requirement.
- Courses that transfer to UW-Madison as departmental electives (e.g., POLI SCI X10) might meet specific Liberal Studies requirements. Students may consult with an advisor in Education Academic Services to discuss transfer electives that appear to meet specific course requirements.
- While one course may cover two requirements, students must still complete both the 40 -credit total and the 9 -credit minimum requirements in Humanities, Social Studies (Social Science), and Science.
- For example, THEATRE/ENGL 120 Introduction to Theatre and Dramatic Literature, a Literature course also on the Fine Arts list, may be used to meet both the specific Fine Arts and Literature requirements of the Humanities area, but a total of 9 credits of Humanities are still required.
- Courses in other schools/colleges (excluding the School of Education) may count as Liberal Studies if they have an L\&S Credit Type designation of C and/or assigned a level or breadth descriptor.
- No Liberal Studies coursework may be taken on a Pass/Fail basis.


## GUIDELINES FOR SPECIFIC PROGRAM AREAS

## Teacher Education programs

All teacher education students, except those in music education or art education, may apply any appropriate coursework from the major or minor toward the Liberal Studies requirements. Students in music and art education are restricted in this overlap. For students in music education, no more than 6 credits of music history and no more than 4 art and dance credits may count toward the 40 total credits. Music history courses (e.g., MUSIC 211

Survey of the History of Western Music, MUSIC 212 Survey of the History of Western Music) may not be used to meet the U.S./ European History requirement. Art education students may apply all of the aesthetics credits (usually 14) toward the Liberal Studies requirements, but not courses taken to meet the studio requirements.

Elementary education students can use a Science course or Social Studies course from the Environmental Education course list to meet both the Liberal Studies and Environmental Education requirements.

## Art (BFA and BS)

In general, students may not satisfy Liberal Studies requirements with courses meeting studio or aesthetics requirements. However, Art-BFA candidates may apply 4 aesthetics elective credits toward the Humanities credits.

## Athletic Training, Kinesiology-Exercise and Movement Science, and Physical Education

Athletic training, kinesiology-exercise and movement science, and physical education students will meet the Science requirement by completing their required science courses-e.g., chemistry and physics.

## Communication Sciences and Disorders

Communication sciences and disorders students should consult both the Liberal Studies requirements and the communication sciences and disorders program requirements, particularly the "related courses" section, when selecting Liberal Studies coursework. Courses may count in both places.

## Dance (BFA \& BS)

Dance and Dance-BFA students must complete ANATOMY 329 Human Anatomy-Kinesiology, which will meet both a Science requirement and the Science Laboratory requirement. In general, Liberal Studies requirements cannot be met with courses taken to meet other program requirements.

## Rehabilitation Psychology

In general, rehabilitation psychology students may not satisfy Liberal Studies requirements with courses taken to meet the Related Course Requirements in Rehabilitation Psychology. Courses applied toward the other parts of the Rehab Psych requirements cannot also count toward the 40 Liberal Studies credits. However, if a course is taken to meet any of the three Cultural/Historical Studies requirements, the course content can be used to meet both requirements, but the credits will only count in the Rehabilitation Psychology or Related Course Requirements areas. Once the required credits have been met, additional course work in Psychology, Sociology, Social Work, etc. may be applied toward Liberal Studies.

## Theatre and Drama

Theatre and drama students can apply major coursework toward the Liberal Studies requirements.

## RESOURCES

## SCHOLARSHIPS/TEACH GRANTS SCHOLARSHIPS

The generosity of alumni and friends has enabled the School of Education to distribute more than \$500,000 in scholarships and awards annually to deserving undergraduate students. Half of these are awarded through a school-wide competitive process; the other half are awarded by individual departments and programs. The list of School of Education undergraduate scholarships and honors is available at Scholarships@UW-Madison (http://scholarships.wisc.edu/ Scholarships).

School of Education scholarships open to applicants in early February and close at the end of March. Scholarship decisions are made in early June and then communicated to applicants in July. The selection criteria for specific scholarships and awards vary and may include academic performance, excellence in a specific field or area, potential as a prospective teacher, leadership ability, personal attributes (such as returning adult status or home county), and financial need. All scholarship and award recipients must be in good academic standing in the School of Education.

Schoolwide scholarships for undergraduates are organized into two categories. All-School scholarships are open to any student in the School of Education. Teacher Education scholarships are designated for students seeking teacher certification; most of these are awarded to students already admitted to professional teacher education programs. Generous donors have also made it possible to offer many School-wide scholarships to recruit and retain underrepresented students interested in health, education and the arts.

While many scholarships are awarded, the number of scholarships is substantially smaller than the number of eligible students.

## TEACH GRANTS

Students willing to teach in "high-need" teaching fields can receive TEACH grants of up to $\$ 4,000$ per year for a total of $\$ 16,000$ over their undergraduate academic career. Officially-designated "high need fields" include Master of Science with Secondary Teaching \& ESL Certification, Bilingual Education; Communication Sciences and Disorders; English as a Second Language; Mathematics; Music; Reading Specialist; Science certification areas; Special Education; World Language Education certification areas, and any other fields documented as "high-need" by the federal government and/or state or local education agency (LEA). Elementary Education students completing the Early Childhood/ESL, Middle Childhood-Early Adolescence/ESL or the Middle Childhood-Early Adolescence/Special Education program options are also eligible for a TEACH Grant.

Students receiving TEACH grants must complete a service obligation of four years of teaching their high-need subject in a designated low-income school within their first eight years of teaching. "Low-income schools" are defined as public or private nonprofit elementary or secondary schools eligible for assistance under Title I of the Elementary and Secondary Education Act. In Wisconsin over a thousand schools are designated as "low income."

TEACH grant applicants must attain certain academic eligibility criteria. For example, candidates must have scored minimally above the 75th
percentile on a nationally normed admissions test or have earned a 3.25 minimum cumulative grade point average. TEACH grants are not need-based, so students may receive them without regard to financial background. Grant recipients must have completed a Free Application for Federal Student Aid (FAFSA) (http://www.fafsa.ed.gov) to be eligible.

Students should indicate their interest in the TEACH Grant program via their FAFSA and by completing the program application (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ scholarships-and-grants).

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE - EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and should consider meeting with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office. Current materials on undergraduate program admission and graduation requirements are available on this site.

Students will find that questions can be answered by and guidance sought from EAS advisors. EAS staff members consult with and refer students to faculty members and department advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## STUDENT DIVERSITY SERVICES

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. Student Diversity Programs support and promote a welcoming, culturally responsive and supportive School community to help fulfill the School's vision to be at the forefront of preparing students from underrepresented backgrounds to enter and excel in higher education.

Student Diversity Programs (SDP) houses programs that serve students from $\mathrm{K}-12$ to those in graduate school. These programs include:

- College Access Program (CAP): A three-week summer residential pre-college program with an emphasis on majors in the School of Education. CAP prepares future first-generation college students or students from economically disadvantaged backgrounds for college admission, majors, and future careers through quantitative and writing coursework and creative arts group activities. Rising high school juniors (completed sophomore year) and rising high school seniors (completed junior year) are encouraged to apply.
- The Office of Undergraduate Recruitment and Retention (OURR): OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education. OURR staff perform outreach, recruitment and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, and financial aid, and career exploration. OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions.
- American Indian Curriculum Services: An office that provides assistance to teacher education programs, faculty, staff, and students, as well as in-service teachers and regional schools, for the teaching and learning of the history, cultures, and tribal sovereignty of the American Indian Nations of Wisconsin in PK16 education. AICS and Wisconsin Public Television developed WisconsinFirstNations.org to support in-service and preservice teachers as they integrate American Indian Studies into their instruction: https://wisconsinfirstnations.org
- Summer Education Research Program (SERP): A ten-week Summer Research Opportunities Program (SROP) residential program for undergraduate students interested in pursuing graduate degrees in the School of Education. SERP program participants conduct research projects under the supervision of faculty mentors, learn how to prepare themselves for graduate school, and present their final projects to faculty members, peers, and the university community.
- Education Graduate Research Scholars (Ed-GRS): A graduate fellowship program and research community which provides not only funding to graduate students from underrepresented backgrounds, but also professional development opportunities and opportunities to connect with faculty members and peers throughout the School and university community.

Students are invited to visit SDP at 105 Education Building-stop in or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that fits you and helps you reach your career goals
- Researching graduate schools and preparing application materials
- Beginning your job search and not sure where to start
- Want assistance with your résumé, cover letter, or interviewing skills
- Want to network and connect with potential employers

The Career Center provides resources and individual consultations to assist you in reaching your career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu).

- Explore career possibilities for specific majors in the Investigate Career Options. This section of the website provides tools for clarifying your personal criteria for success, identifying specific career options linked to majors and identifying steps for career/ major selection, and includes strategies for making the most of your academic and student experience.
- Confirm your decisions. Gain hands-on experience in the career field you are pursuing. Assess the perceptions of your career and major options for accuracy and develop professional and soft skills. The Test Drive and Confirm Career Choice website section provides strategies for gaining real-world experience.
- Prepare to gain entry into the next phase of your career. Learn about graduate school requirements and the application process. Develop your promotional materials for employers and graduate schools and obtain feedback and suggestions for enhancing them. Obtain materials to support your candidacy. The Prepare and Connect section provides offers additional details.
- Implement your plans for your future. Attend recruiting events. Apply for graduate school acceptance or for job opportunities. Practice your interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. Schedule an appointment here (http://bit.ly/CCAppt).

Informational workshops and career-related events (http:// careercenter.education.wisc.edu/workshops) are conducted each semester.

The Career Center also coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semesters.

## STUDY ABROAD

About 25\% of undergraduates make study abroad an integral part of their UW-Madison experience.

International Academic Programs (IAP) (https://
www.studyabroad.wisc.edu) at UW-Madison offers over 200 study abroad options in about 60 countries on 6 continents. In addition to taking the opportunity to learn new languages, understand new cultures and see the world, UW-Madison students study abroad to complement their on-campus academic goals, strengthen their professional potential and enrich their personal lives.

Students of all academic levels and majors study abroad. While many programs include language training-from the basics to full language immersion-most IAP programs have no language requirement and include courses taught in English.

All courses taken abroad through IAP count as "in-residence" credit, just like taking courses on campus at UW-Madison, so students advance towards their degrees while abroad. And study abroad isn't limited to classroom experience. Many students also complete internships, do research, fieldwork and service learning.

In addition to resources on health, safety, academic planning and other aspects, UW-Madison students receive the information and guidance they need to plan a study abroad experiences that fits their budgets. Many study abroad programs cost the about the same or less than studying on campus, and student financial aid can be applied in most cases.

While IAP offers programs to students of all majors, including to students in the College of Agricultural and Life Sciences in collaboration with the CALS International Programs office, the College of Engineering and the School of Business also offer programs tailored specifically to the needs of their students. All of these program options are listed at studyabroad.wisc.edu/explore.

For more information on study abroad at UW-Madison (p. 22), see Study Abroad (http://studyabroad.wisc.edu) or call 608-265-6329.

## UNDERGRADUATE RESEARCH SCHOLARS PROGRAM

The Undergraduate Research Scholars program (URS) is dedicated to enhancing the academic experience of UW-Madison students by providing first and second year undergraduates with opportunities to earn credit for participating in the research and creative work with UWMadison faculty and staff. The program has been designed to include partnerships between students and mentors, seminars on researchrelevant issues, and practice in research/artistic presentations. The many benefits of the program are found in the fluid interaction between these activities. Please refer to Undergraduate Research Scholars (http:// urs.ls.wisc.edu) for more information

## MERIT (MEDIA, EDUCATION RESOURCES, AND INFORMATION TECHNOLOGY)

301 Teacher Education Building, 608-263-4750
merit.education.wisc.edu (http://merit.education.wisc.edu)
MERIT offers information and technology services to the School of Education and UW-Madison community partners. MERIT is designed as a collaborative and comprehensive cluster of service and support for the School of Education, the UW-Madison and beyond. Staff play an active role in the design and implementation of programs which connect the K-12 community to UW-Madison

Some of our services include evaluation and selection of tools for delivery of content, instructional design and consulting for development of online learning, library services and collections to support practicing teachers (including edTPA and equipment loan), workshops and instructional support aimed at adoption of new tools, media development, web hosting, and web design.

## COOPERATIVE CHILDREN'S BOOK CENTER (CCBC)

401 Teacher Education, 608-263-3720
ccbcinfo@education.wisc.edu, ccbc.education.wisc.edu/ (https:// ccbc.education.wisc.edu)

The CCBC is a library of the School of Education that provides Education students, faculty, and staff with a noncirculating collection of children's and adolescent literature. The CCBC also serves other adults on campus
and across the state who are interested in literature for the young, including Wisconsin teachers and school and public librarians.

This nationally unique library is the primary resource on campus and elsewhere for contemporary books published for children and young adults from preschool through high school ages. CCBC resources include extensive reference materials about literature for the young and a wide range of books for children and adolescents, including a book examination collection of new and recently published books, a comprehensive collection of recommended contemporary books, and historical literature from the 19th and early 20th centuries. The CCBC is nationally known for its services related to intellectual freedom and advocacy for diversity in children's and young adult literature. Each year the CCBC compiles and releases statistics documenting the number of children's and young adult books by and/or about people of color published in the United States.

As a library of the School of Education, the CCBC is committed to being a vital part of the teacher education experience on campus. The CCBC's noncirculating collection provides immediate access to a wide range of literature for the young. CCBC librarians are available to meet with education students to help them identify children's and adolescent literature to fulfill class assignments, as well as to use in practicum and student teaching classrooms. Librarians are also available to meet with faculty and teaching assistants to discuss children's and young adult literature as it relates to the courses they are teaching.

The CCBC website (https://ccbc.education.wisc.edu) provides full-text access to many national children's and young adult literature awards and recommended lists as well as specialized bibliographies from CCBC staff. The CCBC offers special events throughout the academic year that provide opportunities to hear from authors and illustrators, as well as to interact with others who are interested in books for children and teens.

## HONORS

## DEAN'S LIST

Students have at least a 2.5 cumulative GPA and 3.5 or higher for the semester. Students must have received no incompletes in graded courses, no unreported grades, or end-of-semester academic actions for the semester. Credit/no credit and pass/fail courses are not considered in meeting the requirements for the Dean's List.

## GRADUATING WITH HONORS AND GRADUATING WITH DISTINCTION

Undergraduate students are invited to wear an honors stole at graduation, representing Graduating with Honors, if they have indicated they expect to graduate at the conclusion of the current semester, have a cumulative GPA that places them in the top $20 \%$ of students expecting to graduate in their school/college, and have earned at least 60 credits in residence at UW-Madison. Credits in progress in the current semester count towards the 60 credit requirement.

Graduating With Distinction is a separate calculation and is posted to the undergraduate student's transcript after all grades and degrees have been recorded. Students qualify for the Distinction notation if they have received their degree, have a cumulative GPA that places them in the top $20 \%$ of degree recipients in their school/college, and have earned at least 60 credits in residence at UW-Madison.

## HONORS OPTIONS THROUGH THE COLLEGE OF LETTERS \& SCIENCE

Through a collaboration between the School of Education and the College of Letters \& Science (L\&S), students in the School of Education may participate in the L\&S Honors Program, including L\&S Honors in the Liberal Arts (HLA), Honors in the Major (HM), or Comprehensive Honors (both HLA and HM).

To learn more about the L\&S Honors options and curricula, please visit the program's website (http://www.honors.Is.wisc.edu). Students with questions about how L\&S Honors connects with School of Education programs and requirements should contact Education Academic Services at 608-262-1651 to make an appointment with an advisor.

Interested students are invited to apply to the program. Admission is competitive and space is limited, but incoming first-year students who did not apply, or are denied admission, may apply later as continuing students.

## WISCIENCE

## WISCIENCE

## SUPPORT FOR SCIENCE UNDERGRADUATES

UW-Madison offers a wealth of opportunities in the natural sciences for undergraduate students, including several undergraduate courses and programs at WISCIENCE designed to enhance an academic course of study in STEM.

Exploring Biology (https://wiscience.wisc.edu/Exploring-Biology) (INTEGSCI 100) This lecture/discussion course is designed to help first-year students understand career and academic options in the biosciences. It fulfills CALS seminar requirements and counts as a Biological Science Breadth credit. 2 credits

BioHouse Seminar (https://wiscience.wisc.edu/BioHouse-program) (INTEGSCI 110) This seminar creates a formal space for residents of UW-Madison's 10th learning community to learn about life science and the Wisconsin Idea. 1 credit

Exploring Service in Science (https://wiscience.wisc.edu/ExploringService) (INTEGSCI 140) Students learn about campus-community partnership and outreach in STEM. 1 credit

Exploring Research in Science (https://wiscience.wisc.edu/course/ exploring-research-science-course) (INTEGSCI 150) This seminar is designed to help students learn how research processes and the skills necessary for success with academic programs or careers in research. 1 credit

Exploring Discipline-based Leadership in Science (https:// www.wiscience.wisc.edu/discipline-based-leadership) (INTEGSCI 230) This course will help STEM students develop crucial skills for civic engagement, leadership, and social justice while reflecting on personal experiences in their field. 2 credits

Service with Youth in (https://wiscience.wisc.edu/Engage-Children)STEM Series (INTEGSCI 240) This 2 semester series partners with the Adult Role Models in Science (ARMS) program to help students learn the
process of learning, how to evaluate inform learning experiences, and how to collaborate with community partners in after-school science clubs. 2 credits per semester

Entering Research Series (https://wiscience.wisc.edu/Entering-Research) (INTEGSCI 260 and INTEGSCI 261). This two-semester series is designed to be taken while undergraduates are engaged in mentored research to help them build a meaningful and productive experience in the lab. 1 credit per course

Special Topics (https://wiscience.wisc.edu/secrets-science) (INTEGSCI 375): Our faculty offers a variety of topics allowing undergraduates to delve into a variety of STEM topics like the "Secrets of Science." 1-3 credits

WISCIENCE also offers customized options for undergraduates with independent study and internship opportunities available.

## ADVANCING HIGHER EDUCATION IN STEM

WISCIENCE promotes cross-college collaboration among university educators around issues in science education, including teaching for diversity.

## Faculty Development Programming and Courses

Wisconsin Program for Scientific Teaching (WIPST)
Scientific Teaching Fellows (https://wiscience.wisc.edu/WPST-program): This program provides a hands-on approach to combine theory, practice, reflection, assessment, while strengthening participant's skill in teaching, with focus on educating the undergraduate.

INTEGSCI 650 College Science Teaching
INTEGSCI 750 Instructional Materials Design for College Science Teaching

INTEGSCI 850 Mentored Practicum in College Science Teaching
INTEGSCI 675 Special Topics
INTEGSCI 660 Research Mentor Training Practicum: Offered in collaboration with the Delta Program, our mentor training is based on the Entering Mentoring curriculum and gives participants time to reflect and build the tools necessary for a successful mentor/mentee relationship.

INTEGSCI 605 Scientific Teaching for TAs: This course is designed to help the newer teaching assistant (TA) enhance their own skills in $t$ teaching and learning to be more effective in the classroom or lab.

## SCIENCE OUTREACH AND COMMUNITY ENGAGEMENT

WISCIENCE initiates and supports outreach efforts to improve K12 science education, prepare future science undergraduates, and encourage general public engagement with the natural sciences.

## Outreach in Science at WISCIENCE

Adult Role Models in Sciences (http://www.wiscience.wisc.edu/ ARMS-program)

Science Alliance (https://science.wisc.edu/science-alliance)
National Alliance for Broader Impacts (https://broaderimpacts.net)

## Beyond the Classroom

BioHouse (https://wiscience.wisc.edu/BioHouse-program) BioCommons (http://www.biology.wisc.edu) IMPACT Peer Leaders (https://wiscience.wisc.edu/IMPACTprogram)

## CONTACT INFORMATION

WISCIENCE
www.wiscience.wisc.edu (http://www.wiscience.wisc.edu)
Wisconsin Institute for Science Education and Community Engagement connect@wiscience.wisc.edu
608-263-0478
First Floor, 445 Henry Mall, Madison, WI 53706-1574 www.wiscience.wisc.edu/ (http://www.wiscience.wisc.edu)

## EDUCATOR LICENSING

## UW-MADISON CERTIFICATION PROGRAMS LEADING TO EDUCATOR LICENSING

## TEACHER LICENSING PROGRAMS

## - Art Education

- Communication Sciences and Disorders (Speech and Language Pathology)
- Elementary Education
- Early Childhood/English as a Second Language
- Middle Childhood through Early Adolescence/English as a Second Language
- Middle Childhood through Early Adolescence - Dual Certification in Elementary and Cross Categorical Special Education
- Middle Childhood through Early Adolescence with Content Minor (Language Arts minors available in English, English Language Arts; Mathematics minors available in Mathematics, Specialized Mathematics, Mathematics/Science dual minor; Science minors available in Biology, Chemistry, Earth Science, Specialized Science, Physics, Mathematics/Science dual minor; Social Studies minors available in Economics, Geography, History, Political Science, Psychology, Social Studies, Sociology)
- Health
- Instructional Library Media Specialist
- Music Education
- General and Choral Music
- General and Instrumental Music
- Physical Education
- Special Education
- Cross Categorical Middle Childhood through Early Adolescence/ Early Adolescence through Adolescence
- Middle Childhood through Early Adolescence - Dual Certification in Elementary and Cross Categorical Special Education
- Secondary Education
- English/English as a Second Language
- Mathematics/English as a Second Language
- Science/English as a Second Language - certification options in Biology, Broad Field Science, Chemistry, Earth and Space Science, Environmental Studies, Physics
- Social Studies/English as a Second Language - certification options in Broad Field Social Studies, Economics, History, Geography, Political Science, Psychology, Sociology
- World Language Education
- Chinese
- French
- German
- Italian
- Japanese
- Latin
- Portuguese
- Spanish


## SUPPLEMENTARY TEACHING LICENSING PROGRAMS

- Adaptive Physical Education
- Bilingual/Bicultural Education
- English as a Second Language (Available with concurrent completion of relevant Elementary or Secondary certification program; Add-on option for previously certified teachers closed to new admissions.)
- Reading Teacher


## ADMINISTRATOR LICENSING PROGRAMS

- Superintendent
- Principal
- Director of Instruction
- Director of Special Education and Pupil Services
- Reading Specialist


## PUPIL SERVICES LICENSING PROGRAMS

- School Counselor (closed to new admissions)
- School Nurse
- School Psychologist
- School Social Worker


## ART

Undergraduate degrees granted: B.S. in Art, B.S. in Art Education, Bachelor of Fine Arts (BFA)

The Department of Art conducts an exemplary experimental undergraduate program emphasizing the importance of a broad background in the basics of visual arts, liberal arts, and knowledge of the history and purpose of art. The nationally and internationally recognized faculty of visual artists provides a stimulating educational environment to prepare students for careers in a broad array of creative fields and/ or graduate study. The program also supports and encourages the development of a visually literate community.

The art department offers two professional programs, art and art education. Art majors may pursue either the bachelor of science degree (p. 1416) or the bachelor of fine arts degree (p. 1423). Art education majors (p. 1407) receive the Bachelor of Science-Art Education degree and eligibility to apply for licensure to teach in both elementary and secondary schools. Entrance requirements vary for each program. For
exhibition purposes, the department may temporarily retain one piece of work from each student in art studio courses. All degree programs are accredited by the National Association of Schools of Art and Design (NASAD).

## DEGREES/MAJORS/CERTIFICATES

- Art Education, B.S. (p. 1407)
- Art, B.S. (p. 1416)
- Art, BFA (p. 1423)
- Studio Art, Certificate (p. 1432)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Art can be found on the department's website. (http:// www.education.wisc.edu/art)

## ART EDUCATION, B.S.

Art education is a perfect choice for people who love making art, viewing and engaging in lively discussions about art, and working in creative environments. Teaching art provides not only a meaningful career, but a unique opportunity to help other people lead interesting, fulfilled, and creative lives.

UW-Madison's art education program provides essential preparation for a variety of careers in art education. Students work directly with children and adolescents in both school and community-based field placements in every semester of the program. They study with world-renowned art and education faculty in a range of rigorous and engaging studio, art history, curriculum and instruction, educational psychology, and educational policy studies courses, while also connecting with Madison's vibrant arts community through field trips and service learning.

Our students experience all the advantages of a Big Ten university, while receiving personalized attention within the major, especially in the Art Foundations Program. This series of interrelated studio and lecture courses is taken by art and art education majors during their first year on campus as preparation for further study in studio art and design.

Graduates of our program earn a bachelor of science degree, a careerready Wisconsin teaching license in $\mathrm{K}-12$ art education, and gain the skills, knowledge, and confidence to teach the visual arts in public and private schools, at the elementary and secondary levels, in the United States and internationally, and in community settings such as art museums, maker spaces, and senior centers.

Consult the departmental website (https://art.wisc.edu/undergraduate/ undergraduate-degrees) for additional information about art education.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

The art education program at the University of Wisconsin-Madison follows admission procedures intended to result in an academically qualified student body as varied as possible in terms of academic strengths, life experiences, and professional experiences. As the
population of our nation's public schools becomes increasingly multicultural, there is a growing need for teachers from diverse backgrounds. The art education faculty encourages qualified applicants from underrepresented groups to apply for admission to the art education program. In addition, the faculty wishes to broaden the field of art education; individuals representing a wide range of visual arts and design are encouraged to apply. A diverse cohort of students enriches the art education teacher certification program as well as the profession. Undergraduate art education students generally apply to the professional part of the art education degree program in their sophomore year.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in art education are admitted directly to the School of Education with a "preprofessional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in art education receive a "pre-professional" classification of PAED.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the School of Education by completing a PreProfessional Application (http://www.education.wisc.edu/soe/ academics/undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1408)). It is not necessary to be a "pre-professional" student before applying to a professional program. Admission as a "pre-professional" student does not guarantee admission to the professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall. Students may call 608-262-1651 to schedule an appointment with an advisor. Prospective art education majors should meet with the art education program coordinator, Dr. Mary Hoefferle.

## PROSPECTIVE TRANSFER STUDENTS

Prospective transfer students should meet as early as possible with the art education program coordinator and with an advisor at Education Academic Services. Studio and aesthetics coursework taken at another institution may need to be evaluated by the art department advisor or a faculty member in the art department. Because students interested in art education must meet minimum eligibility requirements and apply within strict deadlines, prospective transfer students should meet with an Education Academic Services advisor as soon as possible.

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited-enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

Program admission occurs once a year, effective in the fall. Selection is made the previous spring. Students who already possess a B.S., BFA, or advanced degree in visual arts and seek certification in art education follow the same application procedures. Resources limit the number of students who can be served by the UW-Madison art education teacher education program. In recent years the art education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to art education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## PROGRAM ADMISSION ELIGIBILITY REQUIREMENTS

Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

To be considered for admission, students must:

- complete at least 54 credits of transferable college-level coursework to include 20 credits of Studio Art, and 6 credits of the Aesthetics requirement. This coursework must be completed by the end of the spring semester of the application year.
- earn a cumulative grade point average of at least a 2.75 on a 4.0 scale, based on all transferable college coursework attempted at UW-Madison and other campuses. ${ }^{1}$ Transcripts for all collegelevel coursework (excluding courses taken at UW-Madison) must accompany the program application and supporting materials.
- prepare a portfolio. Applicants should include images of their artwork that best represents their skills, knowledge, and interests in art.
- submit completed program application form(s), transcripts, portfolio, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and - the last 60 credits attempted.


#### Abstract

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).


## PROGRAM SELECTION

All qualified applicants will be reviewed individually by the art education program coordinator and selection committee. The committee will consider numerous factors when selecting a diverse student cohort, including the following:

- Grade point average (GPA)
- Course selection and performance
- Life experiences (written statement)
- Supporting materials
- Consideration of student's race, ethnicity, culture, geographic and economic background.

Candidates will be provisionally admitted and notified of their admission status. The offer of admission will specify a deadline for acceptance of this offer. Applicants must respond to Education Academic Services by this date; those who do not will forfeit their position. Admission is not final until Education Academic Services receives the acceptance and program eligibility is confirmed through spring semester grades.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-
classroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The art education program is divided into five areas of study:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- The Foundations Program requires six interrelated studio and aesthetics courses designed to prepare first-year students for further study in studio art and design.
- Aesthetics coursework gives students an opportunity to study both the history of art and contemporary developments in the visual arts.
- Major requirements offer an in-depth study of studio art.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a threesemester sequence of art education teaching methods course work and field experiences in schools.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## ART FOUNDATIONS PROGRAM

The Art Foundations Program is a series of interrelated studio and lecture courses to be taken by art and art education majors in their first year
as preparation for further study in studio art and design. The program addresses the fundamentals of art through investigation of formal, technical and conceptual issues. The drawing, 2D and 3D design, digital media, and art historical lecture classes are designed to expose, broaden, and challenge students' understanding of contemporary art production.

Art foundations classes are meant to be taken concurrently and the information covered in them is interrelated. Students completing the foundations program should enroll in ART 102 Two-Dimensional Design, ART 212 Drawing Methods \& Concepts, and ART 108 Foundations of Contemporary Art for the fall semester and complete ART 104 ThreeDimensional Design, ART 107 Introduction to Digital Forms, and ART 208 Current Directions in Art in the spring

Most freshman art majors complete their foundations courses through participation in the very popular Contemporary Art and Artists FirstYear Interest Group (FIG), (https://figs.wisc.edu) which also creates a network of corresponding experiences and a peer community that will continue throughout the program and often beyond graduation. Students in FIGs enjoy studying with instructors dedicated to serving first year students, the opportunity to integrate related ideas from all three classes, and the ready-made opportunities to form support networks and lasting friendships.

Additional information about the Foundations Program (https:// art.wisc.edu/media-disciplines/foundations) is available on the departmental website.

## AESTHETICS REQUIREMENT

Complete four courses focusing on the history of art and contemporary developments in the visual arts.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ART 108 | Foundations of Contemporary Art | 3 |
| ART 208 | Current Directions in Art | 3 |
| ART HIST 202 | History of Western Art II: From Renaissance to Contemporary | 4 |
| Select one of the follow | wing: ${ }^{1}$ | 3-4 |
| ART HIST 201 | History of Western Art I: From Pyramids to Cathedrals |  |
| ART HIST 203 | Survey of Asian Art |  |
| ART HIST 205 | Global Arts |  |
| ART HIST/ AFROAMER 241 | Introduction to African Art and Architecture |  |
| ART HIST/ AFROAMER 242 | Introduction to Afro-American Art |  |
| ART HIST 305 | History of Islamic Art and Architecture |  |
| ART HIST 307 | Early Chinese Art: From Antiquity to the Tenth Century |  |
| ART HIST 308 | Later Chinese Art: From the Tenth Century to the Present |  |
| ART HIST 354 | Cross-Cultural Arts Around the Atlantic Rim: 1800 to the Present |  |
| ART HIST/ AMER IND 359 | American Indian Art History: Contemporary Issues |  |
| ART HIST 371 | Chinese Painting |  |
| ART HIST 372 | Arts of Japan |  |

## ART HIST 375 Later Japanese Painting and Woodblock Prints

1 Additional art history courses addressing arts from underrepresented cultures will be considered.

## MAJOR REQUIREMENTS

Students must complete 48 credits of studio art, including the specific requirements below. At least 15 upper-level studio credits must be taken in residence on the UW-Madison campus. Upper-level classes include Art courses numbered 214 and above, excluding ART 236 and ART 338. Note: These requirements are effective beginning spring 2016 admission to art education.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 102 | Two-Dimensional Design | 3 |
| ART 104 | Three-Dimensional Design | 3 |
| ART 107 | Introduction to Digital Forms | 3 |
| ART 212 | Drawing Methods \& Concepts | 3 |
| ART 222 | Introduction to Painting | $3-4$ |
| ART 338 | Service Learning in Art | 2 |
| ART 306 | Relief Printmaking | $3-4$ |
| or ART 336 | Serigraphy |  |
| ART 244 | Art Metal I | $3-4$ |
| ART 224 | Ceramics I | 4 |
| ART 214 | Sculpture I | $3-4$ |
| or ART 334 | Wood Working |  |

Take additional art electives to reach the minimum of 48 credits

## PROFESSIONAL EDUCATION REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| Development (Minimum of $\mathbf{3}$ credits) | 3 |  |
| Select one of the following: |  |  |
| ED PSYCH 331 | Human Development From <br> Childhood Through Adolescence |  |
| ED PSYCH 320 | Human Development in Infancy and <br> Childhood |  |
| ED PSYCH 321 | Human Development in <br> Adolescence |  |

Learning (Minimum of 3 credits) 3
ED PSYCH 301 How People Learn
Foundations of the Profession (Minimum of 3 credits) 3
ED POL $300 \quad$ School and Society
or ED POL/ History of American Education HISTORY 412

Literacy, Including Reading 3
CURRIC 305 Integrating the Teaching of Reading with Other Language Arts
Special Education 3

CURRIC/ Strategies for Inclusive Schooling
RP \& SE 506
or CURRIC/ Art in Exceptional Education
ART ED 570
1 Will also fulfill the liberal studies requirement in U.S./European history.

## ART EDUCATION REQUIREMENTS

| Code Title | Credits |
| :---: | :---: |
| Fall Semester |  |
| Module 1 (first 7 weeks) |  |
| ART ED/CURRIC 323 Art in Elementary Education | 3 |
| ART ED/CURRIC 470 Practicum in Elementary School Art | 3 |
| Module 2 (second 7 weeks) |  |
| ART ED/CURRIC 324 Art in Secondary Education | 3 |
| ART ED/CURRIC 493 Practicum in Secondary School Art | 3 |
| Spring Semester |  |
| ART ED/CURRIC 423 Student Teaching in Art in Elementary Schools | 6 |
| ART ED/CURRIC 424 Student Teaching in Art in Secondary Schools | 6 |

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Requirements are based on UW-Madison coursework.

- 2.75 minimum cumulative grade point average, first effective for students admitted into the art education program fall 2016. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major course work.
- 2.75 cumulative grade point average in all upper-level major course work. Art courses numbered 214 and above, excluding ART 236 and ART 338, are considered upperlevel courses.
- 2.75 in professional education course work (excluding practicum and student teaching).
- Major Residency. Students must complete a minimum of 15 upper-level studio credits in residence on the UWMadison campus.
- Senior Residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- A minimum of 120 total credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure (p. 1413).

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. Identify and explore important eras, developments, movements, and theories in historical and contemporary art practice.
2. Identify and analyze the elements and principles of design in the work of other artists and consistently and effectively employ the elements and principles in their own studio work.
3. Develop technical skill, a personal creative practice, and knowledge of the historical and current practices of at least four separate visual art disciplines, including 2D, 3D, 4D, and graphics areas.
4. Examine best practices (historical and contemporary) in art curriculum planning, instruction and assessment, apply knowledge to k-12 curriculum development, and effectively teach art to diverse populations in community and school-based settings.
5. Meet all School of Education Teacher Education Standards and DPI k-12 art licensure requirements (including child development and learning theories, history of American Education, and the role of art in literacy education).

ADVISING AND CAREERS

## ADVISING

## ART EDUCATION ADVISING

Prospective off-campus and on-campus art education students will meet with the art education program coordinator Dr. Mary Hoefferle, 6241 Humanities Building, 455 North Park Street, hoefferle@wisc.edu; 608-772-7016. Students considering art education should contact her as soon as possible. Preadmission advising is conducted by the Department of Art and staff at Education Academic Services (EAS), see below.

The undergraduate art program advisors are Julie Ganser, julie.ganser@wisc.edu, and Branden Martz, branden.martz@wisc.edu , located at 6241 Humanities Building, 455 North Park Street.
Appointments can be made by calling 608-262-1660.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective
students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Art can be found on the department's website. (http:// www.education.wisc.edu/art)

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION

## REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course
content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ <br> ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate
teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, 3-5 lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

 Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a "D") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.
## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be
conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## ART, B.S.

The Department of Art's three degree programs provide students with the critical and artistic skills needed to excel in contemporary, multidisciplinary art and design practices. Degree programs are highly ranked at both the national and the international level, attracting talented students with excellent academic credentials and a passion for art and design.

UW-Madison art graduates are experts in creative problem solving, visual communication, teamwork and collaboration, and project management. These acquired skills and experiences can lead to fascinating and rewarding careers in animation, ceramics, glassblowing, metal fabrication, graphic and multi-media design, illustration, videography, photography, teaching and, of course, as a gallery artist.

Our graduates also work as iPhone and iPad app designers, medical imagists, technical assistants for major film companies, book designers, costume and float designers, jewelry fabricators and more (https:// art.wisc.edu/undergraduate/undergraduate-degrees). (https:// art.wisc.edu/undergraduate/undergraduate-degrees) The Department of Art believes that hardworking students who learn to harness and nurture their creative energies today will be the people influencing progress tomorrow.

The art curriculum fosters positive collaboration and innovative art production while encouraging diverse points-of-view. Students develop unique, creative voices while enjoying the close-knit atmosphere of a department that prides itself on having a very low teacher-to-student ratio, with an average class size of 10-12 students.

Degree programs feature a rigorous foundation program, a set of six courses that students often complete by participating in the popular Contemporary Art \& Artists First Year Interest Group (FIG), before branching out into one or more specialized areas (https://art.wisc.edu/mediadisciplines) such as ceramics, drawing, glass and neon, graphic design, papermaking, performance, photography, etc.

The art department has a remarkable history. UW-Madison was the first university to create a glass-blowing laboratory for art students. The printmaking programs are consistently ranked first in the country and the art metals program is currently ranked third. A large number of undergraduates go on to study in some of the most prestigious MFA programs in the country, and to exhibit their art in regional, national, and also international venues. The school's large faculty of world-class artists is committed to the development of their undergraduate students.

The new Art Lofts Building is the home of state-of-the-art ceramics, glass, papermaking and bronze foundry facilities and a large art performance space. The Humanities Building houses a student gallery and printmaking, painting, drawing, design, comics, photography, multimedia/digital, video/performance, metals, wood, and sculpture facilities, as well as art education classrooms.

The department offers three degree programs: the Bachelor of Science in Art (p. 1416), the Bachelor of Fine Arts (p. 1423), or the Bachelor of Science in Art Education (p. 1407). The bachelor of fine arts (BFA) degree program in art differs from the B.S.-Art degree by requiring a larger number of studio and aesthetic courses. This degree program is often selected by students wishing to develop a refined visual art portfolio in preparation for a career as a professional artist and/or for graduate study. The bachelor of science in art education degree program certifies students to teach in both elementary and secondary schools.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

The Art-B.S. degree program currently admits on-campus students to begin in the fall, spring, and summer. Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page for updates to eligibility requirements prior to submitting an application.

## ENTERING THE SCHOOL OF EDUCATION PROSPECTIVE UW-MADISON APPLICANTS

Prospective applicants to UW-Madison are strongly encouraged to submit a portfolio to the Department of Art for review. Though a portfolio is not required, it does provide the art department an opportunity to make a recommendation on the applicant's behalf to UW-Madison's Office of Admissions and Recruitment. The Office of Admissions and Recruitment makes final determinations regarding the admission status of all applicants. Additional information, including submission guidelines, is available on the How to Apply (https:// art.wisc.edu/undergraduate/undergraduate-application) page of the art department's website.

## NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and off-campus transfers are admitted directly to the Art-B.S. degree program. All other on-campus students interested in becoming Art students must follow the application procedures outlined below.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UWMadison Office of Admissions and Recruitment (http:// admissions.wisc.edu) for application information. BFA candidates cannot transfer directly into the Art-BFA degree program; instead, they will be admitted to campus as if pursing the Art-B.S. degree program (ART classification) and can apply for the BFA program once enrolled on campus. Transfer students are strongly encouraged to meet with the art department advisor prior to coming to campus; call 608-262-1660 to schedule an appointment. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

On-campus students interested in becoming art students must first apply to the Art-B.S. degree program. These students should complete and submit the application, as well as transcripts from all other colleges or universities attended, to Education Academic Services, Room 139 Education Building, 1000 Bascom Mall, at any time during the academic year. Applications cannot be processed without a complete academic record. (A transfer credit evaluation cannot be accepted in place of a transcript.) The program application must be signed by the undergraduate advisor in the Department of Art; call 608-262-1660 to schedule an appointment.

## CRITERIA FOR ADMISSION

- Cumulative grade point average of at least a 2.5 based on UW-Madison campus coursework, as modified by the Last 60 Credits Rule (detailed below).
- Filing of all required paperwork, including professional program application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) and transcripts. Application must be signed by the art department advisor.


## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) For more information on this rule, see this link (p. 1381).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The bachelor of science (B.S.) degree program in art has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- The Foundations Program requires six interrelated studio and aesthetics courses designed to prepare first-year students for further study in studio art and design.
- Aesthetics coursework gives students an opportunity to study both the history of art and contemporary developments in the visual arts.
- Major requirements permit in-depth studies of studio art. After taking courses in the Foundations area, students complete coursework in each of the four studio areas: 2D, 3D, 4D, and Graphics. B.S.-Art majors are required to reach an advanced level in at least one studio discipline.
- Elective credits to pursue individual areas of interest, such as a second major or additional studio credits. Many B.S.-Art students complete an additional major from the College of Letters \& Science. Some use this major to complement their art preparation (e.g., focusing on written communication for an eventual career in advertising), or a subject that complements their interest in art. Students interested in medical illustration, for example, may wish to take courses in the biological sciences. Others select majors that reflect interests completely unrelated to art.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education

Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## ART FOUNDATIONS PROGRAM

The Art Foundations Program is a series of interrelated studio and lecture courses to be taken by art and art education majors in their first year as preparation for further study in studio art and design. The program addresses the fundamentals of art through investigation of formal, technical and conceptual issues. The drawing, 2D and 3D design, digital media, and art historical lecture classes are designed to expose, broaden, and challenge students' understanding of contemporary art production.

Art foundations classes are meant to be taken concurrently and the information covered in them is interrelated. Students completing the Foundations Program should enroll in ART 102 Two-Dimensional Design, ART 212 Drawing Methods \& Concepts, and ART 108 Foundations of Contemporary Art for the fall semester and complete ART 104 ThreeDimensional Design, ART 107 Introduction to Digital Forms, and ART 208 Current Directions in Art in the spring.

Most freshman art majors complete their foundations courses through participation in the very popular Contemporary Art and Artists FirstYear Interest Group (FIG), (https://figs.wisc.edu) which also creates a network of corresponding experiences and a peer community that will continue throughout the program and often beyond graduation. Students in FIGs enjoy studying with instructors dedicated to serving first year
students, the opportunity to integrate related ideas from all three classes, and the ready-made opportunities to form support networks and lasting friendships.

Additional information about the Foundations Program (https:// art.wisc.edu/media-disciplines/foundations) is available on the departmental website.

## AESTHETICS REQUIREMENTS

$\left.\begin{array}{llr}\text { Code } & \text { Title } \\ \text { ART } 108 & \begin{array}{l}\text { Foundations of Contemporary Art } \\ \text { (component of the Foundations } \\ \text { Program) }\end{array} \\ \text { ART } 208 & \begin{array}{l}\text { Current Directions in Art } \\ \text { (component of the Foundations } \\ \text { Program) }\end{array} \\ \text { Select two additional courses from the following: }\end{array} \begin{array}{l}\text { ART HIST } 201\end{array} \begin{array}{l}\text { History of Western Art I: From } \\ \text { Pyramids to Cathedrals }\end{array}\right\}$

## MAJOR REQUIREMENTS

The requirements listed here are effective for students admitted to the program effective summer 2016. Students admitted prior to this time can find their major requirements listed in previous editions of the Undergraduate Catalog and on their DARS reports.

Complete a minimum of 45 studio credits, including the specific coursework below. No more than 58 studio credits will be counted toward the minimum 120 credits required for the B.S. degree. Thus, if a student wishes to graduate with the minimum of 120 credits, 62 of these credits must be "non-studio" coursework.

Major residency requirement: Students completing the B.S. degree must complete at least 24 credits of major studio coursework in residence on the UW-Madison campus.

Art and BFA degree students have priority access to studio courses. Note: Some courses are offered for 3 or 4 credits; it is preferred that the course be taken for 4 credits.

## REQUIRED STUDIO FOUNDATIONS COURSES

Complete the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 102 | Two-Dimensional Design | 3 |
| ART 104 | Three-Dimensional Design | 3 |
| ART 107 | Introduction to Digital Forms | 3 |
| ART 212 | Drawing Methods \& Concepts | 3 |

## REQUIRED STUDIO BREADTH COURSES

Select one course in each of the 2D, 3D, 4D, and Graphics areas. Students will also take ART 508 Colloquium in Art at least once and complete a 500 -level or 600-level art studio course in at least one discipline.

| 2D Studio |  |  |
| :--- | :--- | ---: |
| Select one of the following: |  |  |
| Code | Title | Credits |
| ART 222 | Introduction to Painting | $3-4$ |
| ART 232 | Life Drawing I | 4 |
| ART 242 | Watercolor I | $3-4$ |
| ART 302 | Color | 4 |
| ART 312 | Intermediate Drawing I | $3-4$ |


| 3D Studio |  |  |
| :--- | :--- | ---: |
| Select one of the following: |  |  |
| Code | Title | Credits |
| ART 214 | Sculpture I | 4 |
| ART 224 | Ceramics I | 4 |
| ART 244 | Art Metal I | $3-4$ |
| ART 334 | Wood Working | $3-4$ |
| ART 343 | Metal Fabrication and Welding in | $3-4$ |
| ART 354 | Sculpture | 4 |

## 4D Studio

Select one of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 309 | Digital Art and Code | 4 |
| ART 318 | Introduction to Video, Performance | 4 |
|  | \& Installation Art | 2 |
| ART 338 | Service Learning in Art | 4 |
| ART 409 | Digital Fabrication Studio | 4 |
| ART 428 | Digital Imaging Studio | 4 |
| ART 429 | 3D Digital Studio I | $3-4$ |
| ART 470 | Special Topics in 4D Art | 4 |
| ART 521 | Installations and Environments | $3-4$ |

## Graphics

Select one of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 306 | Relief Printmaking | $3-4$ |
| ART 316 | Lithography | 4 |
| ART 326 | Etching | 4 |
| ART 336 | Serigraphy | $3-4$ |
| ART 346 | Basic Graphic Design | 4 |
| ART 348 | Introduction to Digital Printmaking | 4 |
| ART 376 | Photography | $3-4$ |
| ART 446 | Artists' Books | 4 |

## Art Colloquium

Complete the following:

Code Title Credits
ART 508
Colloquium in Art (Students are
encouraged to enroll in this visiting artist lecture series multiple times)

## Advanced Studio Requirement

Complete a 500 -level or 600 -level art studio course in at least one discipline. ART 508 Colloquium in Art, ART 608 Interdisciplinary Critique in the Visual Arts, and ART 699 Independent Study will not fulfill this requirement.

## ELECTIVE STUDIO COURSES

Select elective studio courses (http://guide.wisc.edu/courses/art) to reach the minimum of 45 credits.

## AREAS OF CONCENTRATION

Although a concentration is not required, students may wish to select a sequence of related courses to develop an area of interest. Concentrations in graphic design, multi-media, 2D studio, 3D studio, and printmaking are just some of the concentrations (https:// art.wisc.edu/media-disciplines) listed on the art department's website.

## ELECTIVE COURSEWORK

B.S.-Art students must complete additional coursework to reach the minimum 120 credits required for the degree. These students must complete a minimum of 62 non-studio credits. Another way of describing this requirement is that only 13 additional studio credits beyond the required 45 credits can count toward the 120 credits. Students interested in completing more than 58 total studio credits may wish to consider the BFA degree program, which requires at least 72 studio credits.

Completing an additional major. Students choosing the B.S.-Art option often also choose to complete an additional major in the College of Letters \& Science. Review Academic Policies and Procedures (p. 1381) to find detailed information about declaring an additional L\&S major while a student in the School of Education.

Completing two degree programs. Students also occasionally choose a second degree in another campus school or college. For instance, students may choose an Art degree program as well as a science degree program in the College of Agricultural and Life Sciences. See Academic Policies and Procedures ( p . 1381) for more detailed information about the requirements and the approvals necessary to be permitted to complete dual degrees. Important note: Some campus schools/colleges do not permit dual degrees; at the present time this includes the College of Letters \& Science and the College of Engineering. These policies do not permit students to complete, for example, an art degree program and a journalism degree program.

Students interested in additional majors or dual degrees should consult carefully with an Education Academic Services advisor. Students may be referred to Associate Dean Jeffrey Hamm for additional consultation and approvals.

## GPA AND OTHER GRADUATION REQUIREMENTS GRADUATION REQUIREMENTS

Requirements are based on UW-Madison coursework..

- 2.5 minimum cumulative grade point average. This may be modified by the Last 60 Credits Rule.
- Cumulative major grade point average: 2.5 cumulative grade point average in all major studio coursework.
- Upper-level major coursework: 2.5 cumulative grade point average in all upper-level major coursework (Art courses numbered 214 and above, excluding ART 236 and ART 338).
- Major Residency: Must complete at least 24 credits of major coursework in residence on the UW-Madison campus.
- Senior Residency: Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- Total Credits: A minimum of 120 credits to include at least 62 non-studio credits are required for graduation in the Art-B.S. degree program.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college |
| or department advisor for information on specific credit |  |
| requirements. |  |

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. To expose, broaden, and challenge students' understanding of past and present art production and provide knowledge of historical, thematic, critical and theoretical issues.
2. To contextualize studio assignments and expand their verbal and visual vocabulary, supporting the development of critical thinking and writing skills.
3. To learn the fundamental elements of art through investigation of formal, technical and conceptual issues and to increase skills in researching and creative problem solving.
4. To introduce students in the Bachelor of Science in Art and Bachelor of Fine Arts Degree Programs to art-making in four areas of practice, including two-dimensional, three-dimensional, graphic art, and interactive art. To broaden student understanding of the concepts and practices distinct to each area of discipline.
5. To facilitate a peer community among a like-minded and diverse cohort of students.
6. To facilitate advanced level competencies in at least one discipline for BS-Art majors and at least two disciplines for BFA majors.
7. To develop a skill set through professional practice experience in the context of an undergraduate art curriculum.

## ADVISING AND CAREERS

## ADVISING

## ART DEPARTMENT ADVISING

Prospective off-campus and on-campus B.S.-Art and BFA-Art majors will meet with the undergraduate art program advisors, Julie Ganser, julie.ganser@wisc.edu, and Branden Martz, branden.martz@wisc.edu, (branden.martz@wisc.edu) located at 6241 Humanities Building, 455 North Park Street. Appointments can be made by calling 608-262-1660. Students are also strongly encouraged to confer with an Education Academic Services advisor on a regular basis, see below.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Art can be found on the department's website. (http:// www.education.wisc.edu/art)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## ACCREDITATION

## Accreditation

National Association of Schools of Art and Design (https://nasad.artsaccredit.org)

Accreditation status: Accredited. Next accreditation review: 2025-2026.

## ART, BFA

The Department of Art's three degree programs provide students with the critical and artistic skills needed to excel in contemporary, multidisciplinary art and design practices. Degree programs are highly ranked at both the national and the international level, attracting talented students with excellent academic credentials and a passion for art and design.

UW-Madison art graduates are experts in creative problem solving, visual communication, teamwork and collaboration, and project management. These acquired skills and experiences can lead to fascinating and rewarding careers in animation, ceramics, glassblowing, metal fabrication, graphic and multi-media design, illustration, videography, photography, teaching and, of course, as a gallery artist.

Our graduates also work as iPhone and iPad app designers, medical imagists, technical assistants for major film companies, book designers, costume and float designers, jewelry fabricators and more (https:// art.wisc.edu/undergraduate/undergraduate-degrees). The Department of Art believes that hardworking students who learn to harness and nurture their creative energies today will be the people influencing progress tomorrow.

The art curriculum fosters positive collaboration and innovative art production while encouraging diverse points-of-view. Students develop unique, creative voices while enjoying the close-knit atmosphere of a department that prides itself on having a very low teacher-to-student ratio, with an average class size of 10-12 students.

Degree programs feature a rigorous foundation program, a set of six courses that students often complete by participating in the popular Contemporary Art \& Artists First Year Interest Group (FIG), before branching out into one or more specialized areas (https://art.wisc.edu/mediadisciplines) such as ceramics, drawing, glass and neon, graphic design, papermaking, performance, photography, etc.

The art department has a remarkable history. UW-Madison was the first university to create a glass-blowing laboratory for art students. The printmaking programs are consistently ranked first in the country and the art metals program is currently ranked third. A large number of undergraduates go on to study in some of the most prestigious MFA programs in the country, and to exhibit their art in regional, national, and
also international venues. The school's large faculty of world class artists is committed to the development of their undergraduate students.

The new Art Lofts Building is the home of state-of-the-art ceramics, glass, papermaking and bronze foundry facilities and a large art performance space. The Humanities Building houses a student gallery, and printmaking, painting, drawing, design, comics, photography, multimedia/digital, video/performance, metals, wood, and sculpture facilities, as well as art education classrooms.

The department offers three degree programs: the Bachelor of Science in Art (p. 1416), the Bachelor of Fine Arts (p. 1423), or the Bachelor of Science in Art Education (p. 1407). The bachelor of fine arts (BFA) degree program in art differs from the B.S.-Art degree by requiring a larger number of studio and aesthetic courses. This degree program is often selected by students wishing to develop a refined visual art portfolio in preparation for a career as a professional artist and/or for graduate study. The bachelor of science in art education degree program certifies students to teach in both elementary and secondary schools.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students interested in the Art-BFA degree program initially enroll in the Art-B.S. degree program while completing prerequisite coursework and establishing other criteria for eligibility. A portfolio review is part of the BFA program selection process. Students will typically apply to the BFA program in their sophomore or junior year and must have attained a minimum of sophomore standing. An application may be submitted during the semester that the required courses will be completed.

## APPLICATION AND ADMISSION

New freshmen and off-campus transfers are admitted directly to the Art-B.S. degree program and receive an ART classification. Both art degree programs currently admit on-campus students to begin in the fall, spring, and summer. Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/undergraduate-students/academic-program-admission) page for updates to eligibility requirements prior to submitting an application.

## APPLICATION PROCEDURES <br> PROSPECTIVE UW-MADISON APPLICANTS

Prospective applicants to UW-Madison are strongly encouraged to submit a portfolio to the Department of Art for review. Though a portfolio is not required, it does provide the art department an opportunity to make a recommendation on the applicant's behalf to UW-Madison's Office of Admissions and Recruitment. The Office of Admissions and Recruitment makes final determinations regarding the admission status of all applicants. Additional information, including submission guidelines, is available on the How to Apply (https:// art.wisc.edu/undergraduate/undergraduate-application) page of the art department's website.

## CURRENT UW-MADISON STUDENTS

On-campus students should obtain a Professional Program Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission).

Complete and submit the application, as well as transcripts from all other colleges or universities attended, to Education Academic Services, Room 139 Education Building, 1000 Bascom Mall, at any time during the academic year. Applications cannot be processed without a complete academic record. (A transfer credit evaluation cannot be accepted in place of a transcript.) The program application must be signed by the undergraduate advisor in the Department of Art; call 608-262-1660 to schedule an appointment.

## TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UWMadison Office of Admissions and Recruitment (http:// admissions.wisc.edu) for application information. Note that off-campus transfer students will be held to the UW-Madison admission GPA requirements. BFA candidates cannot transfer directly into the BFA program; instead, they will be admitted to campus as if pursing a B.S.-Art degree (ART classification) and can apply for the BFA program once enrolled on campus. Transfer students are strongly encouraged to meet with the Department of Art advisor prior to coming to campus; call 608-262-1660 to schedule an appointment. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## CRITERIA FOR ADMISSION

- Previous Art-B.S. degree program status.
- Cumulative grade point average of at least a 2.5 based on UW-Madison campus coursework, as modified by the Last 60 Credits Rule (detailed below).
- Successful completion or concurrent enrollment in the following courses:

$$
\text { Code } \quad \text { Title } \quad \text { Credits }
$$

ART 102
Two-Dimensional Design

| ART 104 | Three-Dimensional Design | 3 |
| :--- | :--- | :--- |
| ART 107 | Introduction to Digital Forms | 3 |
| ART 108 | Foundations of Contemporary | 3 |
|  | Art | 3 |
| ART 208 | Current Directions in Art | 3 |
| ART 212 | Drawing Methods \& Concepts | 3 |

One course from each of the following. See
Requirements section for course options:
2D Studio
3D Studio
4D Studio
Graphics

- Minimum 3.0 Art studio course GPA.
- Portfolio review.
- The portfolio must be submitted only after all prerequisite coursework has been completed or during the semester the courses will be completed. The portfolio must contain images of work completed in college art courses. Specific portfolio requirements will be announced prior to scheduled reviews, held near the end of the fall and/or spring semesters. Students not accepted into the BFA program will be encouraged to continue in the B.S.-Art program and will be allowed to present their portfolio for review one additional time.


## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) For more information on this rule, see this link (p. 1381).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The bachelor of fine arts (BFA) degree program in art has four components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- The Foundations Program requires six interrelated studio and aesthetics courses designed to prepare first-year students for further study in studio art and design.
- Aesthetics coursework gives students an opportunity to study both the history of art and contemporary developments in the visual arts.
- Major requirements permit in-depth studies of studio art. After taking courses in the Foundations area, students complete coursework in each of the four studio areas: 2D, 3D, 4D, and Graphics. BFA students are required to reach an advanced level in two studio disciplines.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits. ART FOUNDATIONS PROGRAM

The Art Foundations Program is a series of interrelated studio and lecture courses to be taken by art and art education majors in their first year as preparation for further study in studio art and design. The program addresses the fundamentals of art through investigation of formal, technical and conceptual issues. The drawing, 2D and 3D design, digital media, and art historical lecture classes are designed to expose, broaden, and challenge students' understanding of contemporary art production.

Art Foundations classes are meant to be taken concurrently and the information covered in them is interrelated. Students completing the Foundations Program should enroll in ART 102 Two-Dimensional Design, ART 212 Drawing Methods \& Concepts, and ART 108 Foundations of Contemporary Art for the fall semester and complete ART 104 ThreeDimensional Design, ART 107 Introduction to Digital Forms, and ART 208 Current Directions in Art in the spring.

Most freshman art majors complete their foundations courses through participation in the very popular Contemporary Art and Artists FirstYear Interest Group (FIG), (https://figs.wisc.edu) which also creates a network of corresponding experiences and a peer community that will continue throughout the program and often beyond graduation. Students in FIGs enjoy studying with instructors dedicated to serving first year students, the opportunity to integrate related ideas from all three classes, and the ready-made opportunities to form support networks and lasting friendships.

Additional information about the Foundations Program (https:// art.wisc.edu/media-disciplines/foundations) is available on the departmental website.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

## AESTHETICS REQUIREMENTS

The BFA program requires a total of 18 aesthetics credits, including four required courses. The remaining credits will be met by selecting from a list of aesthetics electives. Liberal studies coursework in fine arts and literature can also can count as aesthetics electives. Additional courses may be approved by the art department advisor.

REQUIRED AESTHETICS COURSES

| Code | Title |
| :--- | :--- | ---: |
| ART 108 | Foundations of Contemporary Art <br> (component of the Foundations <br> Program) |
| ART 208 | Current Directions in Art <br> (component of the Foundations <br> Program) |
| Select two additional courses from the following: |  |
| ART HIST 201 | History of Western Art I: From <br> Pyramids to Cathedrals |
| ART HIST 202 | History of Western Art II: From <br> Renaissance to Contemporary |
| ART HIST 205 | Global Arts |
| ART 438 | History of Graphic Design and <br> Typography 1 |
| If taken prior to summer, 2018, ART 438 may count toward either the |  |
| aesthetics or studio requirements, but not both. Effective summer, |  |
| 2018, it may only count toward the aesthetics requirement. This |  |
| course is designed for students pursuing graphic design. |  |

## AESTHETICS ELECTIVES

Select from the following to complete the required 18 credits. Liberal studies coursework in fine arts and literature can also double count as aesthetics electives.

| Elective Courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| AFRICAN/ <br> FOLKLORE 210 | The African Storyteller | 3 |
| AFRICAN 211 | The African Autobiography | 3 |
| AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> HISTORY/POLI SCI/ <br> SOC 277 | Africa: An Introductory Survey | 4 |
| AFRICAN/LCA/ RELIG ST 370 | Islam: Religion and Culture | 4 |
| AFROAMER 151 | Introduction to Contemporary AfroAmerican Society | 3 |
| AFROAMER 155 | They: Race in American Literature | 3 |
| AFROAMER/ GEN\&WS 222 | Introduction to Black Women Writers | 3 |
| AFROAMER 231 | Introduction to Afro-American History | 3 |
| AFROAMER/ ART HIST 241 | Introduction to African Art and Architecture | 3 |
| AFROAMER/ ART HIST 242 | Introduction to Afro-American Art | 3 |



| ASIAN AM/SOC 220 | Ethnic Movements in the United States | 3-4 | DS 421 | History of Architecture and Interiors I: Antiquity through 18th Century | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASIAN AM/ <br> ENGL 270 | A Survey of Asian American Literature | 3 | DS 422 | History of Architecture \& Interiors II: 19th and 20th Centuries | 3 |
| CHICLA 210 | Chicana/o and Latina/o Cultural Studies | 3 | DS/FOLKLORE 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| CLASSICS 322 | The Romans | 3 | FOLKLORE 100 | Introduction to Folklore | 3 |
| COM ARTS 236 | Bascom Course | 3 | FOLKLORE/ | Introduction to Music Cultures of the World | 2 |
| COM ARTS 250 | Survey of Contemporary Media | 3 | MUSIC 103 |  |  |
| COM ARTS 260 | Communication and Human Behavior | 3 | FOLKLORE/ AFRICAN 210 | The African Storyteller | 3 |
| COM ARTS 350 | Introduction to Film | 3 | FOLKLORE 220 | The Folk Tale | 3 |
| COM ARTS 351 | Television Industries | 3 | FOLKLORE 230 | Introduction to American Folklore | 3 |
| COM ARTS 352 | Film History to 1960 | 3 | FOLKLORE 320 | Folklore of Wisconsin | 3 |
| COM ARTS 354 | Film Genres | 3 | FOLKLORE/ | In Translation: Mythology of Scandinavia | 3-4 |
| COM ARTS 355 | Introduction to Media Production | 4 | LITTRANS/ |  |  |
| COM ARTS 357 | History of the Animated Film | 3 | MEDIEVAL/ <br> RELIG ST 342 |  |  |
| COM ARTS 358 | History of Documentary Film | 3 |  | Musical Cultures of the World | 3 |
| COM ARTS 450 | Cultural History of Broadcasting | 3 | MUSIC 401 |  |  |
| COM ARTS 454 | Critical Film Analysis | 3 | FOLKLORE/ | Slavic and East European Folklore | 3 |
| COM ARTS 456 | Russian and Soviet Film | 3 | SLAVIC 444 |  |  |
| COMP LIT 201 | Introduction to Pre-Modern Literatures/Impact on the Modern World | 3 | FOLKLORE 460 | Folk Epics | 3 |
|  |  |  | FOLKLORE/DS 512 | Material Culture Analysis: The Arts and the Consumer Society | 3 |
| COMP LIT 202 | Introduction to Modern and Contemporary Literature | 3 | FOLKLORE/DS 655 | Comparative World Dress | 3 |
|  |  |  | GEN\&WS 101 | Gender, Women, and Cultural Representation | 3 |
| COMP LIT 203 | Introduction to Cross-Cultural | 3 |  |  |  |
|  | Literary Forms |  | GEN\&WS 102 | Gender, Women, and Society in Global Perspective | 3 |
| COMP LIT 371 | Literary Criticism | 3-4 |  |  |  |
| COMP LIT 681 | Senior Honors Thesis | 3 | GEN\&WS/ AFROAMER 222 | Introduction to Black Women Writers | 3 |
| COMP LIT 690 | Proseminar | 3 |  |  |  |
| COMP LIT 691 | Senior Thesis | 2-3 | HISTORY 101 | Amer Hist to the Civil War Era, the Origin \& Growth of the U S | 4 |
| COMP LIT 692 | Senior Thesis | 3 |  |  |  |
| COMP LIT 771 | Literary Criticism | 3 | HISTORY 102 | American History, Civil War Era to the Present | 4 |
| COMP LIT 975 | Seminar-Poetics and Literary | 3 |  |  |  |
|  | Theory |  | HISTORY/ | The Ancient Mediterranean | 4 |
| COMP LIT 990 | Research and Thesis | 1-12 | CLASSICS 110 |  |  |
| DANCE 255 | Movement Composition for the Performing and Visual Arts | 2 | HISTORY 115 | Medieval Europe 410-1500 | 4 |
|  |  |  | HISTORY 119 | The Making of Modern Europe 1500-1815 | 4 |
| DANCE 265 | Dance History I: Western Theatrical | 3 |  |  |  |
|  | Dance from the Renaissance through the 1920s |  | HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| ENGL 207 | Introduction to Creative Writing: | 3 | HISTORY 142 | History of South Asia to the Present | 3-4 |
|  | Fiction and Poetry Workshop |  | HISTORY 200 | Historical Studies | 3 |
| ENGL 219 | Shakespearean Drama | 3 | HISTORY 201 | The Historian's Craft | 3-4 |
| ENGL 236 | Bascom Course | 3 | HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| ENGL/ | A Survey of Asian AmericanLiterature | 3 |  |  |  |
| ASIAN AM 270 |  |  | HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| ENGL/HISTORY/ <br> RELIG ST 360 | The Anglo-Saxons | 3 |  |  |  |
| ENGL 417 | History of the English Language | 3 | HISTORY/ | Russia: An Interdisciplinary Survey | 4 |
| DS 221 | Person and Environment Interactions | 3 | GEOG/POLI SCI/ SLAVIC 253 |  |  |
| DS 355 | History of Fashion, 1400-Present | 3 |  |  |  |


| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| :---: | :---: | :---: |
| HISTORY/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY 302 | History of American Thought, 1859 to the Present | 3-4 |
| HISTORY 303 | A History of Greek Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| HISTORY 336 | Chinese Economic and Business History: From Silk to iPhones | 3-4 |
| HISTORY/ <br> EASTDS 341 | History of Modern China, 1800-1949 | 3-4 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| HISTORY 351 | Seventeenth-Century Europe | 3-4 |
| HISTORY/ GEN\&WS 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 | 3-4 |
| HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY/ <br> ED POL 412 | History of American Education | 3 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ CHICLA 435 | Colony, Nation, and Minority. The Puerto Ricans' World | 3 |
| HISTORY/LCA/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| HISTORY/ECON 466 | The American Economy Since 1865 | 3-4 |
| HISTORY 500 | Reading Seminar in History | 3 |
| HISTORY/HIST SCI/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HISTORY/ JOURN 560 | History of Mass Communication | 4 |
| HISTORY/HIST SCI/ <br> MED HIST/ <br> MEDIEVAL/ <br> S\&A PHM 562 | Byzantine Medicine and Pharmacy | 3 |
| HISTORY 600 | Advanced Seminar in History | 3 |
| HISTORY 680 | Honors Thesis Colloquium | 2 |
| HISTORY 681 | Senior Honors Thesis | 1-3 |


| HISTORY 682 | Senior Honors Thesis | 1-3 |
| :---: | :---: | :---: |
| HISTORY 690 | Thesis Colloquium | 2 |
| HISTORY 691 | Senior Thesis | 1-3 |
| HISTORY 692 | Senior Thesis | 1-3 |
| ILS 201 | Western Culture: Science, Technology, Philosophy I | 3 |
| ILS 202 | Western Culture: Science, Technology, Philosophy II | 3 |
| ILS 204 | Western Culture: Literature and the Arts II | 3-4 |
| ILS 205 | Western Culture: Political, Economic, and Social Thought I | 3 |
| ILS 206 | Western Culture: Political, Economic, and Social Thought II | 3 |
| ILS 251 | Contemporary Physical Sciences | 3 |
| LINGUIS 101 | Human Language | 3 |
| LITTRANS 202 | Survey of 19th and 20th Century Russian Literature in Translation II | 3 |
| LITTRANS/ <br> ENGL 223 | Vladimir Nabokov. Russian and American Writings | 3 |
| LITTRANS 234 | Soviet Life and Culture Through Literature and Art (from 1917) | 3-4 |
| LITTRANS 236 | Bascom Course-In Translation | 3 |
| LITTRANS 240 | Soviet Literature in Translation | 3-4 |
| LITTRANS/ MEDIEVAL/ RELIG ST 253 | Of Demons and Angels. Dante's Divine Comedy | 3 |
| LITTRANS 262 | Survey of Chinese Literature in Translation | 3 |
| LITTRANS 264 | Survey of Japanese Literature in Translation | 3 |
| LITTRANS 274 | In Translation: Masterpieces of Scandinavian Literature-the 20th Century | 3-4 |
| LITTRANS 275 | In Translation: The Tales of Hans Christian Andersen | 3-4 |
| LITTRANS/ GERMAN 276 | Special Topics in German and World Literature/s | 3 |
| LITTRANS/GERMAN/ JEWISH 279 | Yiddish Literature and Culture in America | 3 |
| LITTRANS/ THEATRE 335 | In Translation: The Drama of Henrik Ibsen | 3-4 |
| LITTRANS 410 | In Translation: Special Topics in Italian Literature | 3 |
| LITTRANS 473 | Polish Literature (in Translation) since 1863 | 3 |
| JEWISH/GERMAN/ LITTRANS 279 | Yiddish Literature and Culture in America | 3 |
| JEWISH/HEBR- <br> MOD 301 | Introduction to Hebrew Literature | 3 |
| JOURN 201 | Introduction to Mass Communication | 4 |
| JOURN/ <br> HISTORY 560 | History of Mass Communication | 4 |
| JOURN 561 | Mass Communication and Society | 4 |


| MEDIEVAL/ HISTORY/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| :---: | :---: | :---: |
| MEDIEVAL/ HISTORY/ RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| MEDIEVAL/ <br> HIST SCI 322 | Ancient and Medieval Science | 3 |
| MEDIEVAL/ SCAND ST 408 | Old Norse | 3 |
| MEDIEVAL/HIST SCI/ HISTORY/MED HIST/ S\&A PHM 562 | Byzantine Medicine and Pharmacy | 3 |
| MEDIEVAL/ GERMAN 651 | Introduction to Middle High German | 3 |
| MEDIEVAL/ ITALIAN 660 | Dante's Divina Commedia | 3 |
| MEDIEVAL/ <br> FRENCH 703 | La Litterature Francaise du XIV Et du XV Siecle | 3 |
| MUSIC 101 | The Musical Experience | 3 |
| MUSIC/ FOLKLORE 103 | Introduction to Music Cultures of the World | 2 |
| MUSIC 105 | Opera | 3 |
| MUSIC 106 | The Symphony | 3 |
| MUSIC 113 | Music in Performance | 1 |
| MUSIC 211 | Survey of the History of Western Music | 3 |
| PHILOS 101 | Introduction to Philosophy | 3-4 |
| PHILOS 201 | Introduction to Philosophy for Juniors and Seniors | 3-4 |
| PHILOS 253 | Philosophy of the Arts | 3-4 |
| PHILOS 341 | Contemporary Moral Issues | 3-4 |
| PHILOS 430 | History of Ancient Philosophy | 3-4 |
| PHILOS 432 | History of Modern Philosophy | 3-4 |
| PHILOS 553 | Aesthetics | 3 |
| PHYSICS 109 | Physics in the Arts | 3 |
| RELIG ST 361 | Early Christian Literature: Pauline Christianity | 3 |
| RELIG ST/AFRICAN/ $\text { LCA } 370$ | Islam: Religion and Culture | 4 |
| RELIG ST/LCA 444 | Introduction to Sufism (Islamic Mysticism) | 3 |
| SOC 125 | American Society: How It Really Works | 3-4 |
| THEATRE 327 | History of Costume for the Stage | 3 |

## MAJOR REQUIREMENTS

The requirements listed here are effective for students admitted to the Art or BFA program effective summer, 2016. Students admitted prior to this time can find their major requirements listed in previous editions of the Undergraduate Catalog and on their DARS reports.

Bachelor of Fine Arts (BFA) Program: Complete a minimum of 72 studio credits, including the specific coursework below. The BFA degree requires 126 total credits. Admission to the BFA program requires the completion of (or concurrent enrollment in) the ART 102, ART 104, ART 107, ART 108, ART 208, ART 212, and one course in each of the 2D, 3D, 4D and graphics
areas. Students must have a 3.0 GPA in their studio coursework to be considered for the BFA program and have attained a minimum of sophomore standing. Successful participation in a portfolio review is also part of the selection process. Application may be made during the semester that the required courses will be completed. See How to Get In (p. 1423) for details about the application process.

Major residency requirement. The BFA program requires that at least 36 credits of major studio coursework be completed in residence at UWMadison.

Art and BFA degree students have priority access to studio courses.
Note: Some courses are offered for 3 or 4 credits; it is preferred that the course be taken for 4 credits.

## REQUIRED STUDIO FOUNDATIONS COURSES

Complete the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 102 | Two-Dimensional Design | 3 |
| ART 104 | Three-Dimensional Design | 3 |
| ART 107 | Introduction to Digital Forms | 3 |
| ART 212 | Drawing Methods \& Concepts | 3 |

## REQUIRED STUDIO BREADTH COURSES

Select one course in each of the 2D, 3D, 4D, and Graphics areas. Students will also take ART 508 Colloquium in Art at least once and complete a 500 -level or 600 -level art studio course in at least two disciplines. BFA candidates are required to participate in an exhibit and concurrently enroll in a capstone course.

## 2D Studio

Select one of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 222 | Introduction to Painting | $3-4$ |
| ART 232 | Life Drawing I | 4 |
| ART 242 | Watercolor I | $3-4$ |
| ART 302 | Color | 4 |
| ART 312 | Intermediate Drawing I | $3-4$ |

## 3D Studio

Select one of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 214 | Sculpture I | 4 |
| ART 224 | Ceramics I | 4 |
| ART 244 | Art Metal I | $3-4$ |
| ART 334 | Wood Working | $3-4$ |
| ART 343 | Metal Fabrication and Welding in | $3-4$ |
|  | Sculpture | 4 |
| ART 354 | Glassworking | 4 |

## 4D Studio

Select one of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 309 | Digital Art and Code | 4 |
| ART 318 | Introduction to Video, Performance | 4 |
|  | \& Installation Art |  |


| ART 338 | Service Learning in Art | 2 |
| :--- | :--- | ---: |
| ART 409 | Digital Fabrication Studio | 4 |
| ART 428 | Digital Imaging Studio | 4 |
| ART 429 | 3D Digital Studio I | 4 |
| ART 470 | Special Topics in 4D Art | $3-4$ |
| ART 521 | Installations and Environments | 4 |
| ART 531 | Screen Performance | $3-4$ |

## Graphics

Select one of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 306 | Relief Printmaking | $3-4$ |
| ART 316 | Lithography | 4 |
| ART 326 | Etching | 4 |
| ART 336 | Serigraphy | $3-4$ |
| ART 346 | Basic Graphic Design | 4 |
| ART 348 | Introduction to Digital Printmaking | 4 |
| ART 376 | Photography | $3-4$ |
| ART 446 | Artists' Books | 4 |

## Art Colloquium

Complete the following:
Code Title Credits

ART 508
Colloquium in Art (Students are
encouraged to enroll in this visiting
artist lecture series multiple times)

## Advanced Studio Requirement

Complete a 500-level or 600-level Art studio course in two disciplines.
ART 508 Colloquium in Art, ART 608 Interdisciplinary Critique in the Visual Arts, and ART 699 Independent Study will not fulfill this requirement.

## Exhibit Participation

BFA students must participate at least once in the department-sponsored exhibit, held in the spring semester. Requires concurrent enrollment in the professional practices/capstone course.

## Professional Practices/Capstone Course

BFA students must enroll in this course during the required semester of participation in the department-sponsored exhibit. Currently, offered as ART 448 section 10; a unique course number will be forthcoming.

## ELECTIVE STUDIO COURSES

Select elective studio courses (http://guide.wisc.edu/courses/art) to reach the minimum of 72 credits.

## AREAS OF CONCENTRATION

Although a specific emphasis is not required, students may wish to develop an area of interest within the requirements of the BFA program. Concentrations in graphic design, multi-media, 2D studio, 3D studio, and printmaking are some of the available options (https:// art.wisc.edu/media-disciplines) listed on the art department's website.

## GPA AND OTHER GRADUATION REQUIREMENTS <br> GRADUATION REQUIREMENTS

These requirements are based on UW-Madison coursework.

- 2.5 minimum cumulative grade point average. This may be modified by the Last 60 Credits Rule.
- Cumulative major grade point average: 3.0 cumulative grade point average in all major studio coursework.
- Upper-level major coursework: 3.0 cumulative grade point average in all upper-level major coursework (Art courses numbered 214 and above, excluding ART 236 Bascom Course and ART 338 Service Learning in Art).
- Major Residency: Students must complete at least 36 major credits while enrolled in residence on the UW-Madison campus.
- Senior Residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- Total Credits: A minimum of 126 credits are required for graduation in the Art-BFA degree program.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
\(\left.$$
\begin{array}{ll}\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online } \\
\text { formats and credits earned in UW-Madison Study }\end{array}
$$ <br>

Abroad/Study Away programs.\end{array}\right\}\)| Quality of $\quad$Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |
| :--- |

## LEARNING OUTCOMES

1. To expose, broaden, and challenge students' understanding of past and present art production and provide knowledge of historical, thematic, critical and theoretical issues.
2. To contextualize studio assignments and expand their verbal and visual vocabulary, supporting the development of critical thinking and writing skills.
3. To learn the fundamental elements of art through investigation of formal, technical and conceptual issues and to increase skills in researching and creative problem solving.
4. To introduce students in the Bachelor of Science in Art and Bachelor of Fine Arts Degree Programs to art-making in four areas of practice, including two-dimensional, three-dimensional, graphic art, and interactive art. To broaden student understanding of the concepts and practices distinct to each area of discipline.
5. To facilitate a peer community among a like-minded and diverse cohort of students.
6. To facilitate advanced level competencies in at least one discipline for BS-Art majors and at least two disciplines for BFA majors.
7. To develop a skill set through professional practice experience in the context of an undergraduate art curriculum.

## ADVISING AND CAREERS

## ADVISING

## ART DEPARTMENT ADVISING

Prospective off-campus and on-campus B.S.-Art and BFA-Art majors will meet with the undergraduate art program advisors, Julie Ganser, julie.ganser@wisc.edu, (julie.ganser@wisc.edu) and Branden Martz, branden.martz@wisc.edu, (branden.martz@wisc.edu) located at 6241 Humanities Building, 455 North Park Street. Appointments can be made by calling 608-262-1660. Students are also strongly encouraged to confer with an Education Academic Services advisor on a regular basis, see below.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and
is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff
at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Art can be found on the department's website. (http:// www.education.wisc.edu/art)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## ACCREDITATION

## Accreditation

National Association of Schools of Art and Design (https://nasad.artsaccredit.org)

Accreditation status: Accredited. Next accreditation review: 2025-2026.

## STUDIO ART, CERTIFICATE

The certificate in studio art allows students from across campus, regardless of their major or degree program, to engage in a structured, meaningful art studio experience. The certificate was designed for students who may not have professional ambitions in the arts, but still have an interest in a special discipline and want to develop their talents. The certificate does not require previous coursework in art.

The program provides a course of study in five focus areas: 2D, 3D, 4D (time-based), Graphic Design, or Photography. Students select one of these options and complete the courses required of this area of study. For each option, certificate students complete one course focusing on the historical context of art, two courses that provide a foundation for their chosen area, and two related electives that allow for the exploration and development of their skills.

This certificate may also appeal to individuals who have already completed a bachelor's degree in art, but now want to complete an emphasis in a different discipline, such as graphic design; see the Nondegree/Visiting Student Guide (http://guide.wisc.edu/nondegree). In these instances, the student will work closely with an advisor in the Department of Art to substitute higher level courses for the foundational studio courses.

## HOW TO GET IN

## DECLARATION PROCESS

Students intending to complete the art studio certificate may find the declaration form on the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page. The declaration for this certificate program can be submitted at any time during the academic year.

## ELIGIBILITY

Undergraduate students in good academic standing, with a cumulative GPA of 2.50 or higher, who are not participating in the Art-B.S., Art Education, or Art-BFA degree programs, may declare this certificate. University Special students are also eligible to complete this certificate.

## REQUIREMENTS

The studio art certificate may be completed by any UW-Madison undergraduate student who is not a declared art major.

Select a course of study in one of five focus areas: 2D, 3D, 4D (timebased), Graphic Design, or Photography, and complete the required courses. For each option, certificate students complete one course focusing on the historical context of art, two courses that provide a foundation for their chosen area, and two related electives that allow for the exploration and development of their skills.

The certificate requires a total of 17-18 credits, depending on the selected area. It is possible to complete the certificate in three semesters, making it a viable option for most students, including transfers.

## HISTORICAL CONTEXT OF ART/DESIGN

Students in all certificate focus areas must complete one of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART 100 | Introduction to Art | 3 |
| ART 108 | Foundations of Contemporary Art | 3 |
| ART 208 | Current Directions in Art | 3 |
| ART 438 | History of Graphic Design and <br> Typography 1 <br> ART HIST 206 | Survey of Photography: 1839 to <br> 1989 |

1 If taken prior to summer 2018, this course may count toward either the historical context requirement or toward the studio requirements of the focus area, but not both. Effective summer 2018, it may only count toward the historical context requirement.

## FOCUS AREAS

## FOCUS ONE: PAINTING, DRAWING, PRINTMAKING

Ideal for the novice artist, as well as for students who want to develop previous skill in the creation of two-dimensional art. Students interested in pursuing this focus area can find more information about painting (https://art.wisc.edu/media-disciplines/drawing-painting), drawing, (https://art.wisc.edu/media-disciplines/drawing-painting) and printmaking (http://art.wisc.edu/art/academics/media/printmaking) on the art department's website.

| Painting, Drawing, Printmaking Requirements |  |  |
| :--- | :--- | ---: |
| Code Title | Credits |  |
| Foundations |  |  |
| Complete two of the following: | 3 |  |
| ART 112 | Drawing I | 3 |
| ART 212 | Drawing Methods \& Concepts <br> (preferred) |  |


| or ART 102 | Two-Dimensional Design |  |
| :---: | :---: | :---: |
| Development |  |  |
| Complete two courses. Select two courses from Category A or one from Category A and one from Category B. |  |  |
| Category A |  |  |
| ART 222 | Introduction to Painting | 3-4 |
| ART 232 | Life Drawing I | 4 |
| ART 242 | Watercolor I | 3-4 |
| ART 302 | Color | 4 |
| ART 306 | Relief Printmaking | 3-4 |
| ART 316 | Lithography | 4 |
| ART 326 | Etching | 4 |
| ART 336 | Serigraphy | 3-4 |
| ART 348 | Introduction to Digital Printmaking | 4 |
| ART 448 | Special Topics (2D or printmaking topics) | 1-4 |
| Category B (prerequisites apply to these courses) |  |  |
| ART 322 | Intermediate Painting I | 4 |
| ART 332 | Life Drawing II | 4 |
| ART 342 | Watercolor II | 4 |
| ART 446 | Artists' Books | 4 |
| ART 452 | Intermediate Painting: New Figuration I | 4 |
| ART 506 | Advanced Relief Printmaking | 4 |
| ART 516 | Advanced Lithography | 2-3 |
| ART 526 | Advanced Etching/Intaglio | 4 |
| ART 536 | Advanced Serigraphy | 4 |
| ART 636 | Computer Augmented Printmaking | 4 |

## FOCUS TWO: GRAPHIC DESIGN

Art/design experience is highly recommended for students wishing to complete the graphic design focus area. Interested students can find more information about graphic design and typography (https:// art.wisc.edu/media-disciplines/graphic-design), book arts/letterpress (https://art.wisc.edu/media-disciplines/printmaking), and comics (https://art.wisc.edu/media-disciplines/drawing-painting) on the art department's website.

## Graphic Design Requirements

| Code | Title | Credits |
| :---: | :---: | :---: |
| Foundations |  |  |
| Complete the following: |  |  |
| ART 102 or ART 107 | Two-Dimensional Design (preferred) Introduction to Digital Forms | 3 |
| ART 346 | Basic Graphic Design | 4 |
| Development |  |  |
| Complete two courses. Select two courses from Category A or one from Category A and one from Category B. All courses beyond ART 346 require the consent of instructor. Prerequisites apply. |  |  |
| Category A |  |  |
| ART 438 | History of Graphic Design and Typography ${ }^{1}$ | 3 |
| ART 356 | Intermediate Typography | 4 |


| ART 458 | Graphic Design for Branding and <br> Identity | 4 |
| :--- | :--- | ---: |
| ART 463 | Information Graphics | 4 |
| ART 465 | Graphic Design for Packaging | 4 |
| ART 467 | Graphic Design for Posters | 4 |
| Category B | Graphic Design for Publications | 4 |
| ART 546 | Graphic Design for Interactive <br> ART 556 | Media |
| ART 560 56 | Project and Exhibition |  |
| ART 565 | Typeface Design | 4 |
| ART 568 | Motion Typography | 4 |

1 If taken prior to summer, 2018, this course may count toward either the historical context requirement or toward the studio requirements of the focus area, but not both. Effective summer, 2018, it may only count toward the historical context requirement.

Note: The graphic design focus of this certificate is not intended to fully prepare individuals for a career in the field. Those wanting to pursue graphic design as a future profession should prepare by completing design courses as part of an art degree program-either the B.S.-Art (p. 1416) or BFA-Art. (p. 1423)

## FOCUS THREE: 3D FORMS

Ideal for the novice artist, as well as for students who want to develop previous skill in the creation of three-dimensional art. Students interested in pursuing this focus area can find more information about ceramics (https://art.wisc.edu/media-disciplines/3d), glass and neon (https:// art.wisc.edu/media-disciplines/3d), metals/metalsmithing (https:// art.wisc.edu/media-disciplines/3d), sculpture/installations (https:// art.wisc.edu/media-disciplines/3d), and wood (https://art.wisc.edu/ media-disciplines/3d) on the art department's website.

| 3D Forms Requirements |  |  |
| :--- | :--- | ---: |
| Code | Title |  |
| Foundations |  | Credits |
| Complete the following: |  |  |
| ART 104 | Three-Dimensional Design |  |
| ART 214 | Sculpture I | 3 |
| Development |  | 4 |
| Complete two courses. Select two courses from Category |  |  |
| A or one from Category A and one from Category B. |  |  |
| Category A | Ceramics I |  |
| ART 224 | Art Metal I | 4 |
| ART 244 | Sculpture II | $3-4$ |
| ART 314 | Wood Working | 4 |
| ART 334 | Metal Fabrication and Welding in | $3-4$ |
| ART 343 | Sculpture | $3-4$ |
| ART 354 | Glassworking | 4 |
| Category B (prerequisites apply to these courses) | 4 |  |
| ART 324 | Ceramics II | 4 |
| ART 344 | Art Metal II | 4 |
| ART 414 | Art Foundry | 4 |
| ART 454 | Neon: Light as Sculpture | 4 |


| ART 514 | Advanced Sculpture Workshop 1 | 4 |
| :--- | :--- | ---: |
| ART 521 | Installations and Environments | 4 |
| ART 534 | Advanced Wood Working | 4 |
| ART 544 | Advanced Art Metal I | 4 |
| ART 548 | Special Topics: Advanced Level (art <br> metals) | $1-4$ |
| ART 554 | Advanced Glassworking | 4 |
| ART 614 | Advanced Sculpture Workshop 2 | $3-4$ |

## FOCUS FOUR: 4D-DIGITAL, TIME-BASED, PERFORMATIVE OR SOCIAL PRACTICE

Ideal for the novice artist, as well as for students who want to develop previous skill with new art genres. Students interested in pursuing this focus area can find more information about digital media and animation (https://art.wisc.edu/media-disciplines/4d), (https://art.wisc.edu/ media-disciplines/4d) or performance, video, or social practice (https:// art.wisc.edu/media-disciplines/4d) on the art department's website.

## 4D-Digital, Time-based, Performative or Social Practice Requirements

Code
Title
Credits
Foundations
Complete two of the following:
ART 107 Introduction to Digital Forms 3
ART 318 Introduction to Video, Performance 4
\& Installation Art
or ART 338 Service Learning in Art

## Development

Complete two courses. Select two courses from Category
$A$ or one from Category $A$ and one from Category $B$.
Category A

| ART 309 | Digital Art and Code | 4 |
| :--- | :--- | ---: |
| ART 409 | Digital Fabrication Studio | 4 |
| ART 428 | Digital Imaging Studio | 4 |
| ART 429 | 3D Digital Studio I | 4 |
| ART 470 | Special Topics in 4D Art | $3-4$ |
| ART 511 | Art Performance | $3-4$ |
| ART 518 | Artist's Video | 4 |
| ART 531 | Screen Performance | $3-4$ |
| Category B (prerequisites apply to these courses) |  |  |
| ART 528 | Digital Interactive Studio | 4 |
| ART 529 | 3D Digital Studio II | 4 |
| ART 570 | Advanced Topics in 4D Art | $3-4$ |
| ART 618 | Advanced Artists' Video | 4 |
| ART 660 | Art and Technology | 4 |

## FOCUS FIVE: PHOTOGRAPHY (FILM AND DIGITAL)

Ideal for the novice artist, as well as for students who want to develop previous skill with photography. Students interested in pursuing this focus area can find more information about photography (https:// art.wisc.edu/media-disciplines/printmaking) on the art department's website. ART HIST 206 Survey of Photography: 1839 to 1989 is highly recommended as the historical context course.

| Photography Requirements |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Foundations |  |  |
| Complete the following: |  |  |
| ART 176 | Digital Photography for Non-Art Majors | 4 |
| ART 376 | Photography | 3-4 |
| Development |  |  |
| Complete two of the following: |  |  |
| ART 476 | Intermediate Photography | 4 |
| ART 448 | Special Topics (photography topics only in ART 448 and 548) | 1-4 |
| or ART 548 | Special Topics: Advanced Level |  |
| ART 576 | Advanced Photography | 4 |

## PROGRESS AND COMPLETION REQUIREMENTS

A minimum cumulative GPA of 2.5 must be achieved and maintained across all certificate course work in order to remain in, and successfully complete the certificate. All courses required by the certificate must be taken for a grade; none may be taken on a pass/fail, credit/no credit basis or as an auditor.

At least 12 of the required credits must be completed in residence in the UW-Madison Department of Art. Courses taken in a study abroad program sponsored by UW-Madison do not count toward this residency requirement.

## VERIFICATION OF CERTIFICATE COMPLETION

Submit the certificate completion form (http://www.education.wisc.edu/ soe/academics/undergraduate-students/academic-programs) during the semester that all certificate requirements will be completed. This form starts the administrative process that (1) verifies that the requirements have been completed and (2) posts this information on the student's transcript.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. Correctly identify and explain important eras in historical and contemporary art practice.
2. Develop technical and conceptual skill in studio practice by consistently employing the elements and principles of effective visual art and/or design in their chosen focus area.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Art can be found on the department's website. (http:// www.education.wisc.edu/art)

## CURRICULUM AND INSTRUCTION

The Department of Curriculum and Instruction is one of the premier research and teaching departments devoted to understanding the complex world of teaching, learning, curriculum, and policy. Faculty pursue a diverse array of research combining experience in schools with expertise drawn from a range of disciplinary fields. This world-class research is the foundation of its work preparing future teachers and the next generation of educational researchers.

## DEGREES/MAJORS/CERTIFICATES

Undergraduate programs are offered in the areas listed below. Upon successful completion of their program of study, candidates are certified and eligible for a Wisconsin teaching license obtained through the Wisconsin Department of Public Instruction.

Note: Students at UW-Madison become certified to teach middle and high school English, Mathematics, Science and Social Studies subjects only through graduate-level coursework, not as undergraduates. Information about the master's degree program is available at uwteach.org (http://www.uwteach.org) and the Curriculum and Instruction website. (https://ci.education.wisc.edu) Science certification areas include Biology, Chemistry, Earth and Space Science, Environmental Studies, Physics, and Broad Field Science. UW-Madison offers certification in the Social Studies areas of Economics, Geography, History, Political Science, Psychology, Sociology and Broad Field Social Studies.

- Biology, Minor (p. 1436)
- Chemistry, Minor (p. 1438)
- Chinese, BSE (p. 1438)
- Communication Sciences and Disorders, BSE (p. 1450)
- Earth Science, Minor (p. 1456)
- Economics, Minor (p. 1456)
- Elementary Education, BSE (p. 1457)
- English Language Arts, Minor (p. 1471)
- English, Minor (p. 1474)
- French, BSE (p. 1475)
- French, SED Minor (p. 1486)
- Game Design, Certificate (http://guide.wisc.edu/undergraduate/ education/curriculum-instruction/game-design-certificate)
- Geography, Minor (p. 1487)
- German, BSE (p. 1489)
- German, SED Minor (p. 1500)
- History, Minor (p. 1500)
- Italian, BSE (p. 1505)
- Italian, SED Minor (p. 1517)
- Japanese, BSE (p. 1517)
- Latin, BSE (p. 1528)
- Latin, SED Minor (p. 1539)
- Mathematics and Science Dual, Minor (p. 1539)
- Mathematics Specialized, Minor (p. 1541)
- Mathematics, Minor (p. 1542)
- Physics, Minor (p. 1542)
- Political Science, Minor (p. 1543)
- Portuguese, BSE (p. 1545)
- Portuguese, SED Minor (p. 1557)
- Psychology, Minor (p. 1557)
- Science Specialized, Minor (p. 1558)
- Social Studies, Minor (p. 1558)
- Sociology, Minor (p. 1567)
- Spanish, BSE (p. 1569)
- Spanish, SED Minor (p. 1580)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Curriculum and Instruction can be found on the department's website. (http://ci.education.wisc.edu)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## BIOLOGY, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students may wish to consult with a biology undergraduate advisor (http://biologymajor.wisc.edu/advising) to discuss course selection and other issues related to this field of study. The Biology Major website (http://biologymajor.wisc.edu) is also a good resource, providing information about areas of study within biology and upcoming biologyrelated activities on campus. Biology is offered as a major in both the College of Letters \& Science and the College of Agricultural and Life Sciences.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

The biology minor requires a minimum of 24 credits. A minimum cumulative grade point average of 2.75 is required, based on all biology
minor coursework taken on the UW-Madison campus. Biocore sequence coursework may also be used to meet these requirements; consult with an advisor in Education Academic Services.

Discipline-related course work is also required, but not calculated into the minor credits or gpa.

## REQUIRED DISCIPLINE-RELATED COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select a minimum of 6 credits in Mathematics and/or |  |  |
| Statistics, college level, excluding MATH 120-132 |  |  |
| Select one of the following: | $5-10$ |  |
| CHEM 103 |  | General Chemistry I |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 | Chemical Principles I |  |
| \& CHEM 116 | and Chemical Principles II |  |
| Select one of the following: | 8-10 |  |
| PHYSICS 103 | General Physics |  |
| \& PHYSICS 104 | and General Physics |  |
| PHYSICS 201 | General Physics <br> \& PHYSICS 202 | and General Physics |

## MINOR REQUIREMENTS <br> INTRODUCTORY BIOLOGY. SELECT ONE OF THE FOLLOWING OPTIONS:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Option 1: ${ }^{1}$ |  |  |
| BIOLOGY/ | Animal Biology |  |
| ZOOLOGY 101 |  |  |
| BIOLOGY/  <br> ZOOLOGY 102 Animal Biology Laboratory | 2 |  |
| BIOLOGY/  <br> BOTANY 130 General Botany | 5 |  |

Option 2:
BIOLOGY/BOTANY/ Introductory Biology 5
ZOOLOGY 151
BIOLOGY/BOTANY/ Introductory Biology 5
ZOOLOGY 152
1 Students earning Advanced Placement (AP) or International Baccalaureate (IB) Biology scores of 4 or above are given credit for BIOLOGY/BOTANY/ZOOLOGY 151 at UW-Madison. This course fulfills the entire 151-152 sequence. Students taking BIOLOGY/ BOTANY/ZOOLOGY 151 coursework at UW-Madison or transfer it from another campus must complete both BIOLOGY/BOTANY/ ZOOLOGY 151 and BIOLOGY/BOTANY/ZOOLOGY 152 to complete the 151-152 sequence.

## GENETICS

## ELECTIVES

Complete biology elective coursework from the approved lists to reach a minimum of 24 credits. The courses must be numbered 300 and above and include at least one course from two of the following three areas:
(1) Ecology, Evolution, Genetics, (2) Cell and Molecular Biology, and (3) Physiology. Additional courses may, with the consent of an advisor, be selected to meet the elective requirements.

| Area 1: Ecolog | Evolution/Genetics |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| BOTANY 300 | Plant Anatomy ${ }^{1}$ | 4 |
| BOTANY 305 | Plant Morphology and Evolution ${ }^{1}$ | 4 |
| BOTANY 330 | Algae | 3 |
| BOTANY/ <br> PLPATH 332 | Fungi ${ }^{1}$ | 4 |
| BOTANY 400 | Plant Systematics ${ }^{1}$ | 4 |
| BOTANY 401 | Vascular Flora of Wisconsin ${ }^{1}$ | 4 |
| BOTANY/ <br> F\&W ECOL 402 | Dendrology ${ }^{1}$ | 2 |
| BOTANY 403 | Field Collections and Identification ${ }^{1}$ | 1-4 |
| BOTANY 422 | Plant Geography | 3 |
| BOTANY/ <br> F\&W ECOL 455 | The Vegetation of Wisconsin ${ }^{1}$ | 4 |
| BOTANY/F\&W ECOL/ ZOOLOGY 460 | General Ecology ${ }^{1}$ | 4 |
| BOTANY/GENETICS/ HORT 561 | Introductory Cytogenetics | 2-3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENTOM } 302 \end{aligned}$ | Introduction to Entomology ${ }^{1}$ | 4 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENVIR ST } 315 \end{aligned}$ | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources 1 | 2-3 |
| ```ZOOLOGY/ENTOM/ M M & I/PATH- BIO 350``` | Parasitology | 3 |
| ZOOLOGY/M M \& I/ PATH-BIO 351 | Parasitology Laboratory ${ }^{1}$ | 2 |
| ZOOLOGY/ENVIR ST/ <br> F\&W ECOL 360 | Extinction of Species | 3 |
| ZOOLOGY/ANTHRO/ BOTANY 410 | Evolutionary Biology | 3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates | 5 |
| ZOOLOGY/BOTANY/ <br> F\&W ECOL 460 | General Ecology ${ }^{1}$ | 4 |
| ZOOLOGY/ <br> ENVIR ST 510 | Ecology of Fishes | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENVIR ST } 511 \end{aligned}$ | Ecology of Fishes Lab ${ }^{1}$ | 2 |
| ZOOLOGY/AN SCI/ <br> F\&W ECOL 520 | Ornithology | 3 |
| $\begin{aligned} & \text { ZOOLOGY/AN SCI/ } \\ & \text { F\&W ECOL } 521 \end{aligned}$ | Birds of Southern Wisconsin ${ }^{1}$ | 3 |


| ZOOLOGY 525 | Tropical Herpetology | 1 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { ENTOM } 530 \end{aligned}$ | Insect Behavior | 3 |
| ZOOLOGY/ <br> GENETICS/ <br> MD GENET 562 | Human Cytogenetics | 2 |
| MICROBIO/ GENETICS 607 | Advanced Microbial Genetics | 3 |
| ENTOM 331 | Taxonomy of Mature Insects ${ }^{1}$ | 4 |
| ENTOM 342 | Insect Ecology | 3 |
| ENTOM 468 | Studies in Field Entomology ${ }^{1}$ | 3 |
| ENTOM/ <br> ZOOLOGY 530 | Insect Behavior | 3 |
| GENETICS/BOTANY/ HORT 561 | Introductory Cytogenetics | 2-3 |
| GENETICS/ MD GENET 565 | Human Genetics | 3 |
| GENETICS/ <br> AN SCI 610 | Quantitative Genetics | 3 |
| GENETICS/ <br> BIOCHEM/ <br> MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| GENETICS/ <br> BIOCHEM/ <br> MD GENET 620 | Eukaryotic Molecular Biology | 3 |
| HORT/ AGRONOMY 501 | Principles of Plant Breeding | 3 |
| HORT/BOTANY/ GENETICS 561 | Introductory Cytogenetics | 2-3 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology ${ }^{1}$ | 3 |
| PL PATH 300 | Introduction to Plant Pathology ${ }^{1}$ | 4 |
| 1 Courses are lab or | field courses. |  |
| Area 2: Cell and | Molecular Biology |  |
| Code | Title | Credits |
| MICROBIO 303 | Biology of Microorganisms | 3 |
| MICROBIO/M M \& I/ PATH-BIO 528 | Immunology | 3 |
| MICROBIO/ GENETICS 607 | Advanced Microbial Genetics | 3 |
| MICROBIO/ <br> ONCOLOGY/ <br> PL PATH 640 | General Virology-Multiplication of Viruses | 3 |
| BOTANY/GENETICS/ HORT 561 | Introductory Cytogenetics | 2-3 |
| BOTANY 563 | Phylogenetic Analysis of Molecular Data | 3 |
| GENETICS/ <br> MD GENET/ ZOOLOGY 562 | Human Cytogenetics | 2 |
| GENETICS/ <br> BIOCHEM/ <br> MICROBIO 612 | Prokaryotic Molecular Biology | 3 |
| ZOOLOGY 430 | Comparative Anatomy of Vertebrates | 5 |


| ZOOLOGY 570 | Cell Biology | 3 |
| :---: | :---: | :---: |
| Area 3: Physiology |  |  |
| Code | Title | Credits |
| BOTANY 500 | Plant Physiology | 3-4 |
| ZOOLOGY 611 | Comparative and Evolutionary Physiology | 3 |
| ZOOLOGY 612 | Comparative Physiology Laboratory 1 | 2 |
| ANAT\&PHY 335 | Physiology ${ }^{1}$ | 5 |

## CHEMISTRY, MINOR

The chemistry minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of Chemistry is housed in the College of Letters \& Science. Students may wish to consult with a chemistry undergraduate advisor (http://www.chem.wisc.edu/content/ undergraduate-advising) to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

## CHEMISTRY MINOR PREREQUISITES

Note that students must complete prerequisite coursework before enrolling in some courses required for the minor. For example, MATH 222 Calculus and Analytic Geometry 2 and PHYSICS 201 General Physics or PHYSICS 207 General Physics must be completed before taking CHEM 561 Physical Chemistry. Prerequisite coursework may be used to meet liberal studies requirements.

## CHEMISTRY MINOR REQUIREMENTS

A minimum cumulative grade point average of 2.75 is required, based on all chemistry minor coursework taken on the UW-Madison campus.

Complete at least 22 credits, including the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Introductory Chemistry |  |  |
| Select one of the following: |  |  |
| CHEM 103 |  | General Chemistry I |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 |  | Chemical Principles I |
| Analytical Chemistry |  |  |


| Select one of the following: |  | 4-5 |
| :---: | :---: | :---: |
| CHEM 327 | Fundamentals of Analytical Science |  |
| CHEM 329 | Fundamentals of Analytical Science |  |
| CHEM 116 <br> \& CHEM 115 | Chemical Principles II and Chemical Principles I |  |
| Organic Chemistry |  |  |
| Select one of the following options: |  | 7-8 |
| Option 1: |  |  |
| CHEM 341 | Elementary Organic Chemistry |  |
| CHEM 342 | Elementary Organic Chemistry <br> Laboratory |  |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| Option 2: |  |  |
| CHEM 343 | Introductory Organic Chemistry |  |
| CHEM 344 | Introductory Organic Chemistry Laboratory |  |
| CHEM 345 | Intermediate Organic Chemistry |  |
| Inorganic Chemistry |  | 4 |
| CHEM 311 | Chemistry Across the Periodic Table |  |
| Physical Chemistry |  | 3 |
| CHEM 561 or CHEM 565 | Physical Chemistry <br> Biophysical Chemistry |  |
| Electives |  |  |
| Complete Chemistry electives to total 22 credits ${ }^{1}$ |  |  |
| 1 CHEM 346 Interm recommended. BI CIV ENGR 500 Wa Materials, CBE 54 recommended ele | ediate Organic Chemistry Laboratory is OCHEM 501 Introduction to Biochemistry, ter Chemistry, CBE 440 Chemical Engineering 0 Polymer Science and Technology, are also ctive options. |  |

## CHINESE, BSE

WORLD LANGUAGE EDUCATION PROGRAM (CURRENTLY CHINESE, FRENCH, GERMAN, JAPANESE, LATIN, AND SPANISH MAJORS)
The mission of the World Language Education (WLE) program is (1) to promote a community-based approach to world language instruction; (2) to educate teachers who understand different cultures, are proficient in their languages, routinely visit other countries, and can build bridges across nations, races, socioeconomic groups, cultures, and languages; and (3) to certify teachers who are prepared to serve the global needs of increasingly multicultural and multilingual schools and are strongly committed to act for a world in which shared understanding through conflict resolution, negotiation and communication are guiding principles.

There is a growing need for multilingual teachers from diverse backgrounds. The WLE faculty encourages qualified applicants from under-represented groups to apply for admission to the program. The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

The objectives of the $\mathrm{K}-12$ WLE program are

- to provide a philosophy of action designed to promote thoughtful curriculum development and classroom teaching in WLE;
- to provide regular contacts with the global community and inservice teachers in schools through field evenings, workshops, conferences, and other professional meetings;
- to provide clinical settings which enhance opportunities for beginning teachers to develop skillful practice and build bridges across languages, cultures, races, and nationalities;
- to help student teachers use multilingual educational technologies and document their experiences in electronic portfolios and implement research-based practices in their teaching;
- to provide university instructors and supervisors who are wellversed in WLE, who have an international orientation, and who are both approachable and helpful to student teachers.

Program majors include Chinese, French, German, Japanese, Latin, and Spanish, and may also include Italian and Portuguese if field placements are available in these subject areas. Completion of the WLE program leads to a bachelor of science degree in education with a major in the specific subject area. Wisconsin state licensing regulations require that students are licensed to teach at the early childhood through adolescence (approximately kindergarten through high school) levels.

Oral and written examinations are required for all world language teacher candidates enrolled in Wisconsin educator preparation programs, as is an extensive immersion experience. (Students becoming certified to teach Latin are exempt from both the Oral Proficiency Exam and immersion experience requirement.)

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the World Language Education program once a year, effective in the fall. Selection is made the previous spring.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in World Language Education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in World Language Education receive the pre-professional classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1440)). It is not necessary to be a pre-professional student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education

Academic Services (EAS), 139 Education Building, 1000 Bascom Mall; call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## NATIVE AND HERITAGE SPEAKERS

Native or heritage speakers of a language major offered within the World Language Education program are welcome to pursue admission to the World Language Education program. Prospective applicants and transfer students who have previous experience with a language are encouraged to consult with an advisor in Education Academic Services as early as possible; to schedule, call 608-262-1651.

Native or heritage speakers must take a placement exam in the corresponding language to determine the appropriate level of remaining instruction in grammar, communication standards and social customs, and other topics related to language acquisition and proficiency. Placement examinations for Spanish, French, and German are offered on campus through Testing \& Evaluation Services or the University of Wisconsin System's Regional Placement Testing Program. Placement examinations for Chinese, Japanese, Italian, Latin, and Portuguese are administered by faculty or staff within the relevant academic department. For more information regarding placement in language courses, consult the Languages at UW-Madison placement guide (http:// languages.wisc.edu/advising/placement).

## APPLICATION AND ADMISSION

Applicants to the World Language Education program will be selected once a year, during the spring semester. Admission decisions will be based on coursework completed through the preceding fall semester.

Admission is provisional until spring semester work has been completed and posted, and Education Academic Services staff have verified that students have met minimum grade point averages and earned minimum credits in their major. Admitted students will begin the sequence the following fall semester.

Resources limit the number of students who can be served by the UWMadison World Language Education teacher education program. In recent years the World Language Education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to World Language Education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## ELIGIBILITY FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be considered for admission, students must:

- earn 54 or more transferable semester credits (junior standing) by the end of the spring semester of the application year.
- complete all but six credits of the relevant World Language major.
- earn a minimum 2.75 grade point average on all major coursework completed.
- earn a cumulative GPA of at least 2.75 (on a 4.00 scale). ${ }^{1}$
- have completed, or be in the process of completing, an approved Immersion Experience required for the World Language Education degree program.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

1 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established
by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## APPLYING FOR CERTIFICATION IN MORE THAN ONE SUBJECT AREA

Students may apply to be certified in more than one language. Eligibility requirements must be met and separate applications must be filed for each area of interest. Students must be admitted as a major in at least one of the program areas as it is not possible to be admitted only to complete a minor.

Students interested in combining the World Language Education degree program with certification in another area altogether must apply to both programs and meet the minimum criteria for admission to each program. It is suggested that students apply as majors in each area of interest, thus maximizing the chances of admission. Certification in two different areas requires the consent and cooperation of the World Language Education program coordinator and the faculty coordinator of the other subject area. Not all subjects can be combined with the World Language Education degree program.

While multiple majors or major-minor combinations are feasible and may be advantageous as a career strategy, it may take extra time to complete the additional subject area coursework. Students are encouraged to work closely with their Education Academic Services advisor to assess the possibility of completing certification in more than one area and to coordinate the requirements of multiple certifications.

## PROGRAM ADMISSION SELECTION CRITERIA

The files of all applicants will be individually and holistically reviewed by a panel of World Language professionals. The criteria used for admission include the following:

- Academic Qualifications: The applicant demonstrates mastery of the target language and knowledge of its literature, civilization, and culture.
- Career Maturity: The applicant demonstrates commitment to teaching the target language to elementary, middle, and high school students, including consideration of his or her own strengths and limitations as a potential teacher.
- Ability to Relate to Youth: The applicant demonstrates the ability to work effectively with young people.
- Commitment to All Students: The applicant demonstrates commitment to working with all students including those of different racial, ethnic, and socioeconomic backgrounds, and students with disabilities, not just the economically privileged or highly motivated.
- Interpersonal Skills: The applicant demonstrates the ability to work effectively with peers, other professionals, and members of the community outside of school settings.

The application files, including immersion experiences and oral proficiency, are rated according to the above criteria for each language. A final cohort is selected along with rank-ordered alternates, based on a combination of ratings made by the World Language Education review committee and judgement by the faculty program coordinator about optimal cohort characteristics for each language. The availability of field placements in the subject area may also influence the selection process. Admission procedures are reviewed every other year to ensure fairness and effectiveness.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

This program has five components

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Prerequisite coursework prepares students for work in the major. Program applicants must also complete and document an immersion experience as a prerequisite to being admitted to the professional program.
- Major coursework offers in-depth study of the subject students will teach.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a four-semester sequence of world language teaching methods course work and field experiences in schools.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

The four semesters of professional coursework are followed sequentially and taken in consecutive semesters. Because of the program structure, students are expected to have completed most of their major and liberal studies coursework by the start of the professional sequence.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education
program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits. PREREQUISITE COURSEWORK

Students must be at a fifth semester level of Chinese or demonstrate a proficiency level equivalent to E ASIAN 202 Fourth Semester Chinese in order to complete the major requirements. If not at that level, the following courses should be taken. Prerequisite courses do not count toward major credits.

| Code | Title | Credits |
| :--- | :--- | ---: |
| E ASIAN 101 | First Semester Chinese | 6 |
| E ASIAN 102 | Second Semester Chinese | 6 |
| E ASIAN 201 | Third Semester Chinese | 6 |
| E ASIAN 202 | Fourth Semester Chinese | 6 |

## MAJOR REQUIREMENTS

Complete a minimum of 36 credits. At least 15 credits of upperlevel major coursework (courses numbered 220 and above) must be completed in residence at UW-Madison to meet the major residency requirement.

## Code

Title
Credits
Required Courses
E ASIAN 301
Fifth Semester Chinese

| E ASIAN 302 | Sixth Semester Chinese | 4 |
| :--- | :--- | ---: |
| E ASIAN 321 | First Year Classical Chinese | 4 |
| E ASIAN 333 | Chinese Conversation | 3 |
| E ASIAN 351 | Survey of Chinese Literature | 3 |
| E ASIAN 352 | Survey of Chinese Literature | 3 |
| E ASIAN 431 | Introduction to Chinese Linguistics | 3 |
| HISTORY/ | Introduction to East Asian History: | $3-4$ |
| E A STDS 103 | China |  |

Select from the following to reach 36 credits:

| E ASIAN 401 | Seventh Semester Chinese |
| :--- | :--- |
| E ASIAN 402 | Eighth Semester Chinese |
| E ASIAN 432 | Introduction to Chinese Linguistics |

## ORAL AND WRITTEN PROFICIENCY EXAMS

## ABOUT THE ORAL AND WRITTEN PROFICIENCY EXAMS

Students admitted to the World Language Education program must provide evidence of having earned at least an Intermediate High score on an American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI). Latin Education students are exempt from this requirement, see below.

The interview must be taken prior to beginning the first student teaching experience (second semester of the professional sequence). Students should be aware that it may take as long as three months to obtain results, and factor this delay into the scheduling of the OPI. If the score of Intermediate High is not made after the first examination, a student will be asked to take measures to improve their spoken language proficiency before continuing in the program. The student must repeat the OPI and achieve the required Intermediate High proficiency level.

All students in World Language Education (except Latin Education), are also required to complete the Writing Proficiency Test (WPT) no later than the third semester in the program. It is recommended that students take the test during the second semester of the professional sequence. A proficiency level of Intermediate High is also required for this examination. Students must take and pass the WPT in their program area and the scores must be received by Education Academic Services before beginning the final student teaching semester. Students who do not take and pass the exam will not be permitted to student teach. The WPT meets the Department of Public Instruction's content exam requirement, a requirement usually met by taking the appropriate Praxis II test.

Both the Oral Proficiency Interview and the Writing Proficiency Test are administered by Language Testing International (LTI) (http:// www.languagetesting.com). Their address is LTI, 3 Barker Avenue, Suite 310, White Plains, NY 10601; 800-486-8444. Students are responsible for costs associated with the OPI and the WPT.

Students seeking Latin certification will be required to take a proficiency exam administered by the Department of Classical and Ancient Near Eastern Studies prior to beginning the first student teaching experience (second semester of the professional sequence). This exam will take the place of the OPI and WPT required for certification in other languages.

See the World Language Education faculty program coordinator with questions about these requirements.

## IMMERSION EXPERIENCE

## ABOUT THE IMMERSION EXPERIENCE

Participation in an intensive immersion experience is one of the most important and meaningful ways of developing competence in a language. In preparation for the proficiency exams, students seeking certification in a language must participate in an approved immersion experience which emphasizes prolonged and intensive interaction within the target language and culture.

Program applicants completing French, German, and Spanish majors must complete and document a full-semester (or minimum four-monthlong) immersion experience as a prerequisite to being admitted to the professional program. Students completing majors in Chinese and Japanese must spend at least one academic year living in China or Japan, respectively-also a prerequisite to being admitted to the professional program.

The immersion experience must be completed by July 15 preceding the program start. The experience must also have been completed no more than three years before this date.

An approved experience involves significant interaction and day-to-day functioning in the host language, including use of the target language on a daily basis such as in college-level courses, a training program, or a work experience. The immersion experience need not involve attendance in an academic program only, but may take some form such that the language of routine communication is the target language. Simply living with relatives or traveling as a tourist is not considered an immersion experience for the purposes of admission to this program. Most students choose to participate in a structured educational or exchange immersion program.

Students should consult with the International Academic Programs (IAP) (http://www.studyabroad.wisc.edu) office, 106 Red Gym, regarding campus-based study abroad programs. These experiences need not receive prior approval. Experiences through off-campus programs must have prior approval of the World Language Education faculty program coordinator. To obtain prior immersion experience approval, download and complete the approval form (http://www.education.wisc.edu/soe/ academics/undergraduate-students/forms), meet with the faculty coordinator, and obtain authorization. Bring two copies of the form to your meeting, obtain signatures on both, and leave one copy with the coordinator.

Native speakers are normally considered to have fulfilled this requirement without further documentation, especially if they received their secondary education in an environment where the target language is the primary means of communication. Heritage speakers are usually considered to have fulfilled this requirement; applicants must consult with the program coordinator about this requirement.

## PROFESSIONAL EDUCATION REQUIREMENTS (PROFESSIONAL SEQUENCE)

## ABOUT THE PROFESSIONAL SEQUENCE

The professional program is typically a full-time, four-semester sequence of education courses and school-based field experiences. The four semesters of required professional coursework must be followed sequentially and taken in consecutive semesters. Students must enroll in
all required coursework outlined in each semester of the program, even if similar coursework was taken at another institution. Students begin the professional sequence in the fall.

It is expected that almost all major and liberal studies coursework be completed by the start of the professional sequence; completion of the entire major is preferred. The structure of the sequence allows very little time to pursue remaining coursework in these areas. Many students elect to finish their remaining requirements during the summer, or after the sequence has been completed. In addition, ACTFL OPI certification of speaking ability in the language rated Intermediate High or above is required by the end of the first semester in the program. Students must also complete the Writing Proficiency Test (WPT) no later than their third semester in the program. A rating of Intermediate High or above must be earned before a student is allowed to participate in the final student teaching semester. See further information under Oral and Written Proficiency Exams.

Students admitted to two areas of language certification follow the same four-semester sequence as single certification students; consult with the World Language Education program coordinator to arrange sequence requirements.

The professional program is a full-time commitment and places heavy demands on students' time and energy. The professional sequence is particularly taxing for students completing certification in two subject areas. Students must make satisfactory progress in their program to continue. This professional judgment is made by the faculty program coordinator in consultation with cooperating teachers and supervisors.

## PROFESSIONAL SEQUENCE COURSE REQUIREMENTS

Complete all of the courses listed below. Required courses must be taken during the semester listed. Other courses may be taken at any time, including summer, but a suggested course sequence is provided.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| Required Courses |  |  |
| CURRIC 342 | Teaching World Languages (K-8) | 3 |
| CURRIC 243 | Practicum in World Languages $(\mathrm{K}-12)^{1}$ | 3 |
| Other Courses |  |  |
| ED POL 300 <br> or ED POL/ HISTORY 412 | School and Society <br> History of American Education | 3 |
| CURRIC/ RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| ED PSYCH 301 | How People Learn | 3 |
| Semester 2 |  |  |
| Required Courses |  |  |
| CURRIC 442 | Student Teaching in World Languages (K-8) ${ }^{2}$ | 6 |
| or CURRIC 443 | Student Teaching in World Languages (6-12) |  |
| Other Courses |  |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence | 3 |
| Semester 3 |  |  |
| Required Courses |  |  |
| CURRIC 343 | Teaching World Languages (6-12) | 3 |

## CURRIC 443

Student Teaching in World Languages (6-12) ${ }^{3}$
or CURRIC 442 Student Teaching in World Languages (K-8)

## Other Courses

CURRIC 305
Integrating the Teaching of Reading
with Other Language Arts

## Semester 4

Required Courses
CURRIC 443

## CURRIC 564

Student Teaching in World Languages (6-12) ${ }^{4}$

## Advanced Problems on the

Teaching of World Languages

1
The practicum will take place three days a week; placement will probably be at the elementary level. Fieldwork this semester is a halftime commitment and encompasses an entire semester based on the UW-Madison calendar. Placements are made within a 50 -mile field experiences service area and may not necessarily be in the city of Madison.
2
Placement will probably be at the elementary level, three days a week. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the UW-Madison calendar.
3
Placement will probably be at the middle school level. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the school district calendar. (Fall semester extends from late August through mid-January; spring semester extends from mid-January through early mid-June.)
4
Student teaching this semester is a full-time commitment and will be at the high school level. Fieldwork this semester encompasses an entire semester based on the school district calendar.

## ELECTIVE COURSEWORK

Complete additional courses as necessary to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level major coursework
- 2.75 cumulative grade point average in all professional education coursework
- Degree candidates must complete at least 120 total credits.
- No more than 40 credits from a single academic department may be applied toward the 120 minimum credits required for graduation.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $K-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure (p. ).

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study <br> Abroad/Study Away programs. |
| :--- | :--- |
| Quality of | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. <br> Work |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |  |

## LEARNING OUTCOMES

1. In Semester 1, prior to starting student teaching, students must have acquired Intermediate High proficiency in their target language on the ACTFL OPI scale as measured by two independent external evaluators.
2. In Year 1, student teachers must demonstrate the ability to teach in a K-8 context, as evaluated by their University supervisor and their mentor teacher through repeated direct observations.
3. During their content courses, students must meet (a) teacher education standards; and (b) ACTFL standards, as measured by (a) formative and summative evaluation of their assignments; (b) Teacher Education portfolio.
4. In Year 2, student teachers must demonstrate the ability to teach in a 6-12 school context, as evaluated by their University supervisor and their cooperating teacher through repeated direct observations.
5. To get certified by the Department of Public Instruction, at the end of Year 2, student teachers must have successfully completed an EdTPA Portfolio of their classroom experiences that demonstrates professionalism and meets the EdTPA standards, as evaluated by external evaluators.

## ADVISING AND CAREERS

## CHINESE EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Chinese, and with Professor Hongming Zhang, 1112 Van Hise Hall, 262-2004, hzhang6@facstaff.wisc.edu, regarding coursework in the major.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors
provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http://
ci.education.wisc.edu) and Asian Languages and Cultures (http:// alc.wisc.edu) department websites.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ | Atmospheric Environment and | 2 |
| GEOG 121 | Society |  |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along
with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, 3-5 lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's
role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

Withdrawing From/Failing Field Experience Assignments Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a " $D$ ") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of
teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## COMMUNICATION SCIENCES AND DISORDERS, BSE

## OVERVIEW

The major in communication sciences and disorders provides students with opportunities for study in the areas of speech-language pathology, audiology, and the normal aspects of speech, hearing, and language. Most students pursue this major because they hope to work as a licensed and certified clinical speech-language pathologist or audiologist, assisting clients with communication impairments arising from acquired neurological conditions, developmental conditions, genetic conditions, or unknown causes. Professional clinical practice follows completion of a master's degree in speech-language pathology, or a doctor of audiology degree. Some students pursue the undergraduate major as a foundation for a research career in speech, language or hearing sciences. Others pursue the major as a preliminary step toward advanced training in other professional fields (e.g., medicine, nursing, special education), or as a liberal arts degree that could lead to a variety of different career paths (speech-language pathology assistant, educational assistant, line therapist).

The major in communication sciences and disorders can be completed through the College of Letters \& Science, or through the School of Education. Students select one program to follow, and should be aware that the two programs differ somewhat in their requirements. Moreover, each program (L\&S and Education) has its own general liberal studies requirements. Students should plan to complete many of these general requirements as well as some courses in communication sciences and disorders during their first and second years on this campus.

The department is accredited in speech-language pathology and in audiology by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA). Therefore, academic courses and clinical practica in the Department of Communication Sciences and Disorders may be applied toward clinical certification by ASHA (speech language pathology or audiology), and toward state licensure.

Students must consult with an undergraduate advisor in the Department of Communication Sciences and Disorders (Goodnight Hall, 1975 Willow Drive) as soon as a decision has been made to major in this field. Course sequencing in the major is not flexible-certain courses are prerequisites to others and many courses are offered only once a year. CS\&D advising services are focused on students who need to declare the major or who have already declared CS\&D and need advising in the major. Please visit the department's website (https://csd.wisc.edu/undergraduate.htm) for details on weekly advising sessions.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

The School of Education's communication sciences and disorders program currently accepts students during both fall and spring semesters. Prospective applicants typically begin taking the three-course "gateway course" sequence (detailed below) as sophomores.

## ENTERING THE SCHOOL OF EDUCATION ADMISSION TO THE SCHOOL OF EDUCATION AS A "PRE-PROFESSIONAL" STUDENT

New freshmen and transfer students interested in communication sciences and disorders are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in communication sciences and disorders receive the "pre-professional" classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1451)). It is not necessary to be a "pre-professional" student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall. Students may call 608-262-1651 to schedule an appointment with an advisor.

## TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

The communication sciences and disorders degree program currently accepts students during both fall and spring semesters. Requirements and selection criteria may be modified from one application/admission period to the next.

## CRITERIA FOR PROGRAM ADMISSION

## Eligibility for consideration requires:

- Fifty-four (54) or more transferable semester credits (junior standing) completed by the end of the semester prior to admission. Students can first apply during the semester that they will be completing 54 or more credits.
- A cumulative grade-point average of at least a 2.75 (on a 4.0 scale) based on all college-level coursework attempted (as modified by the Last 60 Credits Rule; see below). Grade-point averages are calculated from both Madison campus coursework and coursework taken at any other colleges or universities. ${ }^{1}$
- Completion of the "gateway courses," CS\&D 201 Speech Science ( 3 cr ), CS\&D 202 Normal Aspects of Hearing ( 3 cr ), and CS\&D 240 Language Development in Children and Adolescents ( 3 cr ). If any "gateway" courses were taken on another campus, then the first three Communication Sciences and Disorders courses taken at UW-Madison become the "gateway" courses.
- A minimum 3.0 GPA across CS\&D 201, CS\&D 202, and CS\&D 240 the first time these courses are attempted. If any "gateway" course was taken on another campus, students must earn a minimum 3.0 GPA on the first three communication and sciences disorders courses taken at UW-Madison. Note that "gateway" courses may not be repeated for the purpose of raising the student's "gateway" course GPA.
- A cumulative GPA of at least a 3.0 on all major coursework completed to date, excluding CS\&D 110 Introduction to Communicative Disorders.
- Completed program application (see details below).
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## APPLICATION PROCEDURES

Submit completed program application form(s), transcripts, and all other related application materials specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page. Official transcripts from all other colleges or universities attended are required. Applications cannot be processed unless a complete academic record is presented for consideration.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on students prior to the start of in-classroom field work. Admitted applicants who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

Results of criminal background checks may be shared with other agencies when required by state code, or with a cooperating school or other agency in which the student has been assigned to complete field experiences. Criminal background checks may also be run on students by school districts. Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. Field site administrators have the right to determine the appropriateness of a student placement.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The School of Education's bachelor of science degree in communication sciences and disorders is one path toward eventual clinical practice, though a graduate degree is required for licensure. Thus, students must plan on graduate studies if they intend to pursue Wisconsin State licensure. Not all students eligible for admission to the undergraduate degree program can be accepted to the master's degree program on this campus. Many students obtain their undergraduate degrees from UWMadison and complete their master's degree and licensing requirements at another institution.

The School of Education undergraduate degree provides students with a conceptual background in the field of communication sciences and disorders and includes five categories of coursework:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Major coursework offers in-depth study of foundations for clinical practice.
- Discipline-related coursework supports the major coursework.
- Education coursework examines many aspects of the educational enterprise, including child development and learning, societal expectations of schools and instruction, and teaching methods.
- Elective coursework is taken to meet the minimum of 120 credits required for the degree.

The School of Education's bachelor of science degree in communication sciences and disorders is one path toward eventual clinical practice, though a graduate degree is required for licensure. Thus, students must plan on graduate studies if they intend to pursue Wisconsin State licensure. Not all students eligible for admission to the undergraduate degree program can be accepted to the master's degree program on this campus. Many students obtain their undergraduate degrees from UWMadison and complete their master's degree and licensing requirements at another institution.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science,
and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits. MAJOR REQUIREMENTS

Complete all the courses listed below. At least 15 credits of upper-level major coursework (courses number 300-699) must be taken in residence on the UW-Madison campus for graduation.

Students must complete the three "gateway" courses-CS\&D 201, CS\&D 202, and CS\&D 240-to be eligible for admission. Prospective applicants typically begin taking the three-course "gateway" sequence as sophomores. A grade point average of 3.0 or better must also be earned across these three courses the first time these courses are attempted.
Code
CS\&D 201

Title
Speech Science

Credits
3

| CS\&D 202 | Normal Aspects of Hearing | 3 |
| :--- | :--- | :---: |
| CS\&D 210 | Neural Basis of Communication | 3 |
| CS\&D 240 | Language Development in Children <br> and Adolescents | 3 |
| CS\&D 303 | Speech Acoustics and Perception <br> CS\&D 315 | Phonetics and Phonological <br> Development |
| CS\&D 318 | Voice, Craniofacial and Fluency <br> Disorders | 3 |
| CS\&D 320 | Introduction to Audiology | 3 |
| CS\&D 371 | Pre-Clinical Observation of Children <br> and Adults | 3 |
| CS\&D 425 | Auditory Rehabilitation |  |
| CS\&D 440 | Child Language Disorders, <br> Assessment and Intervention | 3 |

## DISCIPLINE-RELATED COURSEWORK

The communication sciences and disorders program requires both major and related coursework. Related coursework is mandatory, but not considered part of the major or calculated into the major grade point average. This coursework may be used to satisfy Liberal Studies requirements, if appropriate.

| Code <br> Required Course | Title | Credits |
| :--- | :--- | ---: |
| RP \& SE 300 | Individuals with Disabilities <br> Select a statistics course; the following are <br> recommended: | $3-4$ |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT 311 | Introduction to Theory and Methods <br> of Mathematical Statistics I |  |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |  |
| PSYCH 210 | Basic Statistics for Psychology |  |
| SOC/ | Statistics for Sociologists I |  |
| C\&E SOC 360 | Statistical Methods Applied to <br> ED PSYCH 760 |  |

## Humanities

Select one of the following:

| ENGL 314 | Structure of English |
| :--- | :--- |
| ENGL 316 | English Language Variation in the |
|  | U.S. |
| LINGUIS 101 | Human Language |
| LINGUIS/ | Introduction to Linguistics: |
| ANTHRO 301 | Descriptive and Theoretical |

Ethnic Studies
Select one of the following:

| ANTHRO 104 | Cultural Anthropology and Human <br> Diversity |
| :--- | :--- |
| ASIAN AM 101 | Introduction to Asian American <br> Studies |
| CHICLA 201 | Introduction to Chicana/o and <br> Latina/o Studies |
| SOC 134 | Problems of American Racial and <br> Ethnic Minorities |


| $\begin{aligned} & \text { SOC/ } \\ & \text { ASIAN AM } 220 \end{aligned}$ | Ethnic Movements in the United States |  |
| :---: | :---: | :---: |
| Science |  | 3-4 |
| Select one of the following: |  |  |
| ANTHRO 105 | Principles of Biological Anthropology |  |
| PHYSICS 103 | General Physics |  |
| PHYSICS 109 | Physics in the Arts |  |
| GEN\&WS 103 | Women and Their Bodies in Health and Disease |  |
| $\begin{aligned} & \text { BIOLOGY/ } \\ & \text { ZOOLOGY } 101 \end{aligned}$ | Animal Biology |  |
| EDUCATION COURSEWORK |  |  |

Code Title Credits
Development 3

Select one of the following (minimum 3 credits):

| ED PSYCH 320 | Human Development in Infancy and <br> Childhood |
| :---: | :--- |
| ED PSYCH 321 | Human Development in <br> Adolescence |
| PSYCH 460 | Child Development (Effective fall, <br> 2017, Psych 560 was changed to <br> $460)$ |
| Learning | How People Learn (minimum 3 <br> credits) |

Educational Policy Studies
ED POL $300 \quad$ School and Society (minimum 3

Literacy, including Reading

| CURRIC 305 | Integrating the Teaching of Reading <br> with Other Language Arts | 3 |
| :--- | :--- | :--- |

Additional Education Coursework 3

Select 3 credits in School of Education electives. Required School of Education courses may not be applied toward this requirement.

## 3

## ELECTIVE COURSEWORK

Select additional coursework to reach the minimum of 120 credits.

## GPA AND OTHER GRADUATION REQUIREMENTS <br> GRADUATION REQUIREMENTS

Requirements below are based on UW-Madison coursework.

- 2.75 minimum cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level (300-699) major coursework
- 2.75 cumulative grade point average in all education coursework
- Major Residency. Degree candidates must complete at least 15 credits of upper-level major coursework (300-699) in residence on the UW-Madison campus.
- Senior Residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Practicum work is considered part of the 30 credits.
- 40-Credit Rule. Students may not count more than 40 credits from one department within the 120 degree credits needed for graduation. For example, if 42 credits of coursework have been completed from the Department of Communication Sciences and Disorders, the student will need 122 credits to graduate. CS\&D 110 does not count toward the 40 credits.
- 120 credits required for graduation.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL INFORMATION REGARDING CERTIFICATION

The master's degree is required to be certified to work in a public school program in Wisconsin and most states. The major in communication sciences and disorders prepares graduates to function competently and independently in public school programs, hospitals, rehabilitation centers, birth-to-three programs, or clinics. The bachelor of science degree is earned in the School of Education, and the master's degree is earned in the Department of Communication Sciences and Disorders. Student teaching and other professional education courses will be taken while earning the bachelor's and master's degrees. Not all students who apply for admission can be accepted into the master's degree program.

For detailed information about the master's program, see the CS\&D website (http://www.comdis.wisc.edu).

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| Wrade point average specified by the school, college, or |  |

## LEARNING OUTCOMES

1. Ability to successfully integrate subject knowledge and pedagogy knowledge flexibly in authentic situations through field experiences with secondary students under the supervision of highly qualified, experienced teachers and university supervisors.
2. Students will be prepared for recommendation for initial licensure in the state of Wisconsin and beyond in accordance with state standards.

## ADVISING AND CAREERS

## COMMUNICATION SCIENCES AND DISORDERS ADVISING

Students must consult with an undergraduate advisor in the Department of Communication Sciences and Disorders (Goodnight Hall, 1975 Willow Drive) as soon as a decision has been made to major in this field. Course sequencing in the major is not flexible-certain courses are prerequisites to others and many courses are offered only once a year. CS\&D advising services are focused on students who need to declare the major or who have already declared CS\&D and need advising in the major. Please visit the department's website (https://csd.wisc.edu/undergraduate.htm) for details on weekly advising sessions.

Students not yet admitted to the program should also consult with advising staff in Education Academic Services (EAS), see below.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors
provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http://
ci.education.wisc.edu) or Communication Sciences and Disorders (https://csd.wisc.edu) departmental websites.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## EARTH SCIENCE, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students may wish to consult with an advisor in Education Academic Services, 139 Education Building, 608-262-1651, to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 24 credits from the following departments: Astronomy (http://guide.wisc.edu/courses/astron), Atmospheric and Oceanic Sciences (http://guide.wisc.edu/courses/atm_ocn), Geoscience (http://guide.wisc.edu/courses/geosci), and Geography (http:// guide.wisc.edu/courses/geog). Only Geography courses designated as Physical Science may be used toward the minor requirements. At least 10 credits of the 24 credits must be numbered 200 or above. A minimum 2.75 grade point average is required, based on all UW-Madison coursework included in this minor.

## ECONOMICS, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of Economics is housed in the College of Letters \& Science. Students may wish to consult with an economics undergraduate advisor to discuss course selection and other issues related to this field of study. Academic advising (https://econ.wisc.edu/undergraduate/ academic-advising) is available in Room 7238 of the Social Science Building. Email: econadvise@ssc.wisc.edu. (econadvise@ssc.wisc.edu)

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students
admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

The economics minor requires a minimum of 24 credits. A minimum cumulative grade point average of 2.75 is required, based on all economics minor coursework taken on the UW-Madison campus.

Students completing the economics minor must complete at least one semester of calculus. Mathematics coursework may be applied toward the liberal studies requirement.

| Introduction to Microeconomics and Macroeconomics |  |  |
| :---: | :---: | :---: |
| Complete one of the foll | following: | 4-7 |
| ECON 101 <br> \& ECON 102 | Principles of Microeconomics and Principles of Macroeconomics |  |
| ECON 111 | Principles of EconomicsAccelerated Treatment |  |
| Intermediate Microeconomic Theory |  | 3-4 |
| $\begin{aligned} & \text { ECON } 301 \\ & \quad \text { or ECON } 311 \end{aligned}$ | Intermediate Microeconomic Theory Intermediate Microeconomic Theory Treatment | nced |
| Intermediate Macroeconomic Theory |  | 3-4 |
| ECON 302 <br> or ECON 312 | Intermediate Macroeconomic Theory <br> Intermediate Macroeconomic Theory Treatment | ced |
| Statistics |  |  |
| Select one of the following, or an approved substitute: |  | 3-4 |
| ECON 310 | Statistics: Measurement in Economics (preferred) |  |
| STAT 301 | Introduction to Statistical Methods |  |
| STAT/MATH 309 | Introduction to Probability and Mathematical Statistics I |  |
| STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I |  |
| GEN BUS 303 | Business Statistics |  |
| Economics Elective |  |  |
| Select one of the following (330 or 464 are preferred): |  | 3-4 |
| ECON 330 | Money and Banking |  |
| ECON 464 | International Trade and Finance |  |
| ECON 410 | Introductory Econometrics |  |
| ECON 441 | Analytical Public Finance |  |
| ECON 448 | Human Resources and Economic Growth |  |
| ECON 450 | Wages and the Labor Market |  |
| ECON 467 | International Industrial Organizations |  |
| ECON 468 | Industrial Organization and Imperfect Competition |  |
| ECON 475 | Economics of Growth |  |
| ECON 508 | Wealth and Income |  |


| ECON 521 | Game Theory and Economic <br> Analysis |
| :--- | :--- |
| ECON 522 | Law and Economics |
| ECON/POP HLTH/ | The Economics of Health Care |
| PUB AFFR 548 |  |
| ECON 590 | Tutorial in Research Project Design |
| ECON 664 | Advanced International Trade |
| ECON 666 | Issues in International Finance |

## ELEMENTARY EDUCATION, BSE

The University of Wisconsin-Madison Elementary Education program prepares teachers who can foster high academic achievement in all students-particularly students of color, students from minoritized racial, cultural, linguistic and socioeconomic backgrounds, as well as students with disabilities. Teacher education students learn to recognize how their own background and experience shape their thinking and actions, to reflect on their practices, and to develop and adapt practices that serve the needs of their students.

Through their preparation, students gain awareness of how schools reflect both the strengths and inequities of our increasingly multicultural society and become more committed to advancing social justice and equity through their classroom practice and community interactions. They learn to welcome parents, caregivers, and community members into their classrooms as partners in the educational process. They integrate research-based practices in their teaching and, in doing so, acquire knowledge and skills that enable them to grow professionally throughout their teaching careers.

At UW-Madison, students preparing to teach in preschool, elementary, and middle schools engage in substantial supervised fieldwork (especially in diverse schools), community field experiences, selfexamination of teaching practice, and development of multicultural classroom activities.

The Elementary Education program currently consists of four complementary program options:

- The Early Childhood/English as a Second Language option prepares teachers to work at the preschool and primary levels (approximately birth through age 8). Students are also certified in English as a Second Language at the Early Childhood level. Admitted students begin a four-semester professional sequence in the fall after admission.
- The Middle Childhood-Early Adolescence/English as a Second Language option prepares teachers to work in intermediate and middle school settings (approximately ages 6 through 12-13). Students are also certified in English as a Second Language at the Middle Childhood-Early Adolescence levels. As of fall, 2018, admitted students will begin the four-semester professional sequence in the fall after admission; this is a change from previous years in which the sequence began in the spring semester. Professional sequence courses may be reordered slightly as part of this transition.
- The Middle Childhood-Early Adolescence/Special Education option prepares teachers to work in intermediate and middle school settings (approximately ages 6 through 12-13). It emphasizes collaboration, with training in both Elementary and Special Education
methodologies. This option focuses on inclusion and gaining a strong background in working with students across disability categories including learning disabilities, emotional/behavioral disabilities, and other high incidence disabilities. Students are certified in both Special Education and Elementary Education at the Middle ChildhoodEarly Adolescence levels. Admitted students begin a four-semester professional sequence in the fall after admission.
- The Middle Childhood-Early Adolescence/Content Focused Minor option prepares teachers to work in intermediate and middle school settings (approximately ages 6 through 12-13). Students complete a content area minor that may lead to licensing in that subject. As of fall, 2018, admitted students will begin the four-semester professional sequence in the fall after admission; this is a change from previous years in which the sequence began in the spring semester. Professional sequence courses may be reordered slightly as part of this transition.

Course requirements will vary by option, so students should consult often with an Education advisor. All options lead to a Bachelor of Science degree in Education. Formal definitions of Early Childhood and Middle Childhood-Early Adolescence levels are determined by each school district based on the organizational structure of its schools and the philosophy and needs of the district.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the program once a year, effective in the fall. Selection is made the previous spring and students begin a four-semester professional sequence in the subsequent fall semester.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in elementary education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in elementary education receive the "pre-professional" classification of PRE.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1458)). It is not necessary to be a "pre-professional" student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall. Students may call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

Resources limit the number of students who can be served by UWMadison teacher education programs; thus, admission to the Elementary Education program is limited and may be competitive. Obtaining or exceeding the minimum criteria for eligibility does not guarantee admission.

The Elementary Education program faculty selects candidates based on a variety of criteria. Each option has its own selection committee and only reviews applications to that option. In particular they seek individuals who can demonstrate academic competence, multicultural and interpersonal competence, and reflective competence.

## PROGRAM ADMISSION ELIGIBILITY REQUIREMENTS

Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be eligible for admission to the professional program, applicants must:

- determine which of the four program options are of interest. Applicants may apply to a maximum of two options.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a

Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.

- successfully complete at least 40 transferable college-level credits by the end of the fall semester before application.
- earn either
- a minimum 2.5 grade point average (GPA) on a 4.0 scale on all transferable college-level coursework attempted ${ }^{1}, O R$
- minimum scores to meet the Basic Skills requirement, see above.

Applicants will be considered who have met either the minimum GPA or minimum basic skills test scores in all areas, but will not be eligible if both GPA and basic skills test scores are below the minimum. Students must take all three sections of the Basic Skills tests (reading, writing, mathematics) to be eligible for consideration.

- complete RP \& SE 300 Individuals with Disabilities by the end of the summer before beginning the program if applying to the MC-EA/Special Education Dual Major option.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## PROGRAM ADMISSION SELECTION CRITERIA

The Elementary Education program admissions procedures are intended to result in an academically qualified student body that is diverse in terms of both academic strengths and life experiences and has a commitment to providing the best possible education to elementary and middle school students. Having students with diverse life experiences, backgrounds and attitudes is critical if faculty are to prepare students to teach in
schools that themselves have diverse enrollments. Faculty will accept only those students judged to have the potential to be successful in the academically challenging Elementary Education Program. In making admissions decisions, no factor will outweigh judgment that a particular applicant's credentials, taken as a whole, represent unacceptably high academic risk.

## The Admissions Committee will take the following into consideration when making admissions decisions: Academic Competence

The Mission Statement of the Elementary Education Area points to the role that our graduates have in creating academically rigorous classrooms that lead to high academic achievement in all students. For elementary and middle schools to promote academic achievement, elementary and middle school teachers must have demonstrated high levels of success in core disciplines throughout their university studies. Therefore, program faculty expect that students admitted to the program will have demonstrated high levels of academic preparation.

## Multicultural and Interpersonal Competencies

The Elementary Education program's mission is to prepare teachers who are able to promote academic achievement in all elementaryschool and middle-school students. This includes those from diverse races, cultures, language backgrounds, family forms, and sexual orientations, as well as those from diverse economic, gender, and ability groups. The program faculty seek prospective teachers who will demonstrate both commitment to this mission and the prospect of contributing to it. The Admissions Committee will therefore examine the materials from each candidate for evidence of such commitment and prospect.

## Reflective Competence

To have performed at high academic levels or to have had diverse life experiences is not adequate for admissions purposes unless these are accompanied by evidence that the applicant has been able to reflect on and learn from them. Demonstration of reflective competence is important as it likely contributes to one's interpersonal skills as well as to the qualities such as integrity, social awareness, and cultural sensitiveness that are qualities of a well-rounded human being who will be an excellent elementary or middle school teacher. The ability to reflect on one's life experiences is one factor that will allow the Admissions Committee to look for evidence that our students will be reflective practitioners who evaluate the effects of their assumptions, choices, and actions on others (students, parents, and other professionals in the learning community) and who will actively seek out opportunities to grow professionally.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not
be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

## Students of Elementary Education:

- Are exposed to a broad range of academic disciplines through liberal studies course work. The university-wide General Education requirements also encourage this breadth of study.
- Examine schools' relationship to society, the development of children and adolescents, and the processes of learning in their education course work.
- Study teaching methods and gain experience in schools through supervised field placements during their four-semester professional sequence.
- Complete elective coursework to reach the minimum of 120 credits required for the degree.

Practicum experiences provide a school-based setting for students to develop their professional and classroom skills. These experiences generally begin a few weeks after the start of the semester and are approximately nine weeks in length. Students will usually spend three half-days at their assigned schools. Concurrent registration in the methods courses provides students with an opportunity to learn about, and then apply, teaching techniques in a classroom.

The full-semester student teaching assignment is the capstone experience of the professional sequence. Through it students expand upon the activities, responsibilities and expectations encountered during the
practicum experiences. Student teachers will function as regular staff members in their assigned schools and also attend a seminar on campus one afternoon each week. Student teachers are required to follow the school day, school calendar, vacation days and policies of the school where they work.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p.1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits. PROGRAM OPTIONS - SELECT ONE

- Elementary Education: Early Childhood/English as a Second Language (p. 1466)
- Elementary Education: Middle Childhood through Early Adolescence/ Content-focused Minor (p. 1467)
- Elementary Education: Middle Childhood through Early Adolescence/ English as a Second Language (p. 1469)
- Elementary Education: Middle Childhood through Early Adolescence/ Special Education Dual Cert (p. 1470)


## ELECTIVE COURSEWORK

Complete additional courses as necessary to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS-REQUIRED FOR ALL PROGRAM OPTIONS

## GRADUATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Requirements below are based on UW-Madison coursework.

- 2.5 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average across all professional education courses (excluding practicum and student teaching).
- 2.75 cumulative grade point average in the major.
- 2.75 cumulative grade point average in the minor, if required.
- Minimum 120 credits (degree candidates only).
- Major residency: Degree candidates must complete at least 15 credits of upper-level major coursework (numbered 300-699) in residence on the UW-Madison campus.
- Senior residency: Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum are considered part of the 30 credits.


## DEGREE AUDIT REPORTING SYSTEM (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification
such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure. (http://guide.wisc.edu/ undergraduate/education/curriculum-instruction/elementary-bse/ \#certificationlicensuretext)

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Quality of |
| Undergraduate students must maintain the minimum <br> Wrade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below |
| these minimum thresholds will be placed on academic |
| probation. |

## LEARNING OUTCOMES

1. Create and implement developmentally appropriate and challenging learning experiences that reflect high expectations for every learner, supporting learners to (1) develop deep understanding of content areas and their connections, and (2) apply understanding in meaningful ways.
2. Select and/or create and sequence individually supportive and challenging learning experiences that reflect knowledge of individual learners, curriculum, pedagogies, and relevance to all learners and their families.
3. Use a variety of teaching strategies, and evidence-based technologies and information resources to engage learners in meaningful learning activities that lead to content knowledge, critical thinking, creativity, innovation, self-evaluation, and self-directed learning. Use evidence to continually evaluate the effectiveness of these practices, and adjust these as needed to improve learner outcomes.
4. Collaborate with others to create supportive, inclusive, linguistically responsive, and safe learning environments that help all learners meet high standards and reach their full potential.
5. Choose, modify, and/or create multiple forms of unbiased formative and summative assessments to measure each learner's progress toward instructional goals. Use assessment data gathered to respond to each learner's strengths and needs in relation to short and long-term goals. Reflect on and justify planning decisions and ground one's justifications in knowledge of learners, development, curriculum, pedagogies, and resources.
6. Use studies completed in science and mathematics, social sciences, the humanities, histories, languages, and the arts to inform and deepen their teaching of content areas and meeting learners' needs.

## ADVISING AND CAREERS

## ELEMENTARY EDUCATION ADVISING

Students not yet admitted to Elementary Education meet with their assigned advisor in Education Academic Services (EAS) and/or the Office of Undergraduate Recruitment and Retention (OURR), see below. Students are assigned an additional departmental advisor when admitted to the professional component of their degree program.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field
placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)

The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities.
Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Curriculum and Instruction can be found on the department's website. (http://ci.education.wisc.edu)

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN/ENVIR ST/ | Atmospheric Environment and | 2 |
| GEOG 121 | Society |  |
| ATM OCN/ | Earth's Water. Natural Science and | 3 |
| SOIL SCI 132 | Human Use |  |


| BOTANY 100 | Survey of Botany | 3 |
| :---: | :---: | :---: |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ <br> ENVIR ST/ <br> HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, 3-5 lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together
and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for
planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a " D ") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

 Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $K-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer
of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

> ELEMENTARY EDUCATION: EARLY CHILDHOOD/ENGLISH AS A SECOND LANGUAGE

## REQUIREMENTS

The Early Childhood/English as a Second Language option prepares teachers to work at the preschool and primary levels (approximately birth through age 8). Students are also certified in English as a Second Language at the Early Childhood level. Admitted students begin the foursemester professional sequence in the fall after admission.

The option coursework listed here is one component of the Elementary Education, BSE degree (p. 1459) requirements.

## Environmental Education Requirement

Select one Environmental Studies (http://guide.wisc.edu/courses/ envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Environmental Education courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

Mathematics for Elementary Teachers
Code Title Credits

MATH 130 Mathematics for Teaching: 3

Students with college-level calculus coursework or advanced placement credit should see the exemption rules (http:// www.math.wisc.edu/~lempp/Exemptionsfor130-32.htm) for this course. More detailed information (http://www.math.wisc.edu/
~empp/educ.html) about this course is available on the math department website.

## Professional Sequence

Admitted students complete a four-semester sequence of professional courses beginning in the fall semester after program admission. Each semester of the sequence must be followed sequentially and taken in consecutive semesters.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| CURRIC 660 | Early Childhood Education | 3 |
| CURRIC 550 | Methods, Materials and Activities in Early Childhood Education | 3 |
| CURRIC 663 | Learning Environments for Initial Education Programs | 3 |
| CURRIC 328 | Artistic Lives of Children | 3 |
| CURRIC 325 | Educating Young English Learners | 3 |
| CURRIC 363 | Practicum in Early Childhood <br> Education in Kindergarten | 3 |
| Semester 2 |  |  |
| CURRIC 314 | Becoming Literate in and out of Schools | 3 |
| CURRIC 370 | Teaching Mathematics | 3 |
| CURRIC/ <br> RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| CURRIC 326 | Language Use and Acquisition in Early Childhood | 3 |
| CURRIC 367 | Elementary Teaching Practicum II | 3 |
| Semester 3 |  |  |
| CURRIC 371 | Teaching Social Studies | 3 |
| CURRIC 372 | Teaching Science | 3 |
| CURRIC 315 | Reading and Writing Across the Curriculum in Early Childhood | 3 |
| CURRIC 327 | Methods of Teaching Young English Learners | 3 |
| CURRIC 373 | Elementary Teaching Practicum III | 3 |
| Semester 4 |  |  |
| CURRIC 468 | Early Childhood/English as a Second Language Student Teaching | 10 |
| CURRIC 463 | Seminar in Pre-Kindergarten <br> Through Middle School Teaching | 2 |

## Related Courses

These related courses focus on children and families and are recommended (not required) for students interested in early childhood education.

## Related Courses

| Code | Title | Credits |
| :--- | :--- | ---: |
| CNSR SCI 475 | Family Economics | 3 |
| HDFS 362 | Development of the Young Child | 3 |
| HDFS 464 | Play-Development and Role Across <br> the Lifespan | 3 |
| HDFS 469 | Family and Community Influences <br> on the Young Child | 3 |
| HDFS 471 | Parent - Child Relations | 3 |


| HDFS 474 | Racial Ethnic Families in the U.S. | 3 |
| :--- | :--- | ---: |
| HDFS 478 | Development of Black Children and <br> Their Families: Research and Policy | 3 |
| PHILOS 104 | Special Topics in Philosophy for <br> Freshmen | 3 |
| PSYCH 311 | Issues in Psychology | $1-4$ |
| SOC 120 | Marriage and Family | $3-4$ |
| PSYCH 460 | Child Development (formerly <br> numbered 560) | $3-4$ |
| SOC WORK 206 | Introduction to Social Policy | 4 |

## ELEMENTARY EDUCATION: MIDDLE CHILDHOOD THROUGH EARLY ADOLESCENCE/CONTENT-FOCUSED MINOR

## REQUIREMENTS

The Middle Childhood-Early Adolescence/Content Focused Minor option prepares teachers to work in intermediate and middle school settings (approximately ages 6 through 12-13). Admitted students begin the foursemester professional sequence in the fall after admission. Students complete a content area minor that may lead to licensing in that subject.

The option coursework listed here is one component of the Elementary Education, BSE degree (p. 1459) requirements.

## Environmental Education Requirement

Select one Environmental Studies (http://guide.wisc.edu/courses/ envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

## Environmental Education courses

Code Title Credits

ATM OCN/ENVIR ST/ Atmospheric Environment and 2
GEOG 121 Society
ATM OCN/ Earth's Water. Natural Science and 3
SOIL SCI 132 Human Use
BOTANY 100 Survey of Botany 3
BOTANY/BIOLOGY/ Introductory Biology 5
ZOOLOGY 152
BOTANY 240 Plants and Humans 3
BOTANY/ENVIR ST/ Introductory Ecology 3
ZOOLOGY 260
ECON/A A E/ Environmental Economics 3-4
ENVIR ST 343
GEOG/ENVIR ST 120 Introduction to the Earth System 3
GEOG/ATM OCN/ Atmospheric Environment and 2
ENVIR ST 121 Society
GEOG/ENVIR ST 127 Physical Systems of the 5
Environment
GEOG/ENVIR ST 139 Living in the Global Environment: An 3-4
Introduction to People-Environment
Geography

| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| :---: | :---: | :---: |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Fine Arts

Select 6 credits of fine arts coursework. These credits may also be applied toward the liberal studies requirement. See a list of fine arts courses under liberal studies (p. 1389).

| Mathematics for Elementary Teachers |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| MATH 130 | Mathematics for Teaching: <br> Numbers and Operations | 3 |
| MATH 131 | Mathematics for Teaching: <br> Geometry and Measurement | 3 |
| MATH 132 | Problem Solving in Algebra, <br> Probability and Statistics | 3 |

Students with college-level calculus coursework or advanced placement credit should see the exemption rules (http:// www.math.wisc.edu/~lempp/Exemptionsfor130-32.htm) for this coursework. More detailed information (http://www.math.wisc.edu/ ~lempp/educ.html) about these courses is available on the math department website.

## Education Coursework

Code Title
Credits
Child and Adolescent Development
Select one option:

| ED PSYCH 331 | Human Development From <br> Childhood Through Adolescence |
| :--- | :--- |
| ED PSYCH 320 | Human Development in Infancy and |
| \& ED PSYCH 321 | Childhood <br> and Human Development in |
|  | Adolescence ${ }^{1}$ |

## Foundations of the Profession

 6Select 6 credits of coursework numbered below 600 from the Educational Policy Studies department.
Recommended courses include:

| ED POL 300 | School and Society |
| :--- | :--- |
| ED POL/ | History of American Education |
| HISTORY 412 |  |

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ED POL 500 Topics on Social Issues and
    Education
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1 With permission, PSYCH 460 Child Development (formerly 560) may be substituted for ED PSYCH 320 Human Development in Infancy and Childhood. Students are strongly encouraged to complete this requirement before program admission.

## Minor Requirement: Elementary Education

Elementary Education majors choosing the Content Focus option are required to complete a minor area of study that will lead to Wisconsin licensing in English Language Arts, Mathematics, Science or Social Studies. Students can select from the minors listed below or complete the equivalent Letters \& Science major in the subject area. For more details about the requirements of each minor, choose from the links below.

- Biology (p. 1436)
- Chemistry (p. 1438)
- Earth Science (p. 1456)
- Economics (p. 1456)
- English (p. 1474)
- English Language Arts (p. 1471)
- Geography (p. 1487)
- History (p. 1500)
- Mathematics (p. 1542)
- Mathematics and Science Dual (p. 1539)
- Mathematics Specialized (p. 1541)
- Physics (p. 1542)
- Political Science (p. 1543)
- Psychology (p. 1557)
- Science Specialized (p. 1558)
- Social Studies (p. 1558)
- Sociology (p. 1567)


## Professional Sequence

Admitted students complete a four-semester sequence of professional courses. Effective fall, 2018, admitted students will begin the foursemester professional sequence in the fall after admission instead of the spring semester. Professional sequence coursework listed here may be reordered slightly as part of this transition. Each semester of the sequence must be followed sequentially and taken in consecutive semesters.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| CURRIC 364 | Introduction to Education | 3 |
| CURRIC 309 | Reading and Writing Across the Content Areas | 3 |
| Semester 2 |  |  |
| CURRIC 311 | Language Acquisition and Use In and Out of Schools, Middle Childhood through Early Adolescence | 3 |
| CURRIC 367 | Elementary Teaching Practicum II | 3 |
| CURRIC 368 | The Teaching of Reading | 3 |
| CURRIC 370 | Teaching Mathematics | 3 |
| CURRIC 372 | Teaching Science | 3 |


| Semester 3 |  |  |
| :---: | :---: | :---: |
| CURRIC 369 | The Teaching of Language Arts | 3 |
| CURRIC 371 | Teaching Social Studies | 3 |
| CURRIC 373 | Elementary Teaching Practicum III | 3 |
| CURRIC/ RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| Semester 4 |  |  |
| CURRIC 463 | Seminar in Pre-Kindergarten Through Middle School Teaching | 2 |
| CURRIC 464 | Student Teaching in the Elementary School | 10 |
| or CURRIC 454 | Student Teaching in the Middle School |  |

## ELEMENTARY EDUCATION: MIDDLE CHILDHOOD THROUGH EARLY ADOLESCENCE/ENGLISH AS A SECOND LANGUAGE

## REQUIREMENTS

The Middle Childhood-Early Adolescence/English as a Second Language option prepares teachers to work in intermediate and middle school settings (approximately ages 6 through 12-13). Students are also certified in English as a Second Language at the Middle ChildhoodEarly Adolescence levels. Admitted students begin the four-semester professional sequence in the fall after admission.

The option coursework listed here is one component of the Elementary Education, BSE degree (p. 1459) requirements.

## Environmental Education Requirement

Select one Environmental Studies (http://guide.wisc.edu/courses/ envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.
Environmental Education courses

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |


| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| :---: | :---: | :---: |
| GEOG/ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ <br> ENVIR ST/ <br> HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Mathematics for Elementary Teachers

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 130 | Mathematics for Teaching: | 3 |
| MATH 131 | Numbers and Operations | 3 |
| MATH 132 | Meomematics for Teaching: <br> Geometry and Measurement | 3 |

Students with college-level calculus coursework or advanced placement credit should see the exemption rules (http:// www.math.wisc.edu/~lempp/Exemptionsfor130-32.htm) for this coursework. More detailed information (http://www.math.wisc.edu/ ~lempp/educ.html) about these courses is available on the math department website.

## Educational Arts or Educational Technology

Select one of the following. Additional courses can be considered; consult with an advisor in Education Academic Services.

| Code | Title | Credits |
| :---: | :---: | :---: |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women | 3 |
| ART 338 | Service Learning in Art | 2 |
| ART ED/CURRIC 322 | Information Design for Visual Learning | 3 |
| COM ARTS 155 | Introduction to Digital Media Production | 4 |
| COM ARTS 200 | Introduction to Digital Communication | 3 |
| COM ARTS 325 | Media and Human Behavior | 3 |
| COM ARTS 346 | Critical Internet Studies | 3 |
| COM ARTS/ CHICLA 347 | Race, Ethnicity, and Media | 3 |


| COMP SCI 250 | Digital Society: The Impact of Computers and Computer Technology |
| :---: | :---: |
| CURRIC 209 | Digital Media and Literacy |
| CURRIC 277 | Videogames \& Learning |
| JOURN/COM ARTS/ HDFS 616 | Mass Media and Youth |
| LIS 201 | The Information Society |
| LIS 202 | Informational Divides and Differences in a Multicultural Society |
| MUSIC 151 | Basic Concepts of Music Theory |
| MUSIC/CURRIC 354 | Teaching Music |
| THEATRE/CURRIC/ SLAVIC 362 | Drama for Teaching and Learning |
| MC-EA Minor Requirement <br> Students will complete a minor in English as a Second Language through their professional sequence coursework. |  |
| Professional Sequen <br> Each semester of the in consecutive semes begin the four-semes instead of the spring here may be reordered | sequence must be followed sequentially and taken ters. Effective fall, 2018, admitted students will ter professional sequence in the fall after admission semester. Professional sequence coursework listed s slightly as part of this transition. |


| Code <br> Semester 1 | Title | Credits |
| :---: | :---: | :---: |
| CURRIC 311 | Language Acquisition and Use In and Out of Schools, Middle Childhood through Early Adolescence | 3 |
| CURRIC 312 | ESL/Bilingual Issues | 3 |
| CURRIC 317 | Dimensions of Literacy | 3 |
| CURRIC 339 | Cultural Foundations of Learning and Development | 3 |
| CURRIC 340 | Elementary Education Practicum One | 3 |
| Semester 2 |  |  |
| CURRIC/ <br> RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| CURRIC 338 | The Language of Schooling | 3 |
| CURRIC 371 | Teaching Social Studies | 3 |
| CURRIC 372 | Teaching Science | 3 |
| CURRIC 367 | Elementary Teaching Practicum II | 3 |
| Semester 3 |  |  |
| ED POL 300 | School and Society | 3 |
| CURRIC 316 | ESL/Bilingual Methods | 3 |
| CURRIC 370 | Teaching Mathematics | 3 |
| CURRIC 373 | Elementary Teaching Practicum III | 3 |
| CURRIC 318 | Teaching Reading and Writing | 3 |
| Semester 4 |  |  |
| CURRIC 463 | Seminar in Pre-Kindergarten <br> Through Middle School Teaching | 2 |
| CURRIC 464 | Student Teaching in the Elementary | 10 |

> ELEMENTARY EDUCATION: MIDDLE CHILDHOOD THROUGH EARLY ADOLESCENCE/SPECIAL EDUCATION DUAL CERT

## REQUIREMENTS

The Middle Childhood-Early Adolescence/Dual Elementary and Special Education option prepares teachers to work in intermediate and middle school settings (approximately ages 6 through 12-13). Students are certified in both Special Education and Elementary Education at the Middle Childhood-Early Adolescence levels. Admitted students begin the four-semester professional sequence in the fall following admission.

The option coursework listed here is one component of the Elementary/ Special Education, BSE degree (p. 1459) requirements.

RP \& SE 300 Individuals with Disabilities-Admission Prerequisite
This course must be completed prior to beginning the professional sequence.
Code
Title
Credits

RP \& SE 300
Individuals with Disabilities

## Environmental Education Requirement

Select one Environmental Studies (http://guide.wisc.edu/courses/ envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Environmental Education courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ <br> ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |


| GEOG/ENVIR ST | 339 | Environmental Conservation |
| :--- | :--- | :---: |
| LAND ARC/ | Wetlands Ecology | 4 |
| ENVIR ST 361 |  | 3 |
| MED HIST/ | Environment and Health in Global | 3 |
| ENVIR ST/ | Perspective |  |
| HIST SCI 513 |  | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ | Air Pollution and Human Health |  |
| ENVIR ST 502 |  | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and | 3 |
| SOC/C\&E SOC/ | Environmental Sociology | Environment, Natural Resources, |
| F\&W ECOL 248 | and Society |  |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ | Soils and Environmental Quality | 3 |
| ENVIR ST 324 |  |  |

## Mathematics for Elementary Teachers

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 130 | Mathematics for Teaching: <br> Numbers and Operations | 3 |
| MATH 131 | Mathematics for Teaching: <br> Geometry and Measurement | 3 |
| MATH 132 | Problem Solving in Algebra, <br> Probability and Statistics | 3 |

Students with college-level calculus coursework or advanced placement credit should see the exemption rules (http:// www.math.wisc.edu/~lempp/Exemptionsfor130-32.htm) for this coursework. More detailed information (http://www.math.wisc.edu/ ~lempp/educ.html) about these courses is available on the math department website.

| Education Coursework |  |
| :--- | :--- | ---: |
| Title | Credits |
| Child and Adolescent Development |  |$\quad 3-6$

## Select one:

| ED POL 300 | School and Society |
| :--- | :--- |
| ED POL/ | History of American Education |
| HISTORY 412 |  |

1 With permission, PSYCH 460 Child Development (formerly 560) may be substituted for ED PSYCH 320 Human Development in Infancy and Childhood. Students are strongly encouraged to complete this requirement before program admission.

## Professional Sequence

Admitted students complete a four-semester sequence of professional courses beginning in the fall semester after program admission. Each
semester of the sequence must be followed sequentially and taken in consecutive semesters.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| CURRIC 364 | Introduction to Education | 3 |
| CURRIC 368 | The Teaching of Reading | 3 |
| CURRIC 369 | The Teaching of Language Arts | 3 |
| CURRIC 367 | Elementary Teaching Practicum II | 3 |
| RP \& SE 466 | Diversity in Special Education | 3 |
| Semester 2 |  |  |
| RP \& SE 473 | Management: Students with Learning and Behavioral Disabilities | 3 |
| RP \& SE 465 | Language and Reading Instruction for Students with Disabilities | 4 |
| RP \& SE 475 | Special Education Practicum: Middle Childhood - Early Adolescence | 3-6 |
| RP \& SE/ CURRIC 506 | Strategies for Inclusive Schooling | 3 |
| RP \& SE 401 | Augmentative and Alternative Communication and Assistive Technology for Students with Disabilities | 1 |

## Semester 3

| RP \& SE 464 | Diagnosis, Assessment, and <br> Instructional Planning in Special | 4 |
| :--- | :--- | ---: |
|  | Education |  |
| CURRIC 372 | Teaching Science | 3 |
| CURRIC/ | Teaching Mathematics in Inclusive | 4 |
| RP \& SE 365 | Settings |  |
| CURRIC 371 | Teaching Social Studies | 3 |
| CURRIC 373 | Elementary Teaching Practicum III | 3 |

Semester 4

| RP \& SE 477 | Special Education Student <br> Teaching: Middle Childhood - Early <br> Adolescence | 7 |
| :--- | :--- | ---: |
| RP \& SE 457 | Elementary Student Teaching <br> Seminar - Elementary/Special | 1 |
| CURRIC 464 | Education Dual Major | Student Teaching in the Elementary <br> School |
| CURRIC 463 | Seminar in Pre-Kindergarten <br> Through Middle School Teaching | 7 |
| RP \& SE 402 | Methods in Teaching Functional <br> Skills | 1 |

## ENGLISH LANGUAGE ARTS, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students may wish to consult with an advisor in Education Academic Services, 139 Education Building, 608-262-1651, to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (http://guide.wisc.edu/ undergraduate/education/curriculum-instruction/elementary-education-bse/elementary-education-middle-childhood-through-early-adolescence-content-focused-minor) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

The English language arts minor requires the completion of 24 credits to include the requirements of each group of courses. A minimum cumulative grade point average of 2.75 is required, based on all UWMadison coursework included in the minor.

The courses listed here will meet the requirements in each category, but additional courses can be considered.

## INTRODUCTORY LITERATURE

Complete two introductory literature courses. Courses with a Literature breadth designation from many departments-e.g., Comparative Literature, Classics, African Languages and Literature, English, or Theatre -may be selected to meet this requirement.

## INTERNATIONAL LITERATURE

## Select one course from the following: <br> International Literature Courses

Code Title Credits

## African Languages and Literature

| AFRICAN/ | The African Storyteller | 3 |
| :--- | :--- | ---: |
| FOLKLORE 210 |  | 3 |
| AFRICAN 211 | The African Autobiography | 3 |
| AFRICAN 300 | African Literature in Translation |  |
| AFRICAN 405 | Topics in African Cultural Studies | 3 |
| AFRICAN 412 | Contemporary African Fiction | $3-4$ |
| AFRICAN/ | Contemporary African and <br> AFROAMER 413 <br> Caribbean Drama | $3-4$ |
| AFRICAN/ Oral Traditions and the Written <br> FOLKLORE 471 Word | $3-4$ |  |
| Folklore | Introduction to Folklore | 3 |
| FOLKLORE 100 | The African Storyteller | 3 |
| FOLKLORE/ | The Folk Tale | 3 |
| AFRICAN 210 | The Hero and Trickster in African | 3 |
| FOLKLORE 220 | Oral Traditions | 3 |
| AFRICAN 270 | Introduction to Turkish Folk <br> FOLKLORE/LCA | Literature |


| FOLKLORE/ | In Translation: Mythology of | 3-4 |
| :---: | :---: | :---: |
| LITTRANS/ | Scandinavia |  |
| MEDIEVAL/ |  |  |
| RELIG ST 342 |  |  |
| FOLKLORE/ | In Translation: The Scandinavian | 3-4 |
| LITTRANS/ | Tale and Ballad |  |
| MEDIEVAL 345 |  |  |
| FOLKLORE/ | In Translation: The Icelandic Sagas | 3-4 |
| LITTRANS/ |  |  |
| MEDIEVAL 346 |  |  |
| FOLKLORE/ | In Translation: Kalevala and Finnish | 3-4 |
| LITTRANS 347 | Folk-Lore |  |
| FOLKLORE/LCA 374 | Indian Folklore | 3 |
| FOLKLORE/ | Gender and Expressive Culture | 3 |
| GEN\&WS 428 |  |  |
| FOLKLORE/ | Slavic and East European Folklore | 3 |
| SLAVIC 444 |  |  |
| FOLKLORE 460 | Folk Epics | 3 |
| FOLKLORE/ | Oral Traditions and the Written | 3-4 |
| AFRICAN 471 | Word |  |
| FOLKLORE 510 | Folklore Theory | 3 |
| FOLKLORE 517 | The Irish Tradition | 3 |
| FOLKLORE 518 | The Scottish Tradition | 3 |
| English |  |  |
| ENGL/ | American Indian Oral Literatures | 3 |
| AMER IND 275 |  |  |

Library and Information Studies
L I S 624 Story Telling and Oral Literature 3

Any Literature in Translation course with the "L" breadth code

## AMERICAN SOCIAL LITERATURE

This requirement addresses cultural diversity from the perspective of race, ethnicity, class, gender, sexual orientation, or ability.

| Select one course from the following: |  |  |
| :---: | :---: | :---: |
| American Social Literature courses |  |  |
| Code | Title | Credits |
| Afro-American Studies |  |  |
| AFROAMER 155 | They: Race in American Literature | 3 |
| AFROAMER/ GEN\&WS 222 | Introduction to Black Women Writers | 3 |
| AFROAMER 225 | Introduction to African American Dramatic Literature | 3 |
| AFROAMER 227 | Masterpieces of African American Literature | 3 |
| AFROAMER 265 | African-American Autobiography | 3 |
| AFROAMER/ GEN\&WS 267 | Artistic/Cultural Images of Black Women | 3 |
| AFROAMER 501 | 19th Century Afro-American Literature | 3 |
| AFROAMER 525 | Major Authors | 3 |
| AFROAMER 605 | Critical and Theoretical Issues in Afro-American Literature | 3 |

American Indian Studies

| AMER IND/ <br> ENGL 172 | Literatures of Native America | 3 |
| :---: | :---: | :---: |
| AMER IND/ <br> ENGL 275 | American Indian Oral Literatures | 3 |
| English |  |  |
| ENGL 171 | Literature, Gender, and Sexuality | 3 |
| ENGL 173 | Ethnic and Multicultural Literature | 3 |
| ENGL/GEN\&WS 248 | Women in Ethnic American Literature | 3 |
| ENGL/GEN\&WS 250 | Women in Literature | 3 |
| ENGL/ <br> ASIAN AM 270 | A Survey of Asian American Literature | 3 |
| ENGL 461 | Topics in Ethnic and Multicultural Literature | 3 |
| ENGL/ASIAN AM/ GEN\&WS 464 | Asian American Women Writers | 3 |
| ENGL/JEWISH 593 | Literature of Jewish Identity in America | 3 |
| ENGL/ <br> AFROAMER 672 | Selected Topics in Afro-American Literature | 3 |

## MASS COMMUNICATION

| Select one course from the following: |  |  |
| :---: | :---: | :---: |
| Mass Communication courses |  |  |
| Code | Title | Credits |
| Afro-American Studies |  |  |
| AFROAMER 303 | Blacks, Film, and Society | 3 |
| American Indian Studies |  |  |
| AMER IND 325 | American Indians in Film | 3 |
| Asian American Studies |  |  |
| ASIAN AM/ JOURN 662 | Mass Media and Minorities | 4 |
| Chican@ and Latin@ Studies |  |  |
| CHICLA/ COM ARTS 419 | Latino/as and Media | 3 |
| Communication Arts |  |  |
| COM ARTS 250 | Survey of Contemporary Media | 3 |
| COM ARTS 350 | Introduction to Film | 3 |
| COM ARTS 351 | Television Industries | 3 |
| COM ARTS 355 | Introduction to Media Production | 4 |
| History |  |  |
| HISTORY/ CHICLA 468 | Popular Culture in the Multi-racial United States | 3-4 |
| HISTORY/ JOURN 560 | History of Mass Communication | 4 |
| Journalism |  |  |
| JOURN 201 | Introduction to Mass Communication | 4 |
| JOURN 561 | Mass Communication and Society | 4 |
| JOURN 565 | Effects of Mass Communication | 4 |
| JOURN/COM ARTS/ | Mass Media and Youth | 3 |

## HDFS 616

Life Sciences Communication

LSC 440
Contemporary Communication Technologies and Their Social Effects

## SPEECH COMMUNICATION

Select one course from the following:

| Speech Communication courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| Communication Arts |  |  |
| COM ARTS 260 | Communication and Human Behavior | 3 |
| COM ARTS 262 | Theory and Practice of Argumentation and Debate | 3 |
| COM ARTS 266 | Theory and Practice of Group Discussion | 3 |
| COM ARTS 272 | Introduction to Interpersonal Communication | 3 |
| COM ARTS 360 | Introduction to Rhetoric in Politics and Culture | 3 |
| COM ARTS 368 | Theory and Practice of Persuasion | 3 |
| COM ARTS 371 | Communication and Conflict Resolution | 3 |
| Theatre |  |  |
| THEATRE 150 | Acting I: Introduction to Acting | 3 |
| THEATRE 250 | Fundamentals of Acting | 3 |

## ENGLISH COMPOSITION

Select one course from the following:

| English Composition courses |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| ENGL 201 | Intermediate Composition | 3 |
| ENGL 207 | Introduction to Creative Writing: Fiction and Poetry Workshop | 3 |
| ENGL 307 | Creative Writing: Fiction and Poetry Workshop | 3 |
| ENGL 400 | Advanced Composition | 3 |
| ENGL 407 | Creative Writing: Nonfiction Workshop | 3 |
| ENGL 408 | Creative Writing: Fiction Workshop | 3 |
| ENGL 409 | Creative Writing: Poetry Workshop | 3 |
| ENGL 410 | Creative Writing: Playwriting Workshop | 3 |
| ENGL 508 | Creative Writing: Advanced Fiction Workshop | 3 |
| ENGL 509 | Creative Writing: Advanced Poetry Workshop | 3 |

## ELECTIVES

Select any course from the areas above (excluding introductory literature) or from the following options to reach the minimum of 24
credits:

## Additional elective courses

## English Composition courses

| ENGL 316 | English Language Variation in the | 3 |
| :--- | :--- | ---: |
| U.S. | 3 |  |
| ENGL 416 | English in Society | 3 |
| ENGL 417 | History of the English Language | 4 |
| FOLKLORE/ | Global Language Issues |  |
| ANTHRO/INTL ST/ |  | 3 |
| LINGUIS 211 |  | 3 |
| LINGUIS 101 | Human Language |  |
| LINGUIS/ | Introduction to Linguistics: | 3 |
| ANTHRO 301 | Descriptive and Theoretical | 3 |
| LINGUIS 103 | Language, History, and Society | $3-4$ |
| LINGUIS 303 | Language, History, and Society |  |
| LINGUIS/ | Language and Culture |  |
| ANTHRO 430 |  |  |

## ENGLISH, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of English is housed in the College of Letters \& Science. Students may wish to consult with the undergraduate advisor in English to discuss course selection and other issues related to this field of study.

## Karen Redfield, Undergraduate Advisor

advisor@english.wisc.edu
608-263-3760
7195E Helen C. White Hall
600 North Park Street
English Undergraduate Advising (https://english.wisc.edu/
undergraduate/academic-advising)

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

The English minor requires the completion of 24-30 credits to include the coursework listed below. A minimum cumulative grade point average of 2.75 is required, based on all UW-Madison coursework included in the minor.

Note: Six credits of introductory literature must be completed prior to enrolling in coursework required for the English minor. Courses with an Literature breadth designation from many departments-e.g., Comparative Literature, Classical \& Ancient Near Eastern Studies, African Languages and Literature, or Theatre and Drama-may be selected to meet this requirement. Students are encouraged to explore these options, although introductory English department coursework may also be used in this capacity.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Required Courses |  |  |
| Complete the following: |  |  |
| ENGL 241 | Literature and Culture I: to the 18th Century | 3 |
| ENGL 242 | Literature and Culture II: from the 18th Century to the Present | 3 |
| CURRIC 431 | Young Adult Literature for Schools (or approved substitute) | 3 |
| ENGL 314 | Structure of English (students are encouraged to take this course as early as possible) | 3 |
| Shakespeare |  |  |
| Select one of the following: |  |  |
| ENGL 219 | Shakespearean Drama |  |
| ENGL 220 | Shakespearean Drama |  |
| ENGL 431 | Early Works of Shakespeare |  |
| ENGL 432 | Later Works of Shakespeare |  |
| Elective |  |  |
| Select one English department elective numbered 204 and above, except for ENGL 207 and ENGL $236{ }^{1}$ |  |  |
| Ethnic Literature |  |  |
| Select one 3-credit intermediate or advanced ethnic literature course ${ }^{2}$ |  |  |
| Applied English Linguistics |  |  |
| Select one of the following (listed in order of preference): |  |  |
| ENGL 516 | English Grammar in Use |  |
| ENGL 417 | History of the English Language |  |
| ENGL 316 | English Language Variation in the U.S. |  |
| ENGL 416 | English in Society |  |
| ENGL 414 | Global Spread of English |  |
| Composition for English Teachers |  |  |
| ENGL 304 | Composition \& Rhetoric In and Beyond the University |  |
| Or, select Education | in consultation with an advisor in ic Services |  |

## Additional Credits

If necessary, select additional coursework to reach the minimum of 24 credits. Introductory literature may be used.

1

2

Students considering a Letters \& Science English major should select a pre-1800, non-Shakespeare literature course.
Search for Intermediate/Advanced-level courses that are designated as both Literature and Ethnic Studies courses in the enrollment application.

## FRENCH, BSE

> WORLD LANGUAGE EDUCATION PROGRAM (CURRENTLY CHINESE, FRENCH, GERMAN, JAPANESE, LATIN, AND SPANISH MAJORS)

The mission of the World Language Education (WLE) program is (1) to promote a community-based approach to world language instruction; (2) to educate teachers who understand different cultures, are proficient in their languages, routinely visit other countries, and can build bridges across nations, races, socioeconomic groups, cultures, and languages; and (3) to certify teachers who are prepared to serve the global needs of increasingly multicultural and multilingual schools and are strongly committed to act for a world in which shared understanding through conflict resolution, negotiation and communication are guiding principles.

There is a growing need for multilingual teachers from diverse backgrounds. The WLE faculty encourages qualified applicants from under-represented groups to apply for admissions to the program. The director of the World Language Education program is Prof. François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

The objectives of the $\mathrm{K}-12$ WLE program are

- to provide a philosophy of action designed to promote thoughtful curriculum development and classroom teaching in WLE;
- to provide regular contacts with the global community and inservice teachers in schools through field evenings, workshops, conferences, and other professional meetings;
- to provide clinical settings which enhance opportunities for beginning teachers to develop skillful practice and build bridges across languages, cultures, races, and nationalities;
- to help student teachers use multilingual educational technologies and document their experiences in electronic portfolios and implement research-based practices in their teaching;
- to provide university instructors and supervisors who are wellversed in WLE, who have an international orientation, and who are both approachable and helpful to student teachers.

Program majors include Chinese, French, German, Japanese, Latin, and Spanish, and may also include Italian and Portuguese if field placements are available in these subject areas. Completion of the WLE program leads to a bachelor of science degree in education with a major in the specific subject area. Wisconsin state licensing regulations require that students are licensed to teach at the early childhood through adolescence (approximately kindergarten through high school) levels.

Oral and written examinations are required for all world language teacher candidates enrolled in Wisconsin educator preparation programs, as is an extensive immersion experience. (Students becoming certified to teach Latin are exempt from both the Oral Proficiency Exam and immersion experience requirement.)

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the World Language Education program once a year, effective in the fall. Selection is made the previous spring.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in World Language Education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in World Language Education receive the pre-professional classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1476)). It is not necessary to be a pre-professional student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall; call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet
all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## NATIVE AND HERITAGE SPEAKERS

Native or heritage speakers of a language major offered within the World Language Education program are welcome to pursue admission to the World Language Education program. Prospective applicants and transfer students who have previous experience with a language are encouraged to consult with an advisor in Education Academic Services as early as possible; to schedule, call 608-262-1651.

Native or heritage speakers must take a placement exam in the corresponding language to determine the appropriate level of remaining instruction in grammar, communication standards and social customs, and other topics related to language acquisition and proficiency. Placement examinations for Spanish, French, and German are offered on campus through Testing \& Evaluation Services or the University of Wisconsin System's Regional Placement Testing Program. Placement examinations for Chinese, Japanese, Italian, Latin, and Portuguese are administered by faculty or staff within the relevant academic department. For more information regarding placement in language courses, consult the Languages at UW-Madison placement guide (http:// languages.wisc.edu/advising/placement).

## APPLICATION AND ADMISSION

Applicants to the World Language Education program will be selected once a year, during the spring semester. Admission decisions will be based on coursework completed through the preceding fall semester. Admission is provisional until spring semester work has been completed and posted, and Education Academic Services staff have verified that students have met minimum grade point averages and earned minimum credits in their major. Admitted students will begin the sequence the following fall semester.

Resources limit the number of students who can be served by the UWMadison World Language Education teacher education program. In recent years the World Language Education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to World Language Education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## ELIGIBILITY FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be considered for admission, students must:

- earn 54 or more transferable semester credits (junior standing) by the end of the spring semester of the application year.
- complete all but six credits of the relevant World Language major.
- earn a minimum 2.75 grade point average on all major coursework completed.
- earn a cumulative GPA of at least 2.75 (on a 4.00 scale). ${ }^{1}$
- have completed, or be in the process of completing, an approved Immersion Experience required for the World Language Education degree program.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

1
A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and - the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## APPLYING FOR CERTIFICATION IN MORE THAN ONE SUBJECT AREA

Students may apply to be certified in more than one language. Eligibility requirements must be met and separate applications must be filed for each area of interest. Students must be admitted as a major in at least one of the program areas as it is not possible to be admitted only to complete a minor.

Students interested in combining the World Language Education degree program with certification in another area altogether must apply to both programs and meet the minimum criteria for admission to each program. It is suggested that students apply as majors in each area of interest, thus maximizing the chances of admission. Certification in two different areas requires the consent and cooperation of the World

Language Education program coordinator and the faculty coordinator of the other subject area. Not all subjects can be combined with the World Language Education degree program.

While multiple majors or major-minor combinations are feasible and may be advantageous as a career strategy, it may take extra time to complete the additional subject area coursework. Students are encouraged to work closely with their Education Academic Services advisor to assess the possibility of completing certification in more than one area and to coordinate the requirements of multiple certifications.

## PROGRAM ADMISSION SELECTION CRITERIA

The files of all applicants will be individually and holistically reviewed by a panel of World Language professionals. The criteria used for admission include the following:

- Academic Qualifications: The applicant demonstrates mastery of the target language and knowledge of its literature, civilization, and culture.
- Career Maturity: The applicant demonstrates commitment to teaching the target language to elementary, middle, and high school students, including consideration of his or her own strengths and limitations as a potential teacher.
- Ability to Relate to Youth: The applicant demonstrates the ability to work effectively with young people.
- Commitment to All Students: The applicant demonstrates commitment to working with all students including those of different racial, ethnic, and socioeconomic backgrounds, and students with disabilities, not just the economically privileged or highly motivated.
- Interpersonal Skills: The applicant demonstrates the ability to work effectively with peers, other professionals, and members of the community outside of school settings.

The application files, including immersion experiences and oral proficiency, are rated according to the above criteria for each language. A final cohort is selected along with rank-ordered alternates, based on a combination of ratings made by the World Language Education review committee and judgement by the faculty program coordinator about optimal cohort characteristics for each language. The availability of field placements in the subject area may also influence the selection process. Admission procedures are reviewed every other year to ensure fairness and effectiveness.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

This program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Prerequisite coursework prepares students for work in the major. Program applicants must also complete and document an immersion experience as a prerequisite to being admitted to the professional program.
- Major coursework offers in-depth study of the subject students will teach.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a four-semester sequence of world language teaching methods course work and field experiences in schools.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

The four semesters of professional coursework are followed sequentially and taken in consecutive semesters. Because of the program structure, students are expected to have completed most of their major and liberal studies coursework by the start of the professional sequence.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements ( $p$. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits. PREREQUISITE COURSEWORK
Students must be at a fifth semester level of French or demonstrate a proficiency level equivalent to FRENCH 204 Fourth Semester French to
begin the major requirements. If not at that level, the following courses should be taken. Prerequisite courses do not count toward major credits, but may be used to meet the liberal studies requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 101 | First Semester French | 4 |
| FRENCH 102 | Second Semester French | 4 |
| FRENCH 203 | Third Semester French | 4 |
| FRENCH 204 | Fourth Semester French | 4 |

## MAJOR REQUIREMENTS

Complete a minimum of 36 credits to include at least 24 upper-level/ advanced credits ( 300 and above). The credits of the major required for admission must be taken from this coursework. At least 15 credits of upper-level major coursework must be completed in residence on the UW-Madison campus.

| Code | Title | Credits |
| :---: | :---: | :---: |
| FRENCH 271 | Introduction to Literary Analysis | 3-4 |
| FRENCH 228 | Intermediate Language and Culture | 3-4 |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization ${ }^{1}$ | 3 |
| Two advanced language courses (311 and above) ${ }^{2}$ |  | 6-8 |
| Two additional courses in literature or civilization numbered at the 400 or 500 level |  | 6-8 |
| FRENCH 590 | Advanced Phonetics | 3 |

Additional credits as necessary to complete the 36 credit total or 24 advanced level credits required for the French major. Introductory French coursework (101-204) may be used to meet the 36 credit total, but all other requirements must be met.

1 FRENCH 348 Modernity Studies may be substituted with permission from the faculty advisor.
2 It is strongly recommended that students complete fourth year language practice (FRENCH 311 and above), FRENCH 590 Advanced Phonetics, and FRENCH 347 Introduction to Medieval, Renaissance, and Early Modern Civilization and Early Modern Civilization, before the first methods/student teaching semester of the professional program.

## ORAL AND WRITTEN PROFICIENCY EXAMS

## ABOUT THE ORAL AND WRITTEN PROFICIENCY EXAMS

Students admitted to the World Language Education program must provide evidence of having earned at least an Intermediate High score on an American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI). Latin Education students are exempt from this requirement, see below.

The interview must be taken prior to beginning the first student teaching experience (second semester of the professional sequence).

Students should be aware that it may take as long as three months to obtain results, and factor this delay into the scheduling of the OPI. If the score of Intermediate High is not made after the first examination, a student will be asked to take measures to improve their spoken language proficiency before continuing in the program. The student must repeat the OPI and achieve the required Intermediate High proficiency level.

All students in World Language Education (except Latin Education), are also required to complete the Writing Proficiency Test (WPT) no later than the third semester in the program. It is recommended that students take the test during the second semester of the professional sequence. A proficiency level of Intermediate High is also required for this examination. Students must take and pass the WPT in their program area and the scores must be received by Education Academic Services before beginning the final student teaching semester. Students who do not take and pass the exam will not be permitted to student teach. The WPT meets the Department of Public Instruction's content exam requirement, a requirement usually met by taking the appropriate Praxis II test.

Both the Oral Proficiency Interview and the Writing Proficiency Test are administered by Language Testing International (LTI) (http:// www.languagetesting.com). Their address is LTI, 3 Barker Avenue, Suite 310, White Plains, NY 10601; 800-486-8444. Students are responsible for costs associated with the OPI and the WPT.

Students seeking Latin certification will be required to take a proficiency exam administered by the Department of Classical and Ancient Near Eastern Studies prior to beginning the first student teaching experience (second semester of the professional sequence). This exam will take the place of the OPI and WPT required for certification in other languages.

See the World Language Education faculty program coordinator with questions about these requirements.

## IMMERSION EXPERIENCE

## ABOUT THE IMMERSION EXPERIENCE

Participation in an intensive immersion experience is one of the most important and meaningful ways of developing competence in a language. In preparation for the proficiency exams, students seeking certification in a language must participate in an approved immersion experience which emphasizes prolonged and intensive interaction within the target language and culture.

Program applicants completing French, German, and Spanish majors must complete and document a full-semester (or minimum four-monthlong) immersion experience as a prerequisite to being admitted to the professional program. Students completing majors in Chinese and Japanese must spend at least one academic year living in China or Japan, respectively-also a prerequisite to being admitted to the professional program.

The immersion experience must be completed by July 15 preceding the program start. The experience must also have been completed no more than three years before this date.

An approved experience involves significant interaction and day-to-day functioning in the host language, including use of the target language on a daily basis such as in college-level courses, a training program, or a work experience. The immersion experience need not involve attendance in an academic program only, but may take some form such that the language of routine communication is the target language. Simply living with relatives or traveling as a tourist is not considered an immersion
experience for the purposes of admission to this program. Most students choose to participate in a structured educational or exchange immersion program.

Students should consult with the International Academic Programs (IAP) (http://www.studyabroad.wisc.edu) office, 106 Red Gym, regarding campus-based study abroad programs. These experiences need not receive prior approval. Experiences through off-campus programs must have prior approval of the World Language Education faculty program coordinator. To obtain prior immersion experience approval, download and complete the approval form (http://www.education.wisc.edu/soe/ academics/undergraduate-students/forms), meet with the faculty coordinator, and obtain authorization. Bring two copies of the form to your meeting, obtain signatures on both, and leave one copy with the coordinator.

Native speakers are normally considered to have fulfilled this requirement without further documentation, especially if they received their secondary education in an environment where the target language is the primary means of communication. Heritage speakers are usually considered to have fulfilled this requirement; applicants must consult with the program coordinator about this requirement.

## PROFESSIONAL EDUCATION REQUIREMENTS (PROFESSIONAL SEQUENCE)

## ABOUT THE PROFESSIONAL SEQUENCE

The professional program is typically a full-time, four-semester sequence of education courses and school-based field experiences. The four semesters of required professional coursework must be followed sequentially and taken in consecutive semesters. Students must enroll in all required coursework outlined in each semester of the program, even if similar coursework was taken at another institution. Students begin the professional sequence in the fall.

It is expected that almost all major and liberal studies coursework be completed by the start of the professional sequence; completion of the entire major is preferred. The structure of the sequence allows very little time to pursue remaining coursework in these areas. Many students elect to finish their remaining requirements during the summer, or after the sequence has been completed. In addition, ACTFL OPI certification of speaking ability in the language rated Intermediate High or above is required by the end of the first semester in the program. Students must also complete the Writing Proficiency Test (WPT) no later than their third semester in the program. A rating of Intermediate High or above must be earned before a student is allowed to participate in the final student teaching semester. See further information under Oral and Written Proficiency Exams.

Students admitted to two areas of language certification follow the same four-semester sequence as single certification students; consult with the World Language Education program coordinator to arrange sequence requirements.

The professional program is a full-time commitment and places heavy demands on students' time and energy. The professional sequence is particularly taxing for students completing certification in two subject areas. Students must make satisfactory progress in their program to continue. This professional judgment is made by the faculty program coordinator in consultation with cooperating teachers and supervisors.

## PROFESSIONAL SEQUENCE COURSE REQUIREMENTS

Complete all of the courses listed below. Required courses must be taken during the semester listed. Other courses may be taken at any time, including summer, but a suggested course sequence is provided

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| Required Courses |  |  |
| CURRIC 342 | Teaching World Languages (K-8) | 3 |
| CURRIC 243 | Practicum in World Languages (K-12) ${ }^{1}$ | 3 |
| Other Courses |  |  |
| ED POL 300 <br> or ED POL/ HISTORY 412 | School and Society History of American Education | 3 |
| CURRIC/ RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| ED PSYCH 301 | How People Learn | 3 |
| Semester 2 |  |  |
| Required Courses |  |  |
| CURRIC 442 | Student Teaching in World Languages (K-8) ${ }^{2}$ | 6 |
| or CURRIC 443 | Student Teaching in World Languages (6-12) |  |
| Other Courses |  |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence | 3 |

$\left.\begin{array}{lll}\hline \text { Semester } 3 & & \\ \hline \text { Required Courses } & \text { Teaching World Languages (6-12) } & 3 \\ \hline \text { CURRIC } 343 & \begin{array}{l}\text { Student Teaching in World } \\ \text { Languages (6-12) }\end{array} \\ \hline \text { CURRIC 443 } & \text { Student Teaching in World Languages (K-8) }\end{array}\right]$

1 The practicum will take place three days a week; placement will probably be at the elementary level. Fieldwork this semester is a halftime commitment and encompasses an entire semester based on the UW-Madison calendar. Placements are made within a 50-mile field experiences service area and may not necessarily be in the city of Madison.
2 Placement will probably be at the elementary level, three days a week. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the UW-Madison calendar.
3 this semester is a half-time commitment and encompasses an entire semester based on the school district calendar. (Fall semester
extends from late August through mid-January; spring semester extends from mid-January through early mid-June.)
Student teaching this semester is a full-time commitment and will be at the high school level. Fieldwork this semester encompasses an entire semester based on the school district calendar.

## ELECTIVE COURSEWORK

Complete additional coursework as needed to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS <br> GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level major coursework
- 2.75 cumulative grade point average in all professional education coursework
- Degree candidates must complete at least 120 total credits.
- No more than 40 credits from a single academic department may be applied toward the 120 minimum credits required for graduation.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum work are considered part of the 30 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE <br> In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure (p. 1482).

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
| UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |  |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| grade point average specified by the school, college, or |  |
| academic program to remain in good academic standing. |  |
| Students whose academic performance drops below |  |
| these minimum thresholds will be placed on academic |  |
| probation. |  |

## LEARNING OUTCOMES

1. In Semester 1, prior to starting student teaching, students must have acquired Intermediate High proficiency in their target language on the ACTFL OPI scale as measured by two independent external evaluators.
2. In Year 1, student teachers must demonstrate the ability to teach in a K-8 context, as evaluated by their University supervisor and their mentor teacher through repeated direct observations.
3. During their content courses, students must meet (a) teacher education standards; and (b) ACTFL standards, as measured by (a) formative and summative evaluation of their assignments; (b) Teacher Education portfolio.
4. In Year 2, student teachers must demonstrate the ability to teach in a 6-12 school context, as evaluated by their University supervisor and their cooperating teacher through repeated direct observations.
5. To get certified by the Department of Public Instruction, at the end of Year 2, student teachers must have successfully completed an EdTPA Portfolio of their classroom experiences that demonstrates professionalism and meets the EdTPA standards, as evaluated by external evaluators.

## ADVISING AND CAREERS

## FRENCH EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach French. Students may want to consult an undergraduate advisor (https://frit.wisc.edu/ undergraduate/french/academic_advising) in the French and Italian department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to
a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for
career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http:// ci.education.wisc.edu) and French and Italian (http://frit.wisc.edu) departmental websites.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification
candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN/ENVIR ST/ | Atmospheric Environment and | 2 |
| GEOG 121 | Society |  |
| ATM OCN/ | Earth's Water. Natural Science and | 3 |
| SOIL SCI 132 | Human Use |  |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ <br> ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ | Introductory Ecology | 3 |
| ZOOLOGY 260 |  |  |


| ECON/A A E/ ENVIR ST 343 | Environmental Economics | 3-4 |
| :---: | :---: | :---: |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, 3-5 lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a " $D$ ") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully
complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## FRENCH, SED MINOR

## HOW TO GET IN

This minor is available only to students admitted to the World Language Education program, or to teachers already licensed to teach at an appropriate level and subject in Wisconsin. Undergraduate students interested in completing a certification minor in French must also complete a major in another World Language certification subject area and be admitted to the World Language Education program. It is not possible to be certified only in a minor area. Consult with an Education Academic Services advisor to discuss the feasibility of combining this minor with the major subject area-not all combinations may be possible and will require approval of the WLE program coordinator. Interested students must apply and be admitted to both language subject areas. The oral proficiency exam, any written exams, and the immersion experience required for certification must be completed in both languages.

Licensed teachers interested in pursuing certification in this minor should consult with the World Language Education program director, Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## REQUIREMENTS

## FRENCH MINOR

Note: The oral proficiency exam, any written exams, and an immersion experience are required for certification in this language. Consult the major requirements ( p .1477 ) in this subject for an explanation of these requirements and the World Language Education professional sequence.

## PREREQUISITE COURSEWORK

These courses, or demonstrated proficiency through fourth semester French, must be completed before beginning the minor requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| FRENCH 101 | First Semester French | 4 |
| FRENCH 102 | Second Semester French | 4 |
| FRENCH 203 | Third Semester French | 4 |
| FRENCH 204 | Fourth Semester French | 4 |

## MINOR REQUIREMENTS

Complete a minimum of 24 credits. The French minor requires a minimum cumulative grade point average of 2.75 , based on all French minor coursework taken on the UW-Madison campus.

| Code | Title | Credits |
| :---: | :---: | :---: |
| FRENCH 271 | Introduction to Literary Analysis | 4 |
| FRENCH 321 | Introduction to Medieval, Renaissance, and Early Modern Literature | 3 |
| FRENCH 322 | Introduction to Literature of Modernity | 3 |
| FRENCH 347 | Introduction to Medieval, Renaissance, and Early Modern Civilization | 3 |
| Language course elective numbered 227 or above |  | 3 |
| FRENCH 590 | Advanced Phonetics | 3 |
| Additional credits to complete 24 credits. ${ }^{2}$ |  |  |
| FRENCH 348 Modernity Studies may be substituted with permission of faculty advisor. |  |  |
| 2 Introductory coursework (prerequisites) may be used to fulfill this requirement, but all other requirements must be met. |  |  |

## ADVISING AND CAREERS

## FRENCH EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach French. Students may want to consult an undergraduate advisor (https://frit.wisc.edu/ undergraduate/french/academic_advising) in the French and Italian department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GEOGRAPHY, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of Geography is housed in the College of Letters \& Science. Students may wish to consult with academic advisor Joel Gruley, jgruley@wisc.edu, (jgruley@wisc.edu) 144 Science Hall, 262-4438, to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

The geography minor requires a minimum of 24 credits to include GEOG 342 and the required course distribution listed below. Each course may be counted in only one of the groups. Coursework must include at least two upper-level courses, numbered 300-699.

A minimum cumulative grade point average of 2.75 is required, based on all geography minor coursework taken on the UW-Madison campus.
REQUIRED COURSE
Code Title Credits
GEOG 342
Geography of Wisconsin (Or an acceptable substitute selected in consultation with the undergraduate advisor in the Department of Geography. This course may be also used to fulfill the requirement in Area Studies and Global Systems)

## COURSE DISTRIBUTION REQUIREMENTS

Complete one course from each of the six groups:

## PHYSICAL GEOGRAPHY: EARTH SYSTEMS AND ENVIRONMENTAL PROCESSES

Courses address the locational arrangements of earth phenomena and their interaction as physical systems.

| Physical Geography: Earth Systems and Environmental Processes course options |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ | Atmospheric Environment and | 2 |
| ENVIR ST 121 | Society |  |
| GEOG/ENVIR ST 127 | Physical Systems of the | 5 |
|  | Environment |  |


| GEOG/GEOSCI 320 | Geomorphology | 3 |
| :---: | :---: | :---: |
| GEOG 321 | Climatology | 3 |
| GEOG/ATM OCN 323 | Science of Climate Change | 3 |
| GEOG/ENVIR ST 325 | Analysis of the Physical Environment | 4 |
| GEOG/GEOSCI 326 | Landforms-Topics and Regions | 3 |
| GEOG 329 | Landforms and Landscapes of North America | 3 |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts | 3 |
| GEOG/ATM OCN/ <br> ENVIR ST/ <br> GEOSCI 335 | Climatic Environments of the Past | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG 344 | The American West | 3 |
| GEOG/GEOSCI 420 | Glacial and Pleistocene Geology | 3 |
| GEOG/GEOSCI 523 | Quaternary Vegetation Dynamics | 3 |
| GEOG/GEOSCI 524 | Advanced Landform Geography | 3 |
| GEOG/SOIL SCI 525 | Soil Geomorphology | 3 |
| GEOG/SOIL SCI 526 | Human Transformations of Earth Surface Processes | 3 |
| GEOG/GEOSCI 527 | The Quaternary Period | 3 |
| GEOG/ATM OCN/ ENVIR ST 528 | Past Climates and Climatic Change | 3 |

## PEOPLE-ENVIRONMENT INTERACTION

Courses examine human use, perception, and modification of environments.

## People-Environment Interaction course options

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST/ SOIL SCI 230 | Soil: Ecosystem and Resource | 3 |
| GEOG/ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| GEOG/ATM OCN/ ENVIR ST 332 | Global Warming: Science and Impacts | 3 |
| GEOG/ENVIR ST 337 | Nature, Power and Society | 3 |
| GEOG/BOTANY 338 | Environmental Biogeography | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 344 | The American West | 3 |
| GEOG 359 | Australia: Environment and Society | 3 |
| GEOG/C\&E SOC/ <br> ENVIR ST 434 | People, Wildlife and Landscapes | 3 |
| GEOG/ENVIR ST 439 | US Environmental Policy and Regulation | 3-4 |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History | 4 |
| GEOG/ENVIR ST/ HISTORY 469 | The Making of the American Landscape | 4 |


| GEOG 508 | $\begin{array}{l}\text { Landscape and Settlement in the } \\ \text { North American Past }\end{array}$ | 3 |
| :--- | :--- | ---: |
| GEOG/SOIL SCI 526 | $\begin{array}{l}\text { Human Transformations of Earth } \\ \text { Surface Processes }\end{array}$ |  |
| GEOG/ENVIR ST 534 | $\begin{array}{l}\text { Environmental Governance: } \\ \text { Markets, States and Nature }\end{array}$ |  |
| GEOG/ENVIR ST 537 | 3 |  |
| GEOG 538 | $\begin{array}{l}\text { Culture and Environment }\end{array}$ |  |
| $\begin{array}{ll}\text { The Humid Tropics: Ecology, } \\ \text { Subsistence, and Development }\end{array}$ | 4 |  |

Southeast Asia

## HUMAN GEOGRAPHY

Courses examine the location and organization of human settlements and activities.

| Human Geography course options |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| GEOG 101 | Introduction to Human Geography | 4 |
| GEOG 104 | Introduction to Human Geography | 3 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG 302 | Economic Geography: Locational Behavior | 4 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 348 | Latin America | 4 |
| GEOG 349 | Europe | 3 |
| GEOG 353 | Russia and the NIS-Topical Analysis | 3 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG/ENVIR ST/ HISTORY 469 | The Making of the American Landscape | 4 |
| GEOG 501 | Space and Place: A Geography of Experience | 3 |
| GEOG/URB R PL 503 | Researching the City: Qualitative Strategies | 3 |
| GEOG/URB R PL 505 | Urban Spatial Patterns and Theories | 3 |
| GEOG/URB R PL 506 | Historical Geography of European Urbanization | 3 |
| GEOG 508 | Landscape and Settlement in the North American Past | 3 |
| GEOG 510 | Economic Geography | 4 |
| GEOG 518 | Power, Place, Identity | 3 |
| GEOG 566 | History of Geographic Thought | 3 |

## AREA STUDIES AND GLOBAL SYSTEMS

Courses focus on the ways in which regions, places, and landscapes have acquired distinctive characteristics and problems as a result of their locations and resource potentials, and of their settlement, appraisal, and use by particular peoples and cultures.

## Area Studies and Global Systems course options

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEOG/HISTORY/ <br> LCA/POLI SCI/ <br> SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| GEOG/HISTORY/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| GEOG/HISTORY/ <br> POLI SCI/ <br> SLAVIC 253 | Russia: An Interdisciplinary Survey | 4 |
| GEOG/AFROAMER/ ANTHRO/C\&E SOC/ HISTORY/LACIS/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| GEOG/AFRICAN/ AFROAMER/ ANTHRO/HISTORY/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| GEOG 342 | Geography of Wisconsin | 3 |
| GEOG 348 | Latin America | 4 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG/ENVIR ST 557 | Development and Environment in Southeast Asia | 3 |

## CARTOGRAPHY AND GEOGRAPHIC INFORMATION SCIENCE

Courses examine the creation and use of maps.

## Cartography and Geographic Information Science course options

| Code | Title | Credits |
| :--- | :--- | ---: |
| GEOG 170 | Our Digital Globe: An Overview of <br> GIScience and its Technology | 3 |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG/CIV ENGR/ | An Introduction to Geographic |  |
| ENVIR ST 377 | Information Systems | 4 |
| GEOG 378 | Introduction to Geocomputing | 4 |
| GEOG 572 | Graphic Design in Cartography | $4-4$ |
| GEOG 574 | Geospatial Database Design and <br> Development | 4 |
| GEOG 575 |  <br> Geovisualization | 4 |
| GEOG 576 | Geospatial Web and Mobile <br> Programming | 4 |
| GEOG 577 | Environmental Modeling with GIS | 3 |
| GEOG 578 | GIS Applications | 4 |
| GEOG 579 | GIS and Spatial Analysis | 4 |

## METHODOLOGY

Courses examine the skills, techniques and methodology necessary to conduct geographic investigation.

## Methodology course options

## Title

Credits
GEOG 170 Our Digital Globe: An Overview of

| GEOG 360 | Quantitative Methods in <br> Geographical Analysis (offered only <br> in spring) | 4 |
| :--- | :--- | :---: |
| GEOG 370 | Introduction to Cartography | 4 |
| GEOG/CIV ENGR/ | An Introduction to Geographic <br> ENVIR ST 377 | 4 |
| Information Systems |  |  |

## GERMAN, BSE

## WORLD LANGUAGE EDUCATION PROGRAM (CURRENTLY CHINESE, FRENCH, GERMAN, JAPANESE, LATIN, AND SPANISH MAJORS)

The mission of the World Language Education (WLE) program is (1) to promote a community-based approach to world language instruction; (2) to educate teachers who understand different cultures, are proficient in their languages, routinely visit other countries, and can build bridges across nations, races, socioeconomic groups, cultures, and languages; and (3) to certify teachers who are prepared to serve the global needs of increasingly multicultural and multilingual schools and are strongly committed to act for a world in which shared understanding through conflict resolution, negotiation and communication are guiding principles.

There is a growing need for multilingual teachers from diverse backgrounds. The WLE faculty encourages qualified applicants from under-represented groups to apply for admissions to the program. The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

The objectives of the $\mathrm{K}-12$ WLE program are

- to provide a philosophy of action designed to promote thoughtful curriculum development and classroom teaching in WLE;
- to provide regular contacts with the global community and inservice teachers in schools through field evenings, workshops, conferences, and other professional meetings;
- to provide clinical settings which enhance opportunities for beginning teachers to develop skillful practice and build bridges across languages, cultures, races, and nationalities;
- to help student teachers use multilingual educational technologies and document their experiences in electronic portfolios and implement research-based practices in their teaching;
- to provide university instructors and supervisors who are wellversed in WLE, who have an international orientation, and who are both approachable and helpful to student teachers.

Program majors include Chinese, French, German, Japanese, Latin, and Spanish, and may also include Italian and Portuguese if field placements are available in these subject areas. Completion of the WLE program leads to a bachelor of science degree in education with a major in the specific subject area. Wisconsin state licensing regulations require that students are licensed to teach at the early childhood through adolescence (approximately kindergarten through high school) levels.

Oral and written examinations are required for all world language teacher candidates enrolled in Wisconsin educator preparation programs, as is an extensive immersion experience. (Students becoming certified to teach Latin are exempt from both the Oral Proficiency Exam and immersion experience requirement.)

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the World Language Education program once a year, effective in the fall. Selection is made the previous spring.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in World Language Education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in World Language Education receive the pre-professional classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1490)). It is not necessary to be a pre-professional student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall; call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a
subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## NATIVE AND HERITAGE SPEAKERS

Native or heritage speakers of a language major offered within the World Language Education program are welcome to pursue admission to the World Language Education program. Prospective applicants and transfer students who have previous experience with a language are encouraged to consult with an advisor in Education Academic Services as early as possible; to schedule, call 608-262-1651.

Native or heritage speakers must take a placement exam in the corresponding language to determine the appropriate level of remaining instruction in grammar, communication standards and social customs, and other topics related to language acquisition and proficiency. Placement examinations for Spanish, French, and German are offered on campus through Testing \& Evaluation Services or the University of Wisconsin System's Regional Placement Testing Program. Placement examinations for Chinese, Japanese, Italian, Latin, and Portuguese are administered by faculty or staff within the relevant academic department. For more information regarding placement in language courses, consult the Languages at UW-Madison placement guide (http:// languages.wisc.edu/advising/placement).

## APPLICATION AND ADMISSION

Applicants to the World Language Education program will be selected once a year, during the spring semester. Admission decisions will be based on coursework completed through the preceding fall semester. Admission is provisional until spring semester work has been completed and posted, and Education Academic Services staff have verified that students have met minimum grade point averages and earned minimum credits in their major. Admitted students will begin the sequence the following fall semester.

Resources limit the number of students who can be served by the UWMadison World Language Education teacher education program. In recent years the World Language Education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to World Language Education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## ELIGIBILITY FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

To be considered for admission, students must:

- earn 54 or more transferable semester credits (junior standing) by the end of the spring semester of the application year.
- complete all but six credits of the relevant World Language major.
- earn a minimum 2.75 grade point average on all major coursework completed.
- earn a cumulative GPA of at least 2.75 (on a 4.00 scale). ${ }^{1}$
- have completed, or be in the process of completing, an approved Immersion Experience required for the World Language Education degree program.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

1 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## APPLYING FOR CERTIFICATION IN MORE THAN ONE SUBJECT AREA

Students may apply to be certified in more than one language. Eligibility requirements must be met and separate applications must be filed for each area of interest. Students must be admitted as a major in at least one of the program areas as it is not possible to be admitted only to complete a minor.

Students interested in combining the World Language Education degree program with certification in another area altogether must apply to both programs and meet the minimum criteria for admission to each program. It is suggested that students apply as majors in each area of interest, thus maximizing the chances of admission. Certification in two different areas requires the consent and cooperation of the World Language Education program coordinator and the faculty coordinator of the other subject area. Not all subjects can be combined with the World Language Education degree program.

While multiple majors or major-minor combinations are feasible and may be advantageous as a career strategy, it may take extra time to complete the additional subject area coursework. Students are encouraged to work closely with their Education Academic Services advisor to assess the possibility of completing certification in more than one area and to coordinate the requirements of multiple certifications.

## PROGRAM ADMISSION SELECTION CRITERIA

The files of all applicants will be individually and holistically reviewed by a panel of World Language professionals. The criteria used for admission include the following:

- Academic Qualifications: The applicant demonstrates mastery of the target language and knowledge of its literature, civilization, and culture.
- Career Maturity: The applicant demonstrates commitment to teaching the target language to elementary, middle, and high school students, including consideration of his or her own strengths and limitations as a potential teacher.
- Ability to Relate to Youth: The applicant demonstrates the ability to work effectively with young people.
- Commitment to All Students: The applicant demonstrates commitment to working with all students including those of different racial, ethnic, and socioeconomic backgrounds, and students with disabilities, not just the economically privileged or highly motivated.
- Interpersonal Skills: The applicant demonstrates the ability to work effectively with peers, other professionals, and members of the community outside of school settings.

The application files, including immersion experiences and oral proficiency, are rated according to the above criteria for each language. A final cohort is selected along with rank-ordered alternates, based on a combination of ratings made by the World Language Education review committee and judgement by the faculty program coordinator about optimal cohort characteristics for each language. The availability of field placements in the subject area may also influence the selection process. Admission procedures are reviewed every other year to ensure fairness and effectiveness.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

## General

- Breadth-Humanities/Literature/Arts: 6 credits Education
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

This program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Prerequisite coursework prepares students for work in the major. Program applicants must also complete and document an immersion experience as a prerequisite to being admitted to the professional program.
- Major coursework offers in-depth study of the subject students will teach.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a four-semester sequence of world language teaching methods course work and field experiences in schools.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

The four semesters of professional coursework are followed sequentially and taken in consecutive semesters. Because of the program structure,
students are expected to have completed most of their major and liberal studies coursework by the start of the professional sequence.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p.1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits. PREREQUISITE COURSEWORK

Complete the following courses or demonstrate proficiency at the equivalent level. Prerequisite courses do not generally count toward the required credits of the major.

| Code | Title | Credits |
| :--- | :--- | ---: |
| GERMAN 101 | First Semester German | 4 |
| GERMAN 102 | Second Semester German | 4 |
| GERMAN 203 | Third Semester German | 4 |
| GERMAN 204 | Fourth Semester German | 4 |
| GERMAN 249 | Intermediate German - Speaking | 3 |
|  | and Listening |  |
| GERMAN 258 | Intermediate German-Reading | 3 |
| GERMAN 262 | Intermediate German-Writing | 3 |

## MAJOR REQUIREMENTS

Complete a minimum of 27 credits in German courses numbered 300 and above. The credits in the major required for admission must be taken from the coursework below. Students must complete at least 15 credits of upper-level major coursework (numbered 300-699) in residence on the UW-Madison campus. Other courses, especially those transferred from international programs, may be substituted with the approval of the program coordinator.

| Code | Title | Credits |
| :--- | :--- | ---: |
| GERMAN 337 | Advanced Composition \& | $3-4$ |
|  | Conversation | $3-4$ |
| GERMAN 351 | Introduction to German Linguistics | 3 |
| GERMAN 676 | Advanced Seminar in German |  |

Additional 12 credits from any German courses numbered
300 or above. These must be courses designated by the
Department of German as acceptable for the L\&S major in German.
Two upper-level courses (300 or above) in related fields ${ }^{1}$
1 These "cognate" courses must deal substantially with the Germanspeaking world and may be taken at any time during the degree work on campus. Courses come from related fields such as history, art history, philosophy, or music, and must receive prior approval from the program coordinator..

## ORAL AND WRITTEN PROFICIENCY EXAMS

## ABOUT THE ORAL AND WRITTEN PROFICIENCY EXAMS

Students admitted to the World Language Education program must provide evidence of having earned at least an Intermediate High score on an American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI). Latin Education students are exempt from this requirement, see below.

The interview must be taken prior to beginning the first student teaching experience (second semester of the professional sequence). Students should be aware that it may take as long as three months to obtain results, and factor this delay into the scheduling of the OPI. If the score of Intermediate High is not made after the first examination, a
student will be asked to take measures to improve their spoken language proficiency before continuing in the program. The student must repeat the OPI and achieve the required Intermediate High proficiency level.

All students in World Language Education (except Latin Education), are also required to complete the Writing Proficiency Test (WPT) no later than the third semester in the program. It is recommended that students take the test during the second semester of the professional sequence. A proficiency level of Intermediate High is also required for this examination. Students must take and pass the WPT in their program area and the scores must be received by Education Academic Services before beginning the final student teaching semester. Students who do not take and pass the exam will not be permitted to student teach. The WPT meets the Department of Public Instruction's content exam requirement, a requirement usually met by taking the appropriate Praxis II test.

Both the Oral Proficiency Interview and the Writing Proficiency Test are administered by Language Testing International (LTI) (http:// www.languagetesting.com). Their address is LTI, 3 Barker Avenue, Suite 310, White Plains, NY 10601; 800-486-8444. Students are responsible for costs associated with the OPI and the WPT.

Students seeking Latin certification will be required to take a proficiency exam administered by the Department of Classical and Ancient Near Eastern Studies prior to beginning the first student teaching experience (second semester of the professional sequence). This exam will take the place of the OPI and WPT required for certification in other languages.

See the World Language Education faculty program coordinator with questions about these requirements.

## IMMERSION EXPERIENCE

ABOUT THE IMMERSION EXPERIENCE
Participation in an intensive immersion experience is one of the most important and meaningful ways of developing competence in a language. In preparation for the proficiency exams, students seeking certification in a language must participate in an approved immersion experience which emphasizes prolonged and intensive interaction within the target language and culture.

Program applicants completing French, German, and Spanish majors must complete and document a full-semester (or minimum four-monthlong) immersion experience as a prerequisite to being admitted to the professional program. Students completing majors in Chinese and Japanese must spend at least one academic year living in China or Japan, respectively-also a prerequisite to being admitted to the professional program.

The immersion experience must be completed by July 15 preceding the program start. The experience must also have been completed no more than three years before this date.

An approved experience involves significant interaction and day-to-day functioning in the host language, including use of the target language on a daily basis such as in college-level courses, a training program, or a work experience. The immersion experience need not involve attendance in an academic program only, but may take some form such that the language of routine communication is the target language. Simply living with relatives or traveling as a tourist is not considered an immersion experience for the purposes of admission to this program. Most students
choose to participate in a structured educational or exchange immersion program.

Students should consult with the International Academic Programs (IAP) (http://www.studyabroad.wisc.edu) office, 106 Red Gym, regarding campus-based study abroad programs. These experiences need not receive prior approval. Experiences through off-campus programs must have prior approval of the World Language Education faculty program coordinator. To obtain prior immersion experience approval, download and complete the approval form (http://www.education.wisc.edu/soe/ academics/undergraduate-students/forms), meet with the faculty coordinator, and obtain authorization. Bring two copies of the form to your meeting, obtain signatures on both, and leave one copy with the coordinator.

Native speakers are normally considered to have fulfilled this requirement without further documentation, especially if they received their secondary education in an environment where the target language is the primary means of communication. Heritage speakers are usually considered to have fulfilled this requirement; applicants must consult with the program coordinator about this requirement.

## PROFESSIONAL EDUCATION REQUIREMENTS (PROFESSIONAL SEQUENCE)

## ABOUT THE PROFESSIONAL SEQUENCE

The professional program is typically a full-time, four-semester sequence of education courses and school-based field experiences. The four semesters of required professional coursework must be followed sequentially and taken in consecutive semesters. Students must enroll in all required coursework outlined in each semester of the program, even if similar coursework was taken at another institution. Students begin the professional sequence in the fall.

It is expected that almost all major and liberal studies coursework be completed by the start of the professional sequence; completion of the entire major is preferred. The structure of the sequence allows very little time to pursue remaining coursework in these areas. Many students elect to finish their remaining requirements during the summer, or after the sequence has been completed. In addition, ACTFL OPI certification of speaking ability in the language rated Intermediate High or above is required by the end of the first semester in the program. Students must also complete the Writing Proficiency Test (WPT) no later than their third semester in the program. A rating of Intermediate High or above must be earned before a student is allowed to participate in the final student teaching semester. See further information under Oral and Written Proficiency Exams.

Students admitted to two areas of language certification follow the same four-semester sequence as single certification students; consult with the World Language Education program coordinator to arrange sequence requirements.

The professional program is a full-time commitment and places heavy demands on students' time and energy. The professional sequence is particularly taxing for students completing certification in two subject areas. Students must make satisfactory progress in their program to continue. This professional judgment is made by the faculty program coordinator in consultation with cooperating teachers and supervisors.

## PROFESSIONAL SEQUENCE COURSE REQUIREMENTS

Complete all of the courses listed below. Required courses must be taken during the semester listed. Other courses may be taken at any time, including summer, but a suggested course sequence is provided.

| Code <br> Semester 1 | Title | Credits |
| :---: | :---: | :---: |
| Required Courses |  |  |
| CURRIC 342 | Teaching World Languages (K-8) | 3 |
| CURRIC 243 | Practicum in World Languages $(K-12)^{1}$ | 3 |
| Other Courses |  |  |
| ED POL 300 or ED POL/ HISTORY 412 | School and Society <br> History of American Education | 3 |
| CURRIC/ <br> RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| ED PSYCH 301 | How People Learn | 3 |
| Semester 2 |  |  |
| Required Courses |  |  |
| CURRIC 442 | Student Teaching in World Languages (K-8) ${ }^{2}$ | 6 |
| or CURRIC 443 | Student Teaching in World Languages (6-12) |  |
| Other Courses |  |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence | 3 |


| Semester 3 |  |  |
| :---: | :---: | :---: |
| Required Courses |  |  |
| CURRIC 343 | Teaching World Languages (6-12) | 3 |
| CURRIC 443 | Student Teaching in World Languages (6-12) ${ }^{3}$ | 6 |
| or CURRIC 442 | Student Teaching in World Languages (K-8) |  |
| Other Courses |  |  |
| CURRIC 305 | Integrating the Teaching of Reading with Other Language Arts | 3 |
| Semester 4 |  |  |
| Required Courses |  |  |
| CURRIC 443 | Student Teaching in World Languages (6-12) ${ }^{4}$ | 9 |
| CURRIC 564 | Advanced Problems on the Teaching of World Languages | 3 |

1 The practicum will take place three days a week; placement will probably be at the elementary level. Fieldwork this semester is a halftime commitment and encompasses an entire semester based on the UW-Madison calendar. Placements are made within a 50-mile field experiences service area and may not necessarily be in the city of Madison.
2 Placement will probably be at the elementary level, three days a week. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the UW-Madison calendar.
3 this semester is a half-time commitment and encompasses an entire semester based on the school district calendar. (Fall semester
extends from late August through mid-January; spring semester extends from mid-January through early mid-June.)
Student teaching this semester is a full-time commitment and will be at the high school level. Fieldwork this semester encompasses an entire semester based on the school district calendar.

## ELECTIVE COURSEWORK

Complete additional coursework as needed to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS <br> GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level major coursework
- 2.75 cumulative grade point average in all professional education coursework
- Degree candidates must complete at least 120 total credits.
- No more than 40 credits from a single academic department may be applied toward the 120 minimum credits required for graduation.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum work are considered part of the 30 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE <br> In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure. (p. 1496)

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. In Semester 1, prior to starting student teaching, students must have acquired Intermediate High proficiency in their target language on the ACTFL OPI scale as measured by two independent external evaluators.
2. In Year 1, student teachers must demonstrate the ability to teach in a K-8 context, as evaluated by their University supervisor and their mentor teacher through repeated direct observations.
3. During their content courses, students must meet (a) teacher education standards; and (b) ACTFL standards, as measured by (a) formative and summative evaluation of their assignments; (b) Teacher Education portfolio.
4. In Year 2, student teachers must demonstrate the ability to teach in a 6-12 school context, as evaluated by their University supervisor and their cooperating teacher through repeated direct observations.
5. To get certified by the Department of Public Instruction, at the end of Year 2, student teachers must have successfully completed an EdTPA Portfolio of their classroom experiences that demonstrates professionalism and meets the EdTPA standards, as evaluated by external evaluators.

## ADVISING AND CAREERS

## GERMAN EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach German. Students may want to consult an undergraduate advisor (p.729) in the German, Nordic and Slavic department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS) <br> 139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will
also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for
career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http:// ci.education.wisc.edu) and German, Nordic and Slavic (https:// gns.wisc.edu) departmental websites.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification
candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN/ENVIR ST/ | Atmospheric Environment and | 2 |
| GEOG 121 | Society |  |
| ATM OCN/ | Earth's Water. Natural Science and | 3 |
| SOIL SCI 132 | Human Use |  |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ | Introductory Biology | 5 |
| ZOOLOGY 152 |  | 3 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ | Introductory Ecology |  |
| ZOOLOGY 260 |  |  |


| ECON/A A E/ ENVIR ST 343 | Environmental Economics | 3-4 |
| :---: | :---: | :---: |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, 3-5 lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a " D ") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully
complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## GERMAN, SED MINOR

## HOW TO GET IN

This minor is available only to students admitted to the World Language Education program, or to teachers already licensed to teach at an appropriate level and subject in Wisconsin. Undergraduate students interested in completing a certification minor in German must also complete a major in another World Language certification subject area and be admitted to the World Language Education program. It is not possible to be certified only in a minor area. Consult with an Education Academic Services advisor to discuss the feasibility of combining this minor with the major subject area-not all combinations may be possible and will require approval of the WLE program coordinator. Interested students must apply and be admitted to both language subject areas. The oral proficiency exam, any written exams, and the immersion experience required for certification must be completed in both languages.

Licensed teachers interested in pursuing certification in this minor should consult with the World Language Education program director, Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## REQUIREMENTS

Note: The oral proficiency exam, any written exams, and an immersion experience are required for certification in this language. Consult the major requirements ( $p$. 1491) in this subject for an explanation of these requirements and the World Language Education professional sequence.

## PREREQUISITE COURSEWORK

Complete the following courses or demonstrate proficiency at the equivalent level. Prerequisite courses do not count toward the required credits of the minor.

| Code | Title | Credits |
| :--- | :--- | ---: |
| GERMAN 101 | First Semester German | 4 |
| GERMAN 102 | Second Semester German | 4 |
| GERMAN 203 | Third Semester German | 4 |
| GERMAN 204 | Fourth Semester German | 4 |
| GERMAN 249 | Intermediate German - Speaking | 3 |
| GERMAN 258 | and Listening | 3 |
| GERMAN 262 | Intermediate German-Reading | 3 |

## MINOR REQUIREMENTS

The German minor requires a minimum of 18 credits of advanced (numbered 300 and above) coursework. The prerequisites to these courses are listed above. The German minor also requires a minimum cumulative grade point average of 2.75 , based on all German minor coursework taken on the UW-Madison campus.

| Code | Title | Credits |
| :--- | :--- | ---: |
| GERMAN 337 | Advanced Composition \& | $3-4$ |
|  | Conversation |  |
| GERMAN 351 | Introduction to German Linguistics | $3-4$ |

Complete 12 credits of any German courses numbered 300 or above. These must be courses designated by the Department of German, Nordic and Slavic as acceptable for the L\&S major in German.

## ADVISING AND CAREERS

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach German. Students may want to consult an undergraduate advisor (p. 729) in the German, Nordic and Slavic department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## HISTORY, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of History is housed in the College of Letters \& Science.

Students may wish to consult with an undergraduate advisor in the department to discuss course selection and other issues related to this field of study.

Students have numerous advising resources available to them, including both professional and peer advisors. Information on the History advising team, how to contact an advisor, how to schedule an appointment, and drop-in advising hours can be found on the departmental website (https://history.wisc.edu/undergraduate-program/ undergraduate-advising). (https://history.wisc.edu/undergraduate-program/undergraduate-advising)

Upcoming career events and internship opportunities are also available on the History Advising Blog (http://uwhistoryadvising.blogspot.com).

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

The history minor requires a minimum of 24 credits. No more than three courses may be numbered below $\mathbf{3 0 0}$. A minimum cumulative grade point average of 2.75 is required, based on all history minor coursework taken on the UW-Madison campus.

## EUROPEAN HISTORY

Complete at least one course; includes British or Russian history.

| European History course options |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| HISTORY/ CLASSICS 110 | The Ancient Mediterranean | 4 |
| HISTORY 111 | Culture \& Society in the Ancient Mediterranean | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 112 | The World of Late Antiquity (200-900 C.E.) | 4 |
| HISTORY 115 | Medieval Europe 410-1500 | 4 |
| HISTORY 119 | The Making of Modern Europe 1500-1815 | 4 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 123 | English History: England to 1688 | 3-4 |
| HISTORY 124 | British History: 1688 to the Present | 4 |
| HISTORY/ <br> RELIG ST 208 | Western Intellectual and Religious History to 1500 | 3-4 |
| HISTORY/ <br> RELIG ST 209 | Western Intellectual and Religious History since 1500 | 3-4 |
| HISTORY/ <br> RELIG ST 212 | The History of Western Christianity to 1750 | 4 |
| HISTORY/ MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course | 3-4 |


| HISTORY 223 | Explorations in European History (H) | 3-4 |
| :---: | :---: | :---: |
| HISTORY 224 | Explorations in European History (S) | 3 |
| HISTORY/ GEOG/POLI SCI/ SLAVIC 253 | Russia: An Interdisciplinary Survey | 4 |
| HISTORY/ GEOG/POLI SCI/ SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 |
| HISTORY 270 | Eastern Europe since 1900 | 3-4 |
| HISTORY 271 | History Study Abroad: European History | 1-4 |
| HISTORY 303 | A History of Greek Civilization | 3-4 |
| HISTORY 307 | A History of Rome | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 312 | The Medieval Church | 3-4 |
| HISTORY/ MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| HISTORY/ MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| HISTORY 320 | Early Modern France, 1500-1715 | 3-4 |
| HISTORY/ <br> HIST SCI 323 | The Scientific Revolution: From Copernicus to Newton | 3 |
| HISTORY/ <br> HIST SCI 324 | Science in the Enlightenment | 3 |
| HISTORY/ <br> ENVIR ST 328 | Environmental History of Europe | 3 |
| HISTORY 333 | The Renaissance | 3-4 |
| HISTORY/ RELIG ST 334 | The Reformation | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| HISTORY 351 | Seventeenth-Century Europe | 3-4 |
| HISTORY 352 | Eighteenth Century Europe | 3-4 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 358 | French Revolution and Napoleon | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 | 3-4 |
| HISTORY 367 | Society and Ideas in Shakespeare's England | 3-4 |
| HISTORY/JEWISH/ MEDIEVAL/ RELIG ST 368 | The Bible in the Middle Ages | 3 |


| HISTORY/ <br> JEWISH 373 | Modern Political History of the Jews: 1655-1919 | 4 |
| :---: | :---: | :---: |
| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| HISTORY/ GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY/ <br> RELIG ST 411 | The Enlightenment and Its Critics | 3 |
| HISTORY 417 | History of Russia | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ LEGALST 426 | The History of Punishment | 3-4 |
| HISTORY/ SCAND ST 431 | History of Scandinavia to 1815 | 3 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/ RELIG ST 437 | Western Christianity from Augustine to Darwin | 4 |
| HISTORY 467 | Economic and Social History of Europe 1500-1750 | 3-4 |
| HISTORY/ <br> RELIG ST 470 | Religious Thought in Modern Europe | 3-4 |
| HISTORY 474 | European Social History, 1830-1914 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY/ LEGAL ST 476 | Medieval Law and Society | 3 |
| HISTORY/ <br> ED POL 478 | Comparative History of Childhood and Adolescence | 3 |
| HISTORY/ LEGALST 502 | Law and Colonialism | 3 |
| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
| HISTORY/HIST SCI/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HISTORY 514 | European Cultural History Since 1870 | 3-4 |
| HISTORY/CURRIC/ JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY/ <br> JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| HISTORY/JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |


| HISTORY 540 | Balkans and Middle East, <br> 1700-1918: The Rise of National <br> States | $3-4$ |
| :--- | :--- | ---: |
| HISTORY/CLASSICS/ Advanced Interdisciplinary Studies |  |  |
| FRENCH/ITALIAN/ | in Medieval Civilization |  |
| MEDIEVAL 550 |  |  |$\quad 3$

Complete at least one course.

| U.S. History course options |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| HISTORY 101 | Amer Hist to the Civil War Era, the Origin \& Growth of the U S | 4 |
| HISTORY 102 | American History, Civil War Era to the Present | 4 |
| HISTORY 109 | Introduction to U.S. History | 3-4 |
| HISTORY 136 | Sport, Recreation, \& Society in the United States | 3-4 |
| HISTORY 150 | American Histories: The Nineteenth Century | 4 |
| HISTORY/ <br> ASIAN AM 160 | Asian American History: Movement and Dislocation | 3-4 |
| HISTORY/ <br> ASIAN AM 161 | Asian American History: Settlement and National Belonging | 3-4 |
| HISTORY/ <br> JEWISH 213 | Jews and American Pop. Culture | 3-4 |
| HISTORY/ JEWISH 219 | The American Jewish Experience: From Shtetl to Suburb | 4 |
| HISTORY 221 | Explorations in American History $(H)$ | 3-4 |
| HISTORY 227 | Explorations in the History of Race and Ethnicity | 3 |
| HISTORY/CHICLA/ GEN\&WS 245 | Chicana and Latina History | 3 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY/ LEGAL ST 261 | American Legal History to 1860 | 3 |
| HISTORY/ LEGALST 262 | American Legal History, 1860 to the Present | 3 |
| HISTORY 269 | War, Race, and Religion in Europe and the United States, from the Scramble for Africa to Today | 3-4 |
| HISTORY 272 | History Study Abroad: United States History | 1-4 |
| HISTORY/AFRICAN/ AFROAMER/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| HISTORY 302 | History of American Thought, 1859 to the Present | 3-4 |
| HISTORY 304 | United States, 1877-1914 | 3-4 |


| HISTORY 305 | United States 1914-1945 | 3-4 |
| :---: | :---: | :---: |
| HISTORY 306 | The United States Since 1945 | 3-4 |
| HISTORY/ <br> AFROAMER 321 | Afro-American History Since 1900 | 3-4 |
| HISTORY/ AFROAMER 322 | Afro-American History to 1900 | 3-4 |
| HISTORY 329 | History of American Capitalism | 4 |
| HISTORY 343 | Colonial British North America | 3-4 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| HISTORY 345 | Military History of the United States | 3-4 |
| HISTORY/ GEN\&WS 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| HISTORY/ GEN\&WS 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| HISTORY/CHICLA/ <br> LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| HISTORY/ <br> AFROAMER 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| HISTORY/HIST SCI/ MED HIST 394 | Science in America | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY 408 | American Labor History: 1900Present | 3-4 |
| HISTORY/ <br> ED POL 412 | History of American Education | 3 |
| HISTORY/ <br> JEWISH 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |
| HISTORY/ CHICLA 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |
| HISTORY/ LEGAL ST 459 | Rule of Law: Philosophical and Historical Models | 3-4 |
| HISTORY/ENVIR ST/ GEOG 460 | American Environmental History | 4 |
| HISTORY/ <br> CHICLA 461 | The American West tol850 | 3-4 |
| HISTORY/ CHICLA 462 | The American West Since 1850 | 3-4 |
| HISTORY 465 | Global Environmental History,The American Economy to 1865 | 3-4 |
| HISTORY/ECON 466 | The American Economy Since 1865 | 3-4 |
| HISTORY/ <br> CHICLA 468 | Popular Culture in the Multi-racial United States | 3-4 |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |


| HISTORY/ | American Indian History | $3-4$ |
| :--- | :--- | ---: |
| AMER IND 490 |  | 3 |
| HISTORY/HIST SCI/ | Society and Health Care in |  |
| MED HIST 504 | American History |  |
| HISTORY/ | History of Mass Communication |  |
| JOURN 560 |  | 4 |
| HISTORY/L IS 569 | History of American Librarianship | 3 |
| HISTORY 607 | The American Impact Abroad: The <br> Historical Dimension | 3 |
| HISTORY/ | History of the Civil Rights |  |
| AFROAMER 628 | Movement in the United States | 3 |
| NON-WESTERN HISTORY (AFRICA, ASIA, LATIN |  |  |
| AMERICA, MIDDLE EAST) |  |  |


| HISTORY/ <br> EASTDS 363 | China and World War II in Asia | 3-4 |
| :---: | :---: | :---: |
| HISTORY/ <br> EASTDS 454 | Samurai: History and Image | 3-4 |
| HISTORY/ <br> EASTDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 |
| South or Southeast Asian History course options |  |  |
| Code | Title | Credits |
| HISTORY 142 | History of South Asia to the Present | 3-4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| HISTORY/GEOG/ LCA/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| HISTORY/E ASIAN/ LCA/RELIG ST 308 | Introduction to Buddhism | 3-4 |
| HISTORY 319 | The Vietnam Wars | 3-4 |
| HISTORY/LCA/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 |
| HISTORY 463 | Topics in South Asian History | 3 |
| HISTORY/LCA/ RELIG ST 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 |

## Latin American History course options

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 |
| HISTORY 242 | Modern Latin America, 1898 to the Present | 4 |
| HISTORY/CHICLA/ GEN\&WS 245 | Chicana and Latina History | 3 |
| HISTORY/ <br> AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/LACIS/ <br> POLI SCI/SOC/ <br> SPANISH 260 | Latin America: An Introduction | 3-4 |
| HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/ <br> AFROAMER 347 | The Caribbean and its Diasporas | 3 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY/ CHICLA 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |
| HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
| HISTORY 533 | Multi-Racial Societies in Latin America | 3-4 |
| HISTORY 555 | History of Brazil | 3-4 |


| HISTORY/HIST SCI/ | Disease, Medicine and Public |
| :--- | :--- |
| MED HIST 564 | Health in the History of Latin |
|  | America and the Caribbean |

## ANCIENT/MEDIEVAL HISTORY

CLASSICS 110

MEDIEVAL/ (200-900 C.E.)
RELIG ST 112

MEDIEVAL/ Islam
RELIG ST 309

MEDIEVAL/
RELIG ST 312
HISTORY/ Introduction to Byzantine History 3-4
$\begin{array}{ll}\text { MEDIEVAL 313 and Civilization } & \\ \text { HISTORY/ } & \text { Problems in Byzantine History and }\end{array}$
MEDIEVAL 314 Civilization

## Middle Eastern History course options

| Code | Title | Credits |
| :---: | :---: | :---: |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 |
| HISTORY/ RELIG ST 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/ RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
| HISTORY/GEN\&WS/ LCA 472 | Women in Turkish Society | 3 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |

Complete one European or Non-Western history course with a focus on the European or Mediterranean area before C.E. 1500 or with the history of Africa or Asia before these areas fell heavily under European influence. This course may also be counted toward the fulfillment of the other distribution requirements above.

## Ancient/Medieval History course options

Code Title Credits

HISTORY/ The Ancient Mediterranean 4
HISTORY/ The World of Late Antiquity 4

HISTORY 115 Medieval Europe 410-1500 4
HISTORY 123 English History. England to 1688 3-4
HISTORY/ The Making of the Islamic World: 3-4
$\begin{array}{lll}\text { RELIG ST } 205 & \text { The Middle East, 500-1500 } & \\ \text { HISTORY/ } & \text { Western Intellectual and Religious }\end{array}$
RELIG ST 208 History to 1500
HISTORY/ Life in the Middle Ages: An Inter- 3-4
$\begin{array}{lll}\text { MEDIEVAL 215 } & \text { Departmental Course } & \\ \text { HISTORY 303 } & \text { A History of Greek Civilization } & 3-4\end{array}$
HISTORY 307 A History of Rome 3-4
HISTORY/ The Crusades: Christianity and 3-4

HISTORY/ The Medieval Church 3-4
s4
4-43-4

| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 |
| :---: | :---: |
| HISTORY 333 | The Renaissance |
| HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 |
| HISTORY/ENGL/ RELIG ST 360 | The Anglo-Saxons |
| HISTORY/JEWISH/ MEDIEVAL/ RELIG ST 368 | The Bible in the Middle Ages |
| HISTORY/ RELIG ST 379 | Islam in Iran |
| HISTORY/ LEGAL ST 426 | The History of Punishment |
| HISTORY/ RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire |
| HISTORY/ <br> E A STDS 454 | Samurai: History and Image |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 |
| HISTORY/ <br> LEGAL ST 459 | Rule of Law: Philosophical and Historical Models |
| HISTORY/ <br> LEGAL ST 476 | Medieval Law and Society |
| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean |
| HISTORY/CLASSICS/ FRENCH/ITALIAN/ MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization |
| HISTORY/CLASSICS/ HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy |
| HISTORY/HIST SCI/ MED HIST/ MEDIEVAL/ S\&A PHM 562 | Byzantine Medicine and Pharmacy |

## HISTORICAL RESEARCH

Select one course. This course may also be counted toward the fulfillment of the other distribution requirements above. HISTORY 201 is specifically designed to be a research methods course and is strongly recommended. Multiple topics will be offered every fall and spring under this number.

## Historical Research course options

| Code | Title | Credits |
| :--- | :--- | ---: |
| HISTORY 201 | The Historian's Craft | $3-4$ |
| HISTORY 319 | The Vietnam Wars | $3-4$ |
| HISTORY/ | Women and Gender in the U.S. | $3-4$ |
| GEN\&WS 354 | Since 1870 | $3-4$ |
| HISTORY 408 | American Labor History: 1900- |  |
| HISTORY 418 | History of Russia | $3-4$ |
| HISTORY/LCA 458 | History of Southeast Asia Since  <br> 1800 $3-4$ |  |


| HISTORY/ <br> CHICLA 461 | The American West to1850 | $3-4$ |
| :--- | :--- | :---: |
| HISTORY/ <br> CHICLA 462 | The American West Since 1850 | $3-4$ |
| HISTORY 503 | Irish and Scottish Migrations |  |
| HISTORY/ <br> GEN\&WS 519 | Sexuality, Modernity and Social <br> Change | 3 |
| HISTORY/ | History of the Civil Rights <br> AFROAMER 628 | Mevement in the United States |

## ELECTIVES

Complete additional coursework, if necessary, to reach the minimum of 24 credits. It is recommended that students completing the history minor take a one-year continuous course in American history (e.g., HISTORY 101 and HISTORY 102).

## ITALIAN, BSE

Student access to the Italian Education certification program is dependent upon available supervisory and cooperating teacher resources. For this reason, prospective Italian Education students must consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651. Students who do not have previous teaching experience or have not completed a teacher preparation program should expect to participate in the foursemester World Language Education program. Teacher candidates with extensive coursework or teaching experience may complete a modified program after consultation with faculty. Admission to the four-semester professional program entails meeting minimum admission requirements and adherence to strict application deadlines. See the WLE program director, Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building, to determine the feasibility of completing certification in this language.

## WORLD LANGUAGE EDUCATION PROGRAM (CURRENTLY CHINESE, FRENCH, GERMAN, JAPANESE, LATIN, AND SPANISH MAJORS)

The mission of the World Language Education (WLE) program is (1) to promote a community-based approach to world language instruction; (2) to educate teachers who understand different cultures, are proficient in their languages, routinely visit other countries, and can build bridges across nations, races, socioeconomic groups, cultures, and languages; and (3) to certify teachers who are prepared to serve the global needs of increasingly multicultural and multilingual schools and are strongly committed to act for a world in which shared understanding through conflict resolution, negotiation and communication are guiding principles.

There is a growing need for multilingual teachers from diverse backgrounds. The WLE faculty encourages qualified applicants from under-represented groups to apply for admissions to the program. The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

The objectives of the K-12 WLE program are

- to provide a philosophy of action designed to promote thoughtful curriculum development and classroom teaching in WLE;
- to provide regular contacts with the global community and inservice teachers in schools through field evenings, workshops, conferences, and other professional meetings;
- to provide clinical settings which enhance opportunities for beginning teachers to develop skillful practice and build bridges across languages, cultures, races, and nationalities;
- to help student teachers use multilingual educational technologies and document their experiences in electronic portfolios and implement research-based practices in their teaching;
- to provide university instructors and supervisors who are wellversed in WLE, who have an international orientation, and who are both approachable and helpful to student teachers.

Program majors include Chinese, French, German, Japanese, Latin, and Spanish, and may also include Italian and Portuguese if field placements are available in these subject areas. Completion of the WLE program leads to a bachelor of science degree in education with a major in the specific subject area. Wisconsin state licensing regulations require that students are licensed to teach at the early childhood through adolescence (approximately kindergarten through high school) levels.

Oral and written examinations are required for all world language teacher candidates enrolled in Wisconsin educator preparation programs, as is an extensive immersion experience. (Students becoming certified to teach Latin are exempt from both the Oral Proficiency Exam and immersion experience requirement.)

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the World Language Education program once a year, effective in the fall. Selection is made the previous spring.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in World Language Education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in World Language Education receive the pre-professional classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1507)). It is not necessary to be a pre-professional student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall; call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## NATIVE AND HERITAGE SPEAKERS

Native or heritage speakers of a language major offered within the World Language Education program are welcome to pursue admission to the World Language Education program. Prospective applicants and transfer students who have previous experience with a language are encouraged to consult with an advisor in Education Academic Services as early as possible; to schedule, call 608-262-1651.

Native or heritage speakers must take a placement exam in the corresponding language to determine the appropriate level of remaining instruction in grammar, communication standards and social customs, and other topics related to language acquisition and proficiency. Placement examinations for Spanish, French, and German are offered on campus through Testing \& Evaluation Services or the University of Wisconsin System's Regional Placement Testing Program. Placement examinations for Chinese, Japanese, Italian, Latin, and Portuguese are administered by faculty or staff within the relevant academic department. For more information regarding placement in language courses, consult the Languages at UW-Madison placement guide (http:// languages.wisc.edu/advising/placement).

## APPLICATION AND ADMISSION

Applicants to the World Language Education program will be selected once a year, during the spring semester. Admission decisions will be based on coursework completed through the preceding fall semester. Admission is provisional until spring semester work has been completed and posted, and Education Academic Services staff have verified that students have met minimum grade point averages and earned minimum
credits in their major. Admitted students will begin the sequence the following fall semester.

Resources limit the number of students who can be served by the UWMadison World Language Education teacher education program. In recent years the World Language Education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to World Language Education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## ELIGIBILITY FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be considered for admission, students must:

- earn 54 or more transferable semester credits (junior standing) by the end of the spring semester of the application year.
- complete all but six credits of the relevant World Language major.
- earn a minimum 2.75 grade point average on all major coursework completed.
- earn a cumulative GPA of at least 2.75 (on a 4.00 scale). ${ }^{1}$
- have completed, or be in the process of completing, an approved Immersion Experience required for the World Language Education degree program.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

1 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## APPLYING FOR CERTIFICATION IN MORE THAN ONE SUBJECT AREA

Students may apply to be certified in more than one language. Eligibility requirements must be met and separate applications must be filed for each area of interest. Students must be admitted as a major in at least one of the program areas as it is not possible to be admitted only to complete a minor.

Students interested in combining the World Language Education degree program with certification in another area altogether must apply to both programs and meet the minimum criteria for admission to each program. It is suggested that students apply as majors in each area of interest, thus maximizing the chances of admission. Certification in two different areas requires the consent and cooperation of the World Language Education program coordinator and the faculty coordinator of the other subject area. Not all subjects can be combined with the World Language Education degree program.

While multiple majors or major-minor combinations are feasible and may be advantageous as a career strategy, it may take extra time to complete the additional subject area coursework. Students are encouraged to work closely with their Education Academic Services advisor to assess the possibility of completing certification in more than one area and to coordinate the requirements of multiple certifications.

## PROGRAM ADMISSION SELECTION CRITERIA

The files of all applicants will be individually and holistically reviewed by a panel of World Language professionals. The criteria used for admission include the following:

- Academic Qualifications: The applicant demonstrates mastery of the target language and knowledge of its literature, civilization, and culture.
- Career Maturity: The applicant demonstrates commitment to teaching the target language to elementary, middle, and high school students, including consideration of his or her own strengths and limitations as a potential teacher.
- Ability to Relate to Youth: The applicant demonstrates the ability to work effectively with young people.
- Commitment to All Students: The applicant demonstrates commitment to working with all students including those of different racial, ethnic, and socioeconomic backgrounds, and students with disabilities, not just the economically privileged or highly motivated.
- Interpersonal Skills: The applicant demonstrates the ability to work effectively with peers, other professionals, and members of the community outside of school settings.

The application files, including immersion experiences and oral proficiency, are rated according to the above criteria for each language. A final cohort is selected along with rank-ordered alternates, based on a combination of ratings made by the World Language Education review committee and judgement by the faculty program coordinator about optimal cohort characteristics for each language. The availability of field placements in the subject area may also influence the selection process. Admission procedures are reviewed every other year to ensure fairness and effectiveness.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General •Breadth-Humanities/Literature/Arts: 6 credits Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

This program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Prerequisite coursework prepares students for work in the major. Program applicants must also complete and document an immersion experience as a prerequisite to being admitted to the professional program.
- Major coursework offers in-depth study of the subject students will teach.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a four-semester sequence of world language teaching methods course work and field experiences in schools.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

The four semesters of professional coursework are followed sequentially and taken in consecutive semesters. Because of the program structure, students are expected to have completed most of their major and liberal studies coursework by the start of the professional sequence.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education
program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements ( $p$. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## MAJOR REQUIREMENTS

Complete a minimum of 36 credits. Students must complete at least 15 credits of upper-level major coursework (numbered 300-699) in residence on the UW-Madison campus.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Complete 16 credits of Elementary and Intermediate Italian, or demonstrate proficiency at the equivalent levels: |  |  |
| ITALIAN 101 | First Semester Italian | 4 |
| ITALIAN 102 | Second Semester Italian | 4 |
| ITALIAN 203 | Third Semester Italian | 4 |
| ITALIAN 204 | Fourth Semester Italian | 4 |
| Select $\mathbf{2 0}$ hours beyond ITALIAN 204 to include: |  |  |
| ITALIAN 311 <br> \& ITALIAN 312 | Advanced Italian Language and Writing Workshop | 6 |
| ITALIAN 321 <br> \& ITALIAN 322 | Studies in Italian Literature and Culture I and Studies in Italian Literature and Culture II | 6 |

Select two more courses in literature or culture/
civilization (400 or 500 level)
Additional coursework, if necessary, to reach the minimum of 36 credits

Students who expect to become teachers of Italian should elect courses in related fields, such as art history, history, other languages and literatures (especially English), music appreciation, and philosophy. Prospective teachers should take every opportunity to increase oral mastery of the language. The Italian Club at the university offers lectures and films about Italy, and opportunities to converse in Italian. Occasionally, modern and classical plays are presented for the public.

## ORAL AND WRITTEN PROFICIENCY EXAMS

## ABOUT THE ORAL AND WRITTEN PROFICIENCY EXAMS

Students admitted to the World Language Education program must provide evidence of having earned at least an Intermediate High score on an American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI). Latin Education students are exempt from this requirement, see below.

The interview must be taken prior to beginning the first student teaching experience (second semester of the professional sequence). Students should be aware that it may take as long as three months to obtain results, and factor this delay into the scheduling of the OPI. If the score of Intermediate High is not made after the first examination, a student will be asked to take measures to improve their spoken language proficiency before continuing in the program. The student must repeat the OPI and achieve the required Intermediate High proficiency level.

All students in World Language Education (except Latin Education), are also required to complete the Writing Proficiency Test (WPT) no later than the third semester in the program. It is recommended that students take the test during the second semester of the professional sequence. A proficiency level of Intermediate High is also required for this examination. Students must take and pass the WPT in their program area and the scores must be received by Education Academic Services before beginning the final student teaching semester. Students who do not take and pass the exam will not be permitted to student teach. The WPT meets the Department of Public Instruction's content exam requirement, a requirement usually met by taking the appropriate Praxis II test.

Both the Oral Proficiency Interview and the Writing Proficiency Test are administered by Language Testing International (LTI) (http:// www.languagetesting.com). Their address is LTI, 3 Barker Avenue, Suite 310, White Plains, NY 10601; 800-486-8444. Students are responsible for costs associated with the OPI and the WPT.

Students seeking Latin certification will be required to take a proficiency exam administered by the Department of Classical and Ancient Near Eastern Studies prior to beginning the first student teaching experience (second semester of the professional sequence). This exam will take the place of the OPI and WPT required for certification in other languages.

See the World Language Education faculty program coordinator with questions about these requirements.

## IMMERSION EXPERIENCE

## ABOUT THE IMMERSION EXPERIENCE

Participation in an intensive immersion experience is one of the most important and meaningful ways of developing competence in a language. In preparation for the proficiency exams, students seeking certification in a language must participate in an approved immersion experience which emphasizes prolonged and intensive interaction within the target language and culture.

Program applicants completing French, German, and Spanish majors must complete and document a full-semester (or minimum four-monthlong) immersion experience as a prerequisite to being admitted to the professional program. Students completing majors in Chinese and Japanese must spend at least one academic year living in China or Japan, respectively-also a prerequisite to being admitted to the professional program.

The immersion experience must be completed by July 15 preceding the program start. The experience must also have been completed no more than three years before this date.

An approved experience involves significant interaction and day-to-day functioning in the host language, including use of the target language on a daily basis such as in college-level courses, a training program, or a work experience. The immersion experience need not involve attendance in an academic program only, but may take some form such that the language of routine communication is the target language. Simply living with relatives or traveling as a tourist is not considered an immersion experience for the purposes of admission to this program. Most students choose to participate in a structured educational or exchange immersion program.

Students should consult with the International Academic Programs (IAP) (http://www.studyabroad.wisc.edu) office, 106 Red Gym, regarding campus-based study abroad programs. These experiences need not receive prior approval. Experiences through off-campus programs must have prior approval of the World Language Education faculty program coordinator. To obtain prior immersion experience approval, download and complete the approval form (http://www.education.wisc.edu/soe/ academics/undergraduate-students/forms), meet with the faculty coordinator, and obtain authorization. Bring two copies of the form to your meeting, obtain signatures on both, and leave one copy with the coordinator.

Native speakers are normally considered to have fulfilled this requirement without further documentation, especially if they received their secondary education in an environment where the target language is the primary means of communication. Heritage speakers are usually considered to have fulfilled this requirement; applicants must consult with the program coordinator about this requirement.

## PROFESSIONAL EDUCATION REQUIREMENTS (PROFESSIONAL SEQUENCE)

## ABOUT THE PROFESSIONAL SEQUENCE

The professional program is typically a full-time, four-semester sequence of education courses and school-based field experiences. The four semesters of required professional coursework must be followed sequentially and taken in consecutive semesters. Students must enroll in
all required coursework outlined in each semester of the program, even if similar coursework was taken at another institution. Students begin the professional sequence in the fall.

It is expected that almost all major and liberal studies coursework be completed by the start of the professional sequence; completion of the entire major is preferred. The structure of the sequence allows very little time to pursue remaining coursework in these areas. Many students elect to finish their remaining requirements during the summer, or after the sequence has been completed. In addition, ACTFL OPI certification of speaking ability in the language rated Intermediate High or above is required by the end of the first semester in the program. Students must also complete the Writing Proficiency Test (WPT) no later than their third semester in the program. A rating of Intermediate High or above must be earned before a student is allowed to participate in the final student teaching semester. See further information under Oral and Written Proficiency Exams.

Students admitted to two areas of language certification follow the same four-semester sequence as single certification students; consult with the World Language Education program coordinator to arrange sequence requirements.

The professional program is a full-time commitment and places heavy demands on students' time and energy. The professional sequence is particularly taxing for students completing certification in two subject areas. Students must make satisfactory progress in their program to continue. This professional judgment is made by the faculty program coordinator in consultation with cooperating teachers and supervisors.

## PROFESSIONAL SEQUENCE COURSE REQUIREMENTS

Complete all of the courses listed below. Required courses must be taken during the semester listed. Other courses may be taken at any time, including summer, but a suggested course sequence is provided.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| Required Courses |  |  |
| CURRIC 342 | Teaching World Languages (K-8) | 3 |
| CURRIC 243 | Practicum in World Languages $(K-12)^{1}$ | 3 |
| Other Courses |  |  |
| ED POL 300 <br> or ED POL/ HISTORY 412 | School and Society <br> History of American Education | 3 |
| CURRIC/ RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| ED PSYCH 301 | How People Learn | 3 |
| Semester 2 |  |  |
| Required Courses |  |  |
| CURRIC 442 | Student Teaching in World Languages (K-8) ${ }^{2}$ | 6 |
| or CURRIC 443 | Student Teaching in World Languages (6-12) |  |
| Other Courses |  |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence | 3 |
| Semester 3 |  |  |
| Required Courses |  |  |
| CURRIC 343 | Teaching World Languages (6-12) | 3 |


| CURRIC 443 | Student Teaching in World Languages (6-12) ${ }^{3}$ |
| :---: | :---: |
| or CURRIC 442 | Student Teaching in World Languages ( $\mathrm{K}-8$ ) |
| Other Courses |  |
| CURRIC 305 | Integrating the Teaching of Reading with Other Language Arts |
| Semester 4 |  |
| Required Courses |  |
| CURRIC 443 | Student Teaching in World Languages (6-12) ${ }^{4}$ |
| CURRIC 564 | Advanced Problems on the Teaching of World Languages |
| 1 The practicum will take place three days a week; placement will probably be at the elementary level. Fieldwork this semester is a halftime commitment and encompasses an entire semester based on the UW-Madison calendar. Placements are made within a 50 -mile field experiences service area and may not necessarily be in the city of Madison. |  |
| Placement will probably be at the elementary level, three days a week. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the UW-Madison calendar. |  |
| Placement will probably be at the middle school level. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the school district calendar. (Fall semester extends from late August through mid-January; spring semester extends from mid-January through early mid-June.) |  |
| 4 Student teachin be at the high entire semeste | this semester is a full-time commitment and will ool level. Fieldwork this semester encompasses an ased on the school district calendar. |

## ELECTIVE COURSEWORK

Complete additional coursework as needed to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level major coursework
- 2.75 cumulative grade point average in all professional education coursework
- Degree candidates must complete at least 120 total credits.
- No more than 40 credits from a single academic department may be applied toward the 120 minimum credits required for graduation.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student
teaching and practicum work are considered part of the 30 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure. (p. 1513)

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
| Abroad/Study Away programs. |  |

## LEARNING OUTCOMES

1. In Semester 1, prior to starting student teaching, students must have acquired Intermediate High proficiency in their target language on the ACTFL OPI scale as measured by two independent external evaluators.
2. In Year 1, student teachers must demonstrate the ability to teach in a K-8 context, as evaluated by their University supervisor and their mentor teacher through repeated direct observations.
3. During their content courses, students must meet (a) teacher education standards; and (b) ACTFL standards, as measured by (a) formative and summative evaluation of their assignments; (b) Teacher Education portfolio.
4. In Year 2, student teachers must demonstrate the ability to teach in a 6-12 school context, as evaluated by their University supervisor and their cooperating teacher through repeated direct observations.
5. To get certified by the Department of Public Instruction, at the end of Year 2, student teachers must have successfully completed an EdTPA Portfolio of their classroom experiences that demonstrates professionalism and meets the EdTPA standards, as evaluated by external evaluators.

## ADVISING AND CAREERS

## ITALIAN EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Italian. Students may want to meet with an undergraduate advisor (https://frit.wisc.edu/ undergraduate/french/academic_advising) in the French and Italian department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students
will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff
at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http:// ci.education.wisc.edu) and French and Italian (http://frit.wisc.edu) departmental websites.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ | Atmospheric Environment and | 2 |
| GEOG 121 | Society |  |
| ATM OCN/ | Earth's Water. Natural Science and | 3 |
| SOIL SCI 132 | Human Use |  |
| BOTANY 100 | Survey of Botany | 3 |
| $\begin{aligned} & \text { BOTANY/BIOLOGY/ } \\ & \text { ZOOLOGY } 152 \end{aligned}$ | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |

SOIL SCI/
Soils and Environmental Quality
ENVIR ST 324

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

Teacher Performance Assessment (edTPA)
The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, 3-5 lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a "D") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that
withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in
each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK-
6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## ITALIAN, SED MINOR

## HOW TO GET IN

This minor is available only to students admitted to the World Language Education program, or to teachers already licensed to teach at an appropriate level and subject in Wisconsin. Undergraduate students interested in completing a certification minor in Italian must also complete a major in another World Language certification subject area and be admitted to the World Language Education program. It is not possible to be certified only in a minor area. Consult with an Education Academic Services advisor to discuss the feasibility of combining this minor with the major subject area-not all combinations may be possible and will require approval of the WLE program coordinator. Interested students must apply and be admitted to both language subject areas. The oral proficiency exam, any written exams, and the immersion experience required for certification must be completed in both languages.

Licensed teachers interested in pursuing certification in this minor should consult with the World Language Education program director, Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## REQUIREMENTS

Note: The oral proficiency exam, any written exams, and an immersion experience are required for certification in this language. Consult the major requirements ( p .1508 ) in this subject for an explanation of these requirements and the World Language Education professional sequence.

## MINOR REQUIREMENTS

The Italian minor requires a minimum of 26 credits and a minimum cumulative grade point average of 2.75 , based on all Italian minor coursework taken on the UW-Madison campus.
Code Title Credits

ITALIAN 101
First Semester Italian
\& ITALIAN 102 and Second Semester Italian ${ }^{1}$
18 credits above ITALIAN 102, to include at least 2 credits in composition and conversation

1 Or demonstrated proficiency at the equivalent levels.

## ADVISING AND CAREERS

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Italian. Students may
want to meet with an undergraduate advisor (https://frit.wisc.edu/ undergraduate/french/academic_advising) in the French and Italian department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## JAPANESE, BSE

## WORLD LANGUAGE EDUCATION PROGRAM (CURRENTLY CHINESE, FRENCH, GERMAN, JAPANESE, LATIN, AND SPANISH MAJORS)

The mission of the World Language Education (WLE) program is (1) to promote a community-based approach to world language instruction; (2) to educate teachers who understand different cultures, are proficient in their languages, routinely visit other countries, and can build bridges across nations, races, socioeconomic groups, cultures, and languages; and (3) to certify teachers who are prepared to serve the global needs of increasingly multicultural and multilingual schools and are strongly committed to act for a world in which shared understanding through conflict resolution, negotiation and communication are guiding principles.

There is a growing need for multilingual teachers from diverse backgrounds. The WLE faculty encourages qualified applicants from underrepresented groups to apply for admissions to the program. The director of the World Language Education program is Prof. François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

The objectives of the K-12 WLE program are

- to provide a philosophy of action designed to promote thoughtful curriculum development and classroom teaching in WLE;
- to provide regular contacts with the global community and inservice teachers in schools through field evenings, workshops, conferences, and other professional meetings;
- to provide clinical settings which enhance opportunities for beginning teachers to develop skillful practice and build bridges across languages, cultures, races, and nationalities;
- to help student teachers use multilingual educational technologies and document their experiences in electronic portfolios and implement research-based practices in their teaching;
- to provide university instructors and supervisors who are wellversed in WLE, who have an international orientation, and who are both approachable and helpful to student teachers.

Program majors include Chinese, French, German, Japanese, Latin, and Spanish, and may also include Italian and Portuguese if field placements are available in these subject areas. Completion of the WLE program leads to a Bachelor of Science degree in Education with a major in the specific subject area. Wisconsin state licensing regulations require that students are licensed to teach at the early childhood through adolescence (approximately kindergarten through high school) levels.

Oral and written examinations are required for all world language teacher candidates enrolled in Wisconsin educator preparation programs, as is an extensive immersion experience. (Students becoming certified to teach Latin are exempt from both the Oral Proficiency Exam and immersion experience requirement.)

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the World Language Education program once a year, effective in the fall. Selection is made the previous spring.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in World Language Education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in World Language Education receive the pre-professional classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1519)). It is not necessary to be a pre-professional student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall; call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a
subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## NATIVE AND HERITAGE SPEAKERS

Native or heritage speakers of a language major offered within the World Language Education program are welcome to pursue admission to the World Language Education program. Prospective applicants and transfer students who have previous experience with a language are encouraged to consult with an advisor in Education Academic Services as early as possible; to schedule, call 608-262-1651.

Native or heritage speakers must take a placement exam in the corresponding language to determine the appropriate level of remaining instruction in grammar, communication standards and social customs, and other topics related to language acquisition and proficiency. Placement examinations for Spanish, French, and German are offered on campus through Testing \& Evaluation Services or the University of Wisconsin System's Regional Placement Testing Program. Placement examinations for Chinese, Japanese, Italian, Latin, and Portuguese are administered by faculty or staff within the relevant academic department. For more information regarding placement in language courses, consult the Languages at UW-Madison placement guide (http:// languages.wisc.edu/advising/placement).

## APPLICATION AND ADMISSION

Applicants to the World Language Education program will be selected once a year, during the spring semester. Admission decisions will be based on coursework completed through the preceding fall semester. Admission is provisional until spring semester work has been completed and posted, and Education Academic Services staff have verified that students have met minimum grade point averages and earned minimum credits in their major. Admitted students will begin the sequence the following fall semester.

Resources limit the number of students who can be served by the UWMadison World Language Education teacher education program. In recent years the World Language Education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to World Language Education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## ELIGIBILITY FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be considered for admission, students must:

- earn 54 or more transferable semester credits (junior standing) by the end of the spring semester of the application year.
- complete all but six credits of the relevant World Language major.
- earn a minimum 2.75 grade point average on all major coursework completed.
- earn a cumulative GPA of at least 2.75 (on a 4.00 scale). ${ }^{1}$
- have completed, or be in the process of completing, an approved Immersion Experience required for the World Language Education degree program.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

1
A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## APPLYING FOR CERTIFICATION IN MORE THAN ONE SUBJECT AREA

Students may apply to be certified in more than one language. Eligibility requirements must be met and separate applications must be filed for each area of interest. Students must be admitted as a major in at least one of the program areas as it is not possible to be admitted only to complete a minor.

Students interested in combining the World Language Education degree program with certification in another area altogether must apply to both programs and meet the minimum criteria for admission to each program. It is suggested that students apply as majors in each area of interest, thus maximizing the chances of admission. Certification in two different areas requires the consent and cooperation of the World Language Education program coordinator and the faculty coordinator of the other subject area. Not all subjects can be combined with the World Language Education degree program.

While multiple majors or major-minor combinations are feasible and may be advantageous as a career strategy, it may take extra time to complete the additional subject area coursework. Students are encouraged to work closely with their Education Academic Services advisor to assess the possibility of completing certification in more than one area and to coordinate the requirements of multiple certifications.

## PROGRAM ADMISSION SELECTION CRITERIA

The files of all applicants will be individually and holistically reviewed by a panel of World Language professionals. The criteria used for admission include the following:

- Academic Qualifications: The applicant demonstrates mastery of the target language and knowledge of its literature, civilization, and culture.
- Career Maturity: The applicant demonstrates commitment to teaching the target language to elementary, middle, and high school students, including consideration of his or her own strengths and limitations as a potential teacher.
- Ability to Relate to Youth: The applicant demonstrates the ability to work effectively with young people.
- Commitment to All Students: The applicant demonstrates commitment to working with all students including those of different racial, ethnic, and socioeconomic backgrounds, and students with disabilities, not just the economically privileged or highly motivated.
- Interpersonal Skills: The applicant demonstrates the ability to work effectively with peers, other professionals, and members of the community outside of school settings.

The application files, including immersion experiences and oral proficiency, are rated according to the above criteria for each language. A final cohort is selected along with rank-ordered alternates, based on a combination of ratings made by the World Language Education review committee and judgement by the faculty program coordinator about optimal cohort characteristics for each language. The availability of field placements in the subject area may also influence the selection process. Admission procedures are reviewed every other year to ensure fairness and effectiveness.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

This program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Prerequisite coursework prepares students for work in the major. Program applicants must also complete and document an immersion experience as a prerequisite to being admitted to the professional program.
- Major coursework offers in-depth study of the subject students will teach.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a four-semester sequence of world language teaching methods course work and field experiences in schools.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

The four semesters of professional coursework are followed sequentially and taken in consecutive semesters. Because of the program structure,
students are expected to have completed most of their major and liberal studies coursework by the start of the professional sequence.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits. PREREQUISITE COURSEWORK

Complete the following courses or demonstrate proficiency at the equivalent levels. Prerequisite courses do not count toward the credits required of the major.

| Code | Title | Credits |
| :--- | :--- | ---: |
| E ASIAN 103 | First Semester Japanese | 6 |
| E ASIAN 104 | Second Semester Japanese | 6 |

## MAJOR REQUIREMENTS

Complete a minimum of 38 credits. Students must complete at least 15 credits of upper-level major coursework (numbered 220 and above) in residence on the UW-Madison campus.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ASIAN 253 | Japanese Popular Culture | 3 |
| ASIAN 354 | Early Modern Japanese Literature | 3 |
| E ASIAN 203 | Third Semester Japanese | 6 |
| E ASIAN 204 | Fourth Semester Japanese | 6 |
| E ASIAN 303 | Fifth Semester Japanese | 4 |
| E ASIAN 304 | Sixth Semester Japanese | 4 |
| E ASIAN 335 | Intermediate Japanese <br> Conversation |  |
| E ASIAN 353 | Survey of Japanese Literature | 3 |
| E ASIAN 434 | Introduction to Japanese <br> Linguistics | 3 |
| HISTORY/ | Introduction to East Asian History. <br> E A STDS 104 | Japan |

If needed, select additional coursework to reach the minimum of 38 credits
Recommended courses:
E ASIAN 403 Seventh Semester Japanese 3
E ASIAN 404 Eighth Semester Japanese 3

E ASIAN 323 First Year Classical Japanese 3

## ORAL AND WRITTEN PROFICIENCY EXAMS

## ABOUT THE ORAL AND WRITTEN PROFICIENCY EXAMS

Students admitted to the World Language Education program must provide evidence of having earned at least an Intermediate High score on an American Council on the Teaching of Foreign Languages (ACTFL) Oral
Proficiency Interview (OPI). Latin Education students are exempt from this requirement, see below.

The interview must be taken prior to beginning the first student teaching experience (second semester of the professional sequence). Students should be aware that it may take as long as three months to obtain results, and factor this delay into the scheduling of the OPI. If the score of Intermediate High is not made after the first examination, a student will be asked to take measures to improve their spoken language proficiency before continuing in the program. The student must repeat the OPI and achieve the required Intermediate High proficiency level.

All students in World Language Education (except Latin Education), are also required to complete the Writing Proficiency Test (WPT) no
later than the third semester in the program. It is recommended that students take the test during the second semester of the professional sequence. A proficiency level of Intermediate High is also required for this examination. Students must take and pass the WPT in their program area and the scores must be received by Education Academic Services before beginning the final student teaching semester. Students who do not take and pass the exam will not be permitted to student teach. The WPT meets the Department of Public Instruction's content exam requirement, a requirement usually met by taking the appropriate Praxis II test.

Both the Oral Proficiency Interview and the Writing Proficiency Test are administered by Language Testing International (LTI) (http:// www.languagetesting.com). Their address is LTI, 3 Barker Avenue, Suite 310, White Plains, NY 10601; 800-486-8444. Students are responsible for costs associated with the OPI and the WPT.

Students seeking Latin certification will be required to take a proficiency exam administered by the Department of Classical and Ancient Near Eastern Studies prior to beginning the first student teaching experience (second semester of the professional sequence). This exam will take the place of the OPI and WPT required for certification in other languages.

See the World Language Education faculty program coordinator with questions about these requirements.

## IMMERSION EXPERIENCE ABOUT THE IMMERSION EXPERIENCE

Participation in an intensive immersion experience is one of the most important and meaningful ways of developing competence in a language. In preparation for the proficiency exams, students seeking certification in a language must participate in an approved immersion experience which emphasizes prolonged and intensive interaction within the target language and culture.

Program applicants completing French, German, and Spanish majors must complete and document a full-semester (or minimum four-monthlong) immersion experience as a prerequisite to being admitted to the professional program. Students completing majors in Chinese and Japanese must spend at least one academic year living in China or Japan, respectively-also a prerequisite to being admitted to the professional program.

The immersion experience must be completed by July 15 preceding the program start. The experience must also have been completed no more than three years before this date.

An approved experience involves significant interaction and day-to-day functioning in the host language, including use of the target language on a daily basis such as in college-level courses, a training program, or a work experience. The immersion experience need not involve attendance in an academic program only, but may take some form such that the language of routine communication is the target language. Simply living with relatives or traveling as a tourist is not considered an immersion experience for the purposes of admission to this program. Most students choose to participate in a structured educational or exchange immersion program.

Students should consult with the International Academic Programs (IAP) (http://www.studyabroad.wisc.edu) office, 106 Red Gym, regarding campus-based study abroad programs. These experiences need not receive prior approval. Experiences through off-campus programs must have prior approval of the World Language Education faculty program
coordinator. To obtain prior immersion experience approval, download and complete the approval form (http://www.education.wisc.edu/soe/ academics/undergraduate-students/forms), meet with the faculty coordinator, and obtain authorization. Bring two copies of the form to your meeting, obtain signatures on both, and leave one copy with the coordinator.

Native speakers are normally considered to have fulfilled this requirement without further documentation, especially if they received their secondary education in an environment where the target language is the primary means of communication. Heritage speakers are usually considered to have fulfilled this requirement; applicants must consult with the program coordinator about this requirement

## PROFESSIONAL EDUCATION REQUIREMENTS (PROFESSIONAL SEQUENCE)

## ABOUT THE PROFESSIONAL SEQUENCE

The professional program is typically a full-time, four-semester sequence of education courses and school-based field experiences. The four semesters of required professional coursework must be followed sequentially and taken in consecutive semesters. Students must enroll in all required coursework outlined in each semester of the program, even if similar coursework was taken at another institution. Students begin the professional sequence in the fall.

It is expected that almost all major and liberal studies coursework be completed by the start of the professional sequence; completion of the entire major is preferred. The structure of the sequence allows very little time to pursue remaining coursework in these areas. Many students elect to finish their remaining requirements during the summer, or after the sequence has been completed. In addition, ACTFL OPI certification of speaking ability in the language rated Intermediate High or above is required by the end of the first semester in the program. Students must also complete the Writing Proficiency Test (WPT) no later than their third semester in the program. A rating of Intermediate High or above must be earned before a student is allowed to participate in the final student teaching semester. See further information under Oral and Written Proficiency Exams.

Students admitted to two areas of language certification follow the same four-semester sequence as single certification students; consult with the World Language Education program coordinator to arrange sequence requirements.

The professional program is a full-time commitment and places heavy demands on students' time and energy. The professional sequence is particularly taxing for students completing certification in two subject areas. Students must make satisfactory progress in their program to continue. This professional judgment is made by the faculty program coordinator in consultation with cooperating teachers and supervisors.

## PROFESSIONAL SEQUENCE COURSE REQUIREMENTS

Complete all of the courses listed below. Required courses must be taken during the semester listed. Other courses may be taken at any time, including summer, but a suggested course sequence is provided.

## Code

Title

## Credits

Semester 1
Required Courses

| CURRIC 342 | Teaching World Languages ( $\mathrm{K}-8$ ) | 3 |
| :---: | :---: | :---: |
| CURRIC 243 | Practicum in World Languages $(\mathrm{K}-12)^{1}$ | 3 |
| Other Courses |  |  |
| ED POL 300 or ED POL/ HISTORY 412 | School and Society <br> History of American Education | 3 |
| CURRIC/ <br> RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| ED PSYCH 301 | How People Learn | 3 |
| Semester 2 |  |  |
| Required Courses |  |  |
| CURRIC 442 | Student Teaching in World Languages (K-8) ${ }^{2}$ | 6 |
| or CURRIC 443 | Student Teaching in World Languag |  |
| Other Courses |  |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence | 3 |
| Semester 3 |  |  |
| Required Courses |  |  |
| CURRIC 343 | Teaching World Languages (6-12) | 3 |
| CURRIC 443 | Student Teaching in World Languages (6-12) ${ }^{3}$ | 6 |
| or CURRIC 442 | Student Teaching in World Languag |  |
| Other Courses |  |  |
| CURRIC 305 | Integrating the Teaching of Reading with Other Language Arts | 3 |
| Semester 4 |  |  |
| Required Courses |  |  |
| CURRIC 443 | Student Teaching in World Languages (6-12) ${ }^{4}$ | 9 |
| CURRIC 564 | Advanced Problems on the Teaching of World Languages | 3 |
| The practicum will take place three days a week; pla probably be at the elementary level. Fieldwork this time commitment and encompasses an entire sem UW-Madison calendar. Placements are made with experiences service area and may not necessarily Madison. |  |  |
| 2 Placement will probably be at the elementary level, three days a week. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the UW-Madison calendar. |  |  |
| Placement will probably be at the middle school level. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the school district calendar. (Fall semester extends from late August through mid-January; spring semester extends from mid-January through early mid-June.) |  |  |
| 4 Student teachi be at the high entire semeste | this semester is a full-time commitm ool level. Fieldwork this semester enc ased on the school district calendar. |  |

## ELECTIVE COURSEWORK

Complete additional coursework as needed to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level major coursework
- 2.75 cumulative grade point average in all professional education coursework
- Degree candidates must complete at least 120 total credits.
- No more than 40 credits from a single academic department may be applied toward the 120 minimum credits required for graduation.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum work are considered part of the 30 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within
the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure. (p. 1525)

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of 120 degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of 30 } \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes }\end{array}
$$ <br>
UW-Madison courses offered in distance or online <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |

## LEARNING OUTCOMES

1. In Semester 1, prior to starting student teaching, students must have acquired Intermediate High proficiency in their target language on the ACTFL OPI scale as measured by two independent external evaluators.
2. In Year 1, student teachers must demonstrate the ability to teach in a K-8 context, as evaluated by their University supervisor and their mentor teacher through repeated direct observations.
3. During their content courses, students must meet (a) teacher education standards; and (b) ACTFL standards, as measured by (a) formative and summative evaluation of their assignments; (b) Teacher Education portfolio.
4. In Year 2, student teachers must demonstrate the ability to teach in a 6-12 school context, as evaluated by their University supervisor and their cooperating teacher through repeated direct observations.
5. To get certified by the Department of Public Instruction, at the end of Year 2, student teachers must have successfully completed an EdTPA Portfolio of their classroom experiences that demonstrates professionalism and meets the EdTPA standards, as evaluated by external evaluators.

## ADVISING AND CAREERS

## JAPANESE EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Japanese. Students should also contact Professor Naomi Fujita Geyer, nfgeyer@wisc.edu ,1260 Van Hise Hall, 262-9221 or 262-2291, as soon as possible to discuss course sequencing, admission to the program, and other aspects of certification to teach Japanese.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are
encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/
or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http:// ci.education.wisc.edu) and Asian Languages and Cultures (http:// alc.wisc.edu) departmental websites.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been
placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| botany/Envir st/ ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |


| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| :---: | :---: | :---: |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, $3-5$ lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/

Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-
policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

 Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a "D") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.
## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## LATIN, BSE

## WORLD LANGUAGE EDUCATION PROGRAM (CURRENTLY CHINESE, FRENCH, GERMAN, JAPANESE, LATIN, AND SPANISH MAJORS)

The mission of the World Language Education (WLE) program is (1) to promote a community-based approach to world language instruction; (2) to educate teachers who understand different cultures, are proficient in their languages, routinely visit other countries, and can build bridges across nations, races, socioeconomic groups, cultures, and languages; and (3) to certify teachers who are prepared to serve the global needs of increasingly multicultural and multilingual schools and are strongly committed to act for a world in which shared understanding through conflict resolution, negotiation and communication are guiding principles.

There is a growing need for multilingual teachers from diverse backgrounds. The WLE faculty encourages qualified applicants from under-represented groups to apply for admissions to the program. The director of the World Language Education program is Prof. François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

The objectives of the K-12 WLE program are

- to provide a philosophy of action designed to promote thoughtful curriculum development and classroom teaching in WLE;
- to provide regular contacts with the global community and inservice teachers in schools through field evenings, workshops, conferences, and other professional meetings;
- to provide clinical settings which enhance opportunities for beginning teachers to develop skillful practice and build bridges across languages, cultures, races, and nationalities;
- to help student teachers use multilingual educational technologies and document their experiences in electronic
portfolios and implement research-based practices in their teaching;
- to provide university instructors and supervisors who are wellversed in WLE, who have an international orientation, and who are both approachable and helpful to student teachers.

Program majors include Chinese, French, German, Japanese, Latin, and Spanish, and may also include Italian and Portuguese if field placements are available in these subject areas. Completion of the WLE program leads to a Bachelor of Science degree in Education with a major in the specific subject area. Wisconsin state licensing regulations require that students are licensed to teach at the early childhood through adolescence (approximately kindergarten through high school) levels.

Oral and written examinations are required for all world language teacher candidates enrolled in Wisconsin educator preparation programs, as is an extensive immersion experience. (Students becoming certified to teach Latin are exempt from both the Oral Proficiency Exam and immersion experience requirement.)

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the World Language Education program once a year, effective in the fall. Selection is made the previous spring.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in World Language Education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in World Language Education receive the pre-professional classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5, based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1530)). It is not necessary to be a pre-professional student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall; call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly
advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## NATIVE AND HERITAGE SPEAKERS

Native or heritage speakers of a language major offered within the World Language Education program are welcome to pursue admission to the World Language Education program. Prospective applicants and transfer students who have previous experience with a language are encouraged to consult with an advisor in Education Academic Services as early as possible; to schedule, call 608-262-1651.

Native or heritage speakers must take a placement exam in the corresponding language to determine the appropriate level of remaining instruction in grammar, communication standards and social customs, and other topics related to language acquisition and proficiency. Placement examinations for Spanish, French, and German are offered on campus through Testing \& Evaluation Services or the University of Wisconsin System's Regional Placement Testing Program. Placement examinations for Chinese, Japanese, Italian, Latin, and Portuguese are administered by faculty or staff within the relevant academic department. For more information regarding placement in language courses, consult the Languages at UW-Madison placement guide (http:// languages.wisc.edu/advising/placement).

## APPLICATION AND ADMISSION

Applicants to the World Language Education program will be selected once a year, during the spring semester. Admission decisions will be based on coursework completed through the preceding fall semester. Admission is provisional until spring semester work has been completed and posted, and Education Academic Services staff have verified that students have met minimum grade point averages and earned minimum credits in their major. Admitted students will begin the sequence the following fall semester.

Resources limit the number of students who can be served by the UWMadison World Language Education teacher education program. In recent years the World Language Education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to World Language Education exceeds program
resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## ELIGIBILITY FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be considered for admission, students must:

- earn 54 or more transferable semester credits (junior standing) by the end of the spring semester of the application year.
- complete all but six credits of the relevant World Language major.
- earn a minimum 2.75 grade point average on all major coursework completed.
- earn a cumulative GPA of at least 2.75 (on a 4.00 scale). ${ }^{1}$
- have completed, or be in the process of completing, an approved Immersion Experience required for the World Language Education degree program.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate
coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## APPLYING FOR CERTIFICATION IN MORE THAN ONE SUBJECT AREA

Students may apply to be certified in more than one language. Eligibility requirements must be met and separate applications must be filed for each area of interest. Students must be admitted as a major in at least one of the program areas as it is not possible to be admitted only to complete a minor.

Students interested in combining the World Language Education degree program with certification in another area altogether must apply to both programs and meet the minimum criteria for admission to each program. It is suggested that students apply as majors in each area of interest, thus maximizing the chances of admission. Certification in two different areas requires the consent and cooperation of the World Language Education program coordinator and the faculty coordinator of the other subject area. Not all subjects can be combined with the World Language Education degree program.

While multiple majors or major-minor combinations are feasible and may be advantageous as a career strategy, it may take extra time to complete the additional subject area coursework. Students are encouraged to work closely with their Education Academic Services advisor to assess the possibility of completing certification in more than one area and to coordinate the requirements of multiple certifications.

## PROGRAM ADMISSION SELECTION CRITERIA

The files of all applicants will be individually and holistically reviewed by a panel of World Language professionals. The criteria used for admission include the following:

- Academic Qualifications: The applicant demonstrates mastery of the target language and knowledge of its literature, civilization, and culture.
- Career Maturity: The applicant demonstrates commitment to teaching the target language to elementary, middle, and high school students, including consideration of his or her own strengths and limitations as a potential teacher.
- Ability to Relate to Youth: The applicant demonstrates the ability to work effectively with young people.
- Commitment to All Students: The applicant demonstrates commitment to working with all students including those of different racial, ethnic, and socioeconomic backgrounds, and students with disabilities, not just the economically privileged or highly motivated.
- Interpersonal Skills: The applicant demonstrates the ability to work effectively with peers, other professionals, and members of the community outside of school settings.

The application files, including immersion experiences and oral proficiency, are rated according to the above criteria for each language. A final cohort is selected along with rank-ordered alternates, based on a combination of ratings made by the World Language Education review committee and judgement by the faculty program coordinator about optimal cohort characteristics for each language. The availability of field placements in the subject area may also influence the selection process.

Admission procedures are reviewed every other year to ensure fairness and effectiveness.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

This program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Prerequisite coursework prepares students for work in the major. Program applicants must also complete and document an
immersion experience as a prerequisite to being admitted to the professional program.
- Major coursework offers in-depth study of the subject students will teach.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a four-semester sequence of world language teaching methods course work and field experiences in schools.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

The four semesters of professional coursework are followed sequentially and taken in consecutive semesters. Because of the program structure, students are expected to have completed most of their major and liberal studies coursework by the start of the professional sequence.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## MAJOR REQUIREMENTS

Complete a minimum of 40 credits. At least 15 credits of upperlevel major coursework (numbered 301, 302, 500 and above) must be completed in residence at UW-Madison to meet the major residency requirement.

## REQUIRED COURSES

Complete the following, 22 credits.

| Code | Title | Credits |
| :--- | :--- | ---: |
| LATIN 103 | Elementary Latin | 4 |
| LATIN 104 | Elementary Latin | 4 |
| LATIN 203 | Intermediate Latin | 4 |
| LATIN 204 | Introduction to Latin Literature | 4 |
| LATIN 301 | Latin Literature of the Roman | 3 |
|  | Republic | 3 |

## READING COURSES

Select two Latin reading courses numbered 500 or above. Most courses require completion of LATIN 302 or consent of instructor. Suggested courses include:

| Code | Title | Credits |
| :--- | :--- | ---: |
| LATIN 505 | Elementary Prose Composition | 3 |
| LATIN 515 | Vergil | 3 |
| LATIN 519 | Latin Poetry | 3 |
| LATIN 520 | Roman Drama | 3 |
| LATIN 521 | Roman Elegy | 3 |
| LATIN 522 | Roman Lyric Poetry | 3 |
| LATIN 523 | Roman Satire | 3 |
| LATIN 524 | Roman Novel | 3 |
| LATIN 539 | Latin Historical Writers | 3 |
| LATIN 549 | Latin Philosophical Writers | 3 |
| LATIN 559 | Latin Oratory | 3 |
| LATIN/ | Mediaeval Latin | 3 |
| MEDIEVAL 563 |  |  |

## THE CLASSICAL WORLD

Complete the following Classics courses:

## Code

Title
CLASSICS 322
The Romans
Credits

CLASSICS 370
Classical Mythology 3

## ELECTIVES

Complete additional upper-level Latin coursework (http://guide.wisc.edu/ courses/latin) to reach the minimum of 40 credits.

## ORAL AND WRITTEN PROFICIENCY EXAMS

## ABOUT THE ORAL AND WRITTEN PROFICIENCY EXAMS

Students admitted to the World Language Education program must provide evidence of having earned at least an Intermediate High score on an American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI). Latin Education students are exempt from this requirement, see below.

The interview must be taken prior to beginning the first student teaching experience (second semester of the professional sequence). Students should be aware that it may take as long as three months to obtain results, and factor this delay into the scheduling of the OPI. If the score of Intermediate High is not made after the first examination, a student will be asked to take measures to improve their spoken language proficiency before continuing in the program. The student must repeat the OPI and achieve the required Intermediate High proficiency level.

All students in World Language Education (except Latin Education), are also required to complete the Writing Proficiency Test (WPT) no later than the third semester in the program. It is recommended that students take the test during the second semester of the professional sequence. A proficiency level of Intermediate High is also required for this examination. Students must take and pass the WPT in their program area and the scores must be received by Education Academic Services before beginning the final student teaching semester. Students who do not take and pass the exam will not be permitted to student teach. The WPT meets the Department of Public Instruction's content exam requirement, a requirement usually met by taking the appropriate Praxis II test.

Both the Oral Proficiency Interview and the Writing Proficiency Test are administered by Language Testing International (LTI) (http:// www.languagetesting.com). Their address is LTI, 3 Barker Avenue, Suite 310, White Plains, NY 10601; 800-486-8444. Students are responsible for costs associated with the OPI and the WPT.

Students seeking Latin certification will be required to take a proficiency exam administered by the Department of Classical and Ancient Near Eastern Studies prior to beginning the first student teaching experience (second semester of the professional sequence). This exam will take the place of the OPI and WPT required for certification in other languages.

See the World Language Education faculty program coordinator with questions about these requirements.

## PROFESSIONAL EDUCATION REQUIREMENTS (PROFESSIONAL SEQUENCE)

## ABOUT THE PROFESSIONAL SEQUENCE

The professional program is typically a full-time, four-semester sequence of education courses and school-based field experiences. The four semesters of required professional coursework must be followed
sequentially and taken in consecutive semesters. Students must enroll in all required coursework outlined in each semester of the program, even if similar coursework was taken at another institution. Students begin the professional sequence in the fall.

It is expected that almost all major and liberal studies coursework be completed by the start of the professional sequence; completion of the entire major is preferred. The structure of the sequence allows very little time to pursue remaining coursework in these areas. Many students elect to finish their remaining requirements during the summer, or after the sequence has been completed. In addition, ACTFL OPI certification of speaking ability in the language rated Intermediate High or above is required by the end of the first semester in the program. Students must also complete the Writing Proficiency Test (WPT) no later than their third semester in the program. A rating of Intermediate High or above must be earned before a student is allowed to participate in the final student teaching semester. See further information under Oral and Written Proficiency Exams.

Students admitted to two areas of language certification follow the same four-semester sequence as single certification students; consult with the World Language Education program coordinator to arrange sequence requirements.

The professional program is a full-time commitment and places heavy demands on students' time and energy. The professional sequence is particularly taxing for students completing certification in two subject areas. Students must make satisfactory progress in their program to continue. This professional judgment is made by the faculty program coordinator in consultation with cooperating teachers and supervisors.

## PROFESSIONAL SEQUENCE COURSE REQUIREMENTS

Complete all of the courses listed below. Required courses must be taken during the semester listed. Other courses may be taken at any time, including summer, but a suggested course sequence is provided.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| Required Courses |  |  |
| CURRIC 342 | Teaching World Languages (K-8) | 3 |
| CURRIC 243 | Practicum in World Languages $(\mathrm{K}-12)^{1}$ | 3 |
| Other Courses |  |  |
| ED POL 300 <br> or ED POL/ HISTORY 412 | School and Society <br> History of American Education | 3 |
| CURRIC/ RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| ED PSYCH 301 | How People Learn | 3 |
| Semester 2 |  |  |
| Required Courses |  |  |
| CURRIC 442 | Student Teaching in World Languages (K-8) ${ }^{2}$ | 6 |
| or CURRIC 443 | Student Teaching in World Languages (6-12) |  |
| Other Courses |  |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence | 3 |

Semester 3
Required Courses

| CURRIC 343 | Teaching World Languages (6-12) | 3 |
| :--- | :--- | :---: |
| CURRIC 443 | Student Teaching in World <br> Languages (6-12) |  |
| or CURRIC 442 | Student Teaching in World Languages (K-8) | 6 |
| Other Courses | Integrating the Teaching of Reading <br> with Other Language Arts | 3 |
| CURRIC 305 |  |  |

## Semester 4

Required Courses

| CURRIC 443 | Student Teaching in World <br> Languages $(6-12)^{4}$ | 9 |
| :--- | :--- | :--- |
| CURRIC 564 | Advanced Problems on the <br> Teaching of World Languages | 3 |

1 The practicum will take place three days a week; placement will probably be at the elementary level. Fieldwork this semester is a halftime commitment and encompasses an entire semester based on the UW-Madison calendar. Placements are made within a 50-mile field experiences service area and may not necessarily be in the city of Madison.
2 Placement will probably be at the elementary level, three days a week. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the UW-Madison calendar.
3 Placement will probably be at the middle school level. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the school district calendar. (Fall semester extends from late August through mid-January; spring semester extends from mid-January through early mid-June.)
Student teaching this semester is a full-time commitment and will be at the high school level. Fieldwork this semester encompasses an entire semester based on the school district calendar.

## ELECTIVE COURSEWORK

Complete additional coursework as needed to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level major coursework
- 2.75 cumulative grade point average in all professional education coursework
- Degree candidates must complete at least 120 total credits.
- No more than 40 credits from a single academic department may be applied toward the 120 minimum credits required for graduation.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum work are considered part of the 30 credits.


## DEGREE AUDIT REPORTING SYSTEM (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure. (p. 1536)

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br>  <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| :--- | :--- |
|  | Abroad/Study Away programs. |

## LEARNING OUTCOMES

1. In Semester 1, prior to starting student teaching, students must have acquired Intermediate High proficiency in their target language on the ACTFL OPI scale as measured by two independent external evaluators.
2. In Year 1, student teachers must demonstrate the ability to teach in a K-8 context, as evaluated by their University supervisor and their mentor teacher through repeated direct observations.
3. During their content courses, students must meet (a) teacher education standards; and (b) ACTFL standards, as measured by (a) formative and summative evaluation of their assignments; (b) Teacher Education portfolio.
4. In Year 2, student teachers must demonstrate the ability to teach in a 6-12 school context, as evaluated by their University supervisor and their cooperating teacher through repeated direct observations.
5. To get certified by the Department of Public Instruction, at the end of Year 2, student teachers must have successfully completed an EdTPA Portfolio of their classroom experiences that demonstrates professionalism and meets the EdTPA standards, as evaluated by external evaluators.

## ADVISING AND CAREERS

## LATIN EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Latin. Students may want to consult the undergraduate advisor (https://calendar.wisc.edu/ scheduling-assistant/public/profiles/YjfjFEtg.html) in the Department of Classical and Ancient Near Eastern Studies regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students
will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651<br>www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)

The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff
at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http:// ci.education.wisc.edu) and Classical and Ancient Near Eastern Studies (http://canes.wisc.edu) departmental websites.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION

## REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ | Atmospheric Environment and | 2 |
| GEOG 121 | Society |  |
| ATM OCN/ SOIL SCI 132 | Earth's Water: Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, 3-5 lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a "D") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that
withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in
each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK-
6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $K-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## LATIN, SED MINOR

The Latin minor is currently under review. Please contact Education Academic Services, 139 Education Building, 608-262-1651, with any questions regarding the status of this program. A Latin major (p. 1528) is offered through the School of Education; interested students may want to investigate this option.

## MATHEMATICS AND SCIENCE DUAL, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students may wish to consult with an advisor in Education Academic Services, 139 Education Building, 608-262-1651, to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

This minor is intended for Elementary Education majors wishing to enhance their content preparation in mathematics and science and is particularly suitable for Elementary Education majors who intend to teach mathematics and science in the middle school.

A minimum cumulative grade point average of 2.75 is required, based on all minor coursework taken on the UW-Madison campus.

## MATHEMATICS COMPONENT

The mathematics sequence emphasizes problem solving, mathematical reasoning and justification, communicating, and building on students' mathematical ideas in areas such as algebraic thinking, calculus, and probability and statistics. The capstone course, MATH 138, is for students to build connections across core ideas in upper-level elementary and middle school mathematics and to understand how these evolve from and into elementary and higher level mathematics. This sequence is also intended to prepare students to take the Praxis examination for middle school mathematics, thereby permitting certification and licensure in most other states that require more in-depth content preparation.

Complete the following courses. Students completing this minor will take MATH 135 instead of MATH 132 in the Elementary Education sequence.

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 135 | Algebraic Reasoning for Teaching Math ${ }^{1}$ | 3 |
| MATH 136 | Pre-calculus and Calculus for Middle School Teachers ${ }^{2}$ | 6 |
| MATH 138 | Mathematics for Teaching: <br> Conjecture, Generalization, and Proof ${ }^{3}$ | 3 |
| Offered each spring semester. For more detailed information about MATH 135, see this website (http://www.math.wisc.edu/\%7Elempp/ ed.html). |  |  |
| This is a 6-credit course based on the large lecture of MATH 171 Calculus with Algebra and Trigonometry I with a special discussion section for students completing this minor. Offered each fall semester. The following students will be exempt from this course requirement: students having taken MATH 213, MATH 217, MATH 221, MATH 222, MATH 234, MATH 275, MATH 276, or MATH 375 (or an exact transfer equivalent of any of these) with a grade of $B$ or better; students having passed the AP Calculus $A B$ test with a score of 5 ; and students having passed the AP Calculus BC test with a score of 4 or better. |  |  |
| This 3-credit capstone course is similar to MATH 132. |  |  |

## SCIENCE COMPONENT

The aim of the science component of this minor is for students to understand science as an intellectual activity. The goals of science and the diverse means by which scientific knowledge is generated and validated should be at the core of the science portion of this minor. Upon its completion, students should have had opportunities to understand some of the most powerful organizing ideas in the various scientific disciplines as well as how those ideas have been and are generated. Such an understanding should provide students with the fundamental tools and outlook necessary to teach the variety of science content typically taught in middle schools.

The committee that developed this science component has indicated that the primary purpose for the minor should be consistent with the goals of a liberal or general education, thus viewing the minor as an extension of the current liberal studies requirement. In addition to the 9 credits of science required for the liberal studies requirement, students completing this minor must also take 9 credits in science for the math-science dual minor. With these 18 credits it is possible to provide a minimal level of breadth and depth of science coursework. This minor is also expected to provide Elementary Education program students with a background in the sciences that are most commonly taught at the middle school level.

## Complete the following requirements:

- At least 18 credits from the courses listed below. Additional courses can be considered; please consult with an advisor in Education Academic Services
- One course in each of three of the four science areas of biology, chemistry, physics, and earth and space science from the approved list, below. Integrated Liberal Studies 153 does not count in any of the areas, but can count toward the 18 credit total.
- At least 6 credits of coursework from the courses listed below tha are not marked with an asterisk (*). Courses with the asterisk are considered to be introductory level courses

The following courses are approved for inclusion in the science component of the math/science minor

| Code | Title | Credits |
| :---: | :---: | :---: |
| ILS 153 | Ways of Knowing in the Sciences * | 4 |
| Biology course options |  |  |
| Code | Title | Credits |
| Biochemistry |  |  |
| All courses numbered 500 and above |  |  |
| Biocore |  |  |
| All courses |  |  |
| Biology |  |  |
| $\begin{aligned} & \text { BIOLOGY/ } \\ & \text { ZOOLOGY } 101 \end{aligned}$ | Animal Biology * | 3 |
| $\begin{aligned} & \text { BIOLOGY/ } \\ & \text { ZOOLOGY } 102 \end{aligned}$ | Animal Biology Laboratory * | 2 |
| $\begin{aligned} & \text { BIOLOGY/BOTANY/ } \\ & \text { ZOOLOGY } 151 \end{aligned}$ | Introductory Biology * | 5 |
| BIOLOGY/BOTANY/ ZOOLOGY 152 | Introductory Biology | 5 |
| Botany |  |  |
| BOTANY 100 | Survey of Botany * | 3 |
| $\begin{aligned} & \text { BOTANY/ } \\ & \text { PL PATH } 123 \end{aligned}$ | Plants, Parasites, and People * | 3 |
| BOTANY/ <br> BIOLOGY 130 | General Botany * | 5 |
| BOTANY/BIOLOGY/ ZOOLOGY 151 | Introductory Biology * | 5 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY/ENVIR ST/ ZOOLOGY 260 | Introductory Ecology * | 3 |
| All courses numbered 300 and above |  |  |
| Entomology |  |  |
| ENTOM/ <br> ENVIR ST 201 | Insects and Human Culture-a Survey Course in Entomology * | 3 |
| All courses numbered 300 and above |  |  |
| Forest and Wildlife Ecology |  |  |
| All courses numbered | 300 and above |  |

All courses numbered 300 and above
Genetics
All courses numbered 400 and above
Microbiology

| MICROBIO 101 | General Microbiology * | 3 |
| :--- | :--- | :--- |
| MICROBIO 102 | General Microbiology Laboratory * | 2 |

All courses numbered 300 and above
Plant Pathology
PL PATH/ Plants, Parasites, and People * 3

BOTANY 123
All courses numbered 300 and above
Zoology

| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY } 101 \end{aligned}$ | Animal Biology * | 3 |
| :---: | :---: | :---: |
| ZOOLOGY/ <br> BIOLOGY 102 | Animal Biology Laboratory * | 2 |
| ZOOLOGY/BIOLOGY/ <br> BOTANY 151 | Introductory Biology * | 5 |
| ZOOLOGY/BIOLOGY/ <br> BOTANY 152 | Introductory Biology | 5 |
| $\begin{aligned} & \text { ZOOLOGY/BOTANY/ } \\ & \text { ENVIR ST } 260 \end{aligned}$ | Introductory Ecology * | 3 |
| ZOOLOGY/ <br> ENTOM 302 | Introduction to Entomology | 4 |
| ZOOLOGY/ <br> ENVIR ST 315 | Limnology-Conservation of Aquatic Resources | 2 |
| ZOOLOGY 316 | Laboratory for LimnologyConservation of Aquatic Resources | 2-3 |

Courses numbered 350 and above

## Chemistry course options Code

## Biochemistry

All courses numbered 500 and above
Chemistry

| CHEM 103 | General Chemistry I * $^{*}$ | 4 |
| :--- | :--- | :--- |
| CHEM 104 | General Chemistry II | 5 |
| CHEM 108 | Chemistry in Our World $^{*}$ | 5 |
| CHEM 109 | Advanced General Chemistry | 5 |
| CHEM 115 | Chemical Principles I | 5 |
| CHEM 116 | Chemical Principles II | 5 |
| All courses numbered 300 and above |  |  |

Physics course options

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHYSICS 103 | General Physics * | 4 |
| PHYSICS 104 | General Physics | 4 |
| PHYSICS 107 | The Ideas of Modern Physics * | 3 |

All courses numbered 200 and above
Earth and Space Science course options
Code Title Credits

| Astronomy |  |  |
| :---: | :---: | :---: |
| ASTRON 100 | Survey of Astronomy * | 4 |
| ASTRON 103 | The Evolving Universe: Stars, Galaxies, and Cosmology | 3 |
| ASTRON 104 | Our Exploration of the Solar System | 3 |
| ASTRON 113 | Hands on the Universe (Only if taken concurrently with ASTRON 103) * | 1 |
| ASTRON 114 | Hands on the Solar System (Only if taken concurrently with ASTRON 104) * | 1 |
| ASTRON 150 | Topics in Astronomy | 2 |
| ASTRON 200 | The Physical Universe * | 3 |
| ASTRON 236 | The History of Matter in the Universe | 3 |


| All courses numbered 200 and above |  |  |
| :---: | :---: | :---: |
| Atmospheric and Oceanic Studies |  |  |
| ATM OCN 100 | Weather and Climate * | 3 |
| ATM OCN 101 | Weather and Climate * | 4 |
| ATM OCN/ENVIR ST/ GEOSCI 102 | Climate and Climate Change | 3 |
| ATM OCN/ GEOSCI 105 | Survey of Oceanography * | 3-4 |
| ATM OCN/ ENVIR ST 171 | Global Change: Atmospheric Issues and Problems * | 2-3 |

All courses numbered 200 and above
Geography
GEOG/ENVIR ST 120 Introduction to the Earth System * 3
GEOG/ENVIR ST 127 Physical Systems of the 5
Environment *
All courses numbered 300 and above and designated as
Physical Science

## Geoscience

GEOSCI $100 \quad$| Introductory Geology: How the Earth |
| :--- |
| Works |

GEOSCI/ATM OCN/ Climate and Climate Change * 3
ENVIR ST 102
GEOSCI/ Survey of Oceanography * 3-4
ATM OCN 105
GEOSCI 107 Life of the Past * 3
GEOSCI 110 Evolution and Extinction * 4
GEOSCI 202 Introduction to Geologic Structures 4
GEOSCI 203 Earth Materials 5
GEOSCI 204 Geologic Evolution of the Earth 4
GEOSCI 302 Physics and Chemistry of the 3
Earth's Interior
GEOSCI 303 Fluids and Sedimentary Processes 3
GEOSCI 304 Geobiology 3
GEOSCI/GEOG 320 Geomorphology 3
GEOSCI/G LE 370 Elementary Petrology 3
GEOSCI/GEOG 420 Glacial and Pleistocene Geology 3
GEOSCI 430 Sedimentology and Stratigraphy 3
GEOSCI/G LE 455 Structural Geology 4
GEOSCI 456 Geologic Field Methods 2
GEOSCI/GEOG 524 Advanced Landform Geography 3
GEOSCI/GEOG 527 The Quaternary Period 3
All courses numbered 556 and above

## MATHEMATICS SPECIALIZED, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students may wish to consult with an advisor in Education Academic Services, 139 Education Building, 608-262-1651, to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 22 credits to include the requirements listed below. A minimum cumulative grade point average of 2.75 is required, based on all minor coursework taken on the UW-Madison campus.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Required Courses |  |  |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| MATH 222 | Calculus and Analytic Geometry 2 | 4 |
| STAT 301 | Introduction to Statistical Methods | 3 |
| Additional credits chosen from the following: |  |  |
| MATH 135 | Algebraic Reasoning for Teaching Math | 3 |
| MATH 138 | Mathematics for Teaching: Conjecture, Generalization, and Proof | 3 |
| MATH 234 | Calculus--Functions of Several Variables | 4 |
| MATH/ <br> COMP SCI 240 | Introduction to Discrete Mathematics | 3 |
| MATH 340 | Elementary Matrix and Linear Algebra | 3 |
| MATH 461 | College Geometry I | 3 |
| MATH/HIST SCI 473 | History of Mathematics | 3 |

## MATHEMATICS, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of Mathematics is housed in the College of Letters \& Science. Students may wish to consult with an undergraduate advisor in the department to discuss course selection and other issues related to this field of study. The current list of advisors and the schedule of the office hours can be found at the departmental advising page (https:// www.math.wisc.edu/undergraduate/advising).

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence
options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 28 credits. A minimum cumulative grade point average of 2.75 is required, based on all UW-Madison coursework included in the minor.

Elementary Education students may also wish to consider the Specialized Mathematics minor, which exchanges some of the higherlevel mathematics courses for a broader range of coursework in mathematics, computer sciences, and statistics. A mathematics/science dual minor option is also available.

The first 13 credits of the mathematics minor involves calculus-level coursework. Students may need to complete prerequisite coursework -e.g., MATH 112 Algebra, MATH 113 Trigonometry-to reach this proficiency level. These preparatory courses may be used to meet the liberal studies requirement, but may not be applied toward the credits required for the mathematics minor.

| Code | Title | Credits |
| :--- | :--- | ---: |
| MATH 221 | Calculus and Analytic Geometry 1 | 5 |
| MATH 222 | Calculus and Analytic Geometry 2 | 4 |
| MATH 234 | Calculus--Functions of Several | 4 |
|  | Variables |  |
| MATH 340 | Elementary Matrix and Linear | 3 |
|  | Algebra | 3 |
| STAT 301 | Introduction to Statistical Methods | 3 |
| MATH 441 | Introduction to Modern Algebra | 3 |

Because of prerequisites and scheduling issues, the sequencing of this coursework requires careful planning to be completed in a timely fashion. Students are encouraged to consult with an advisor regarding the appropriate sequencing of these courses.

## PHYSICS, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of Physics is housed in the College of Letters \& Science. Students may wish to consult with an undergraduate advisor in the physics department to discuss course selection and other issues related to this field of study.

## Physics Undergraduate Advisors

Professor Dan McCammon
6207 Chamberlin Hall
608-262-5916
Professor Stefan Westerhoff
4209 Chamberlin Hall
608-262-3989
Professor Michael Winokur
5106 Chamberlin Hall
608-262-5425

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 22 credits. A minimum cumulative grade point average of 2.75 is required, based on all Physics minor coursework taken on the UW-Madison campus.

## INTRODUCTORY REQUIREMENTS



## ADDITIONAL COURSE REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| PHYSICS 307 | Intermediate Laboratory-Mechanics | 2 |
| and Modern Physics | 2 |  |
| PHYSICS 308 | Intermediate Laboratory- <br>  <br> Electromagnetic Fields and Optics | 2 |
| PHYSICS 311 | Mechanics | 3 |

Select physics electives, if necessary, to total 22 credits

## POLITICAL SCIENCE, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of Political Science is housed in the College of Letters \& Science. Students may wish to consult with an undergraduate advisor (p. 1197) in the department to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 24 credits. A minimum cumulative grade point average of 2.75 is required, based on all political science minor coursework taken on the UW-Madison campus.

## REQUIRED COURSES

| Code <br> Complete any 100-level Political Science course (one <br> course) | Credits |
| :--- | :--- | ---: |
| POLI SCI 205 |  |
| or POLI SCI 405 |  |$\quad$| Introduction to State Government |
| ---: | :--- | ---: |
| Research Methods |$\quad 3-4$

## DISTRIBUTION REQUIREMENTS

Complete at least one course from each of the four political science groups. Courses taken to meet the requirements above may be applied toward the course distribution.

## POLITICAL THEORY

Political Theory course options

| Code | Title | Credits |
| :--- | :--- | ---: |
| POLI SCI 160 | Introduction to Political Theory | $3-4$ |
| POLI SCI 265 | Development of Ancient and | $3-4$ |
|  | Medieval Western Political Thought |  |


| POLI SCI 266 | The Development of Modern <br> Western Political Thought | $3-4$ |
| :--- | :--- | ---: |
| POLI SCI 360 | History of American Political <br> Thought | $3-4$ |
| POLI SCI 361 | Contemporary American Political <br> Thought | $3-4$ |
| POLI SCI 363 | Literature and Politics | $3-4$ |
| POLI SCI 460 | Topics in Political Philosophy | $3-4$ |
| POLI SCI 463 | Deception and Politics | 4 |
| POLI SCI/ | Women and Politics |  |
| GEN\&WS 469 | African American Political Theory | $3-4$ |
| POLI SCI/ | Radical Political Theory | $3-4$ |
| AFROAMER 519 | POLI SCI 561 | Study Abroad Topics in Political |
| POLI SCI 590 | Science: Political Theory | $3-4$ |

## AMERICAN GOVERNMENT

## American Government course options

| Code | Title | Credits |
| :---: | :---: | :---: |
| POLI SCI 104 | Introduction to American Politics and Government | 3-4 |
| POLI SCI 184 | Introduction to American Politics | 3 |
| POLI SCI 205 | Introduction to State Government | 3-4 |
| POLI SCI 206 | Introduction to Political Psychology | 3-4 |
| POLI SCI/ LEGALST 217 | Law, Politics and Society | 3-4 |
| POLI SCI/ <br> CHICLA 231 | Politics in Multi-Cultural Societies | 3-4 |
| POLI SCI/AFRICAN/ <br> AFROAMER/ <br> HISTORY 297 | African and African-American Linkages: An Introduction | 4 |
| POLI SCI/ <br> CHICLA 302 | Mexican-American Politics | 3-4 |
| POLI SCI 303 | Election Campaign Practicum | 3 |
| POLI SCI 304 | The Political Economy of Race in the United States | 3-4 |
| POLI SCI 305 | Elections and Voting Behavior | 3-4 |
| POLI SCI 308 | Public Administration | 3-4 |
| POLI SCI 309 | Civil Liberties in the United States | 3-4 |
| POLI SCI 311 | United States Congress | 3-4 |
| POLI SCI 314 | Criminal Law and Justice | 3-4 |
| POLI SCI 315 | Legislative Internship | 3 |
| POLI SCI 402 | Wisconsin in Washington Internship Course | 4 |
| POLI SCI 405 | State Government and Public Policy | 3-4 |
| POLI SCI 408 | The American Presidency | 3-4 |
| POLI SCI 409 | American Parties and Politics | 3-4 |
| POLI SCI 410 | Citizenship, Democracy, and Difference | 4 |
| POLI SCI 411 | The American Constitution: Powers and Structures of Government | 4 |
| POLI SCI 412 | The American Constitution: Rights and Civil Liberties | 4 |


| POLI SCI 414 | The Supreme Court as a Political <br> Institution | 3 |
| :--- | :--- | :---: |
| POLI SCI 415 | The Separation of Powers and <br> Federal Courts | 3 |
| POLI SCI 416 | Community Power and Grass Roots <br> Politics | 3 |
| POLI SCI 417 | The American Judicial System | $3-4$ |
| POLI SCI/ | Administrative Law | $3-4$ |
| PUB AFFR 419 | Health Policy and Health Politics | $3-4$ |
| POLI SCI 507 | American National Security: Policy |  |
| POLI SCI 508 | and Process | $3-4$ |
| POLI SCI 510 | Politics of Government Regulation | $3-4$ |
| POLI SCI 511 | Campaign Finance | $3-4$ |
| POLI SCI 514 | Interest Group Politics | $3-4$ |
| POLI SCI 515 | Public Opinion | $3-4$ |
| POLI SCI 516 | Political Communications | $3-4$ |
| POLI SCI/ | African American Political Theory | $3-4$ |
| AFROAMER 519 | Wisconsin in Washington Advanced | $4-4$ |
| POLI SCI 602 | Public Policy Course |  |
| POLI SCI 490 | Study Abroad Topics in Political <br> Science: American Government | 3 |

## COMPARATIVE POLITICS

## Comparative Politics course options

Code Title Credits

POLI SCI $120 \quad$ Politics Around the World 4
POLI SCI $182 \quad 3$

POLI SCI/ Politics in Multi-Cultural Societies 3-4
CHICLA 231
POLI SCI/GEOG/ Introduction to Southeast Asia: 4
HISTORY/LCA/ Vietnam to the Philippines
SOC 244
POLI SCI/GEOG/ The Civilizations of India-Modern 4
HISTORY/LCA/ Period
SOC 252
POLI SCI/GEOG/ Russia: An Interdisciplinary Survey 4
HISTORY/
SLAVIC 253
POLI SCI/GEOG/ Eastern Europe: An Interdisciplinary 4
HISTORY/ Survey
SLAVIC 254
POLI SCI/E A STDS/ Introduction to East Asian 3-4
HISTORY 255 Civilizations
POLI SCI/ Latin America: An Introduction 3-4
AFROAMER/
ANTHRO/C\&E SOC/
GEOG/HISTORY/
LACIS/SOC/
SPANISH 260
POLI SCI/AFRICAN/ Africa: An Introductory Survey 4
AFROAMER/
ANTHRO/GEOG/
HISTORY/SOC 277

| POLI SCI/AFRICAN/ AFROAMER/ HISTORY 297 | African and African-American Linkages: An Introduction | 4 |
| :---: | :---: | :---: |
| POLI SCI 321 | Latin-American Politics | 3-4 |
| POLI SCI 322 | Politics of Southeast Asia | 3-4 |
| POLI SCI 324 | Political Power in Contemporary China | 3-4 |
| POLI SCI/ <br> INTL ST 325 | Social Movements and Revolutions in Latin America | 3-4 |
| POLI SCI/LCA 326 | Politics of South Asia | 3-4 |
| POLI SCI/ <br> INTL ST 327 | Indian Politics in Comparative Perspective | 3 |
| POLI SCI 329 | African Politics | 3-4 |
| POLI SCI 330 | Political Economy of Development | 3 |
| POLI SCI 332 | German Politics | 3-4 |
| POLI SCI 333 | International Politics of the Middle East | 3-4 |
| POLI SCI 334 | Russian Politics | 3-4 |
| POLI SCI 421 | The Challenge of Democratization | 3-4 |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |
| POLI SCI/ <br> INTL ST 423 | Social Mobilization in Latin America | 3 |
| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| POLI SCI/ <br> INTL ST 431 | Contentious Politics | 3-4 |
| POLI SCI 432 | Comparative Legal Institutions | 3-4 |
| POLI SCI/ <br> RELIG ST 433 | Religion and Politics | 3-4 |
| POLI SCI/ <br> INTL ST 434 | The Politics of Human Rights | 3-4 |
| POLI SCI/ <br> INTL ST 436 | Political Inequality: Measures, Causes, Effects and Remedies | 3 |
| POLI SCI 437 | Nationalism and Ethnic Conflict | 3-4 |
| POLI SCI 438 | Comparative Political Culture | 3-4 |
| POLI SCI/ <br> INTL ST 439 | The Comparative Study of Genocide | 3-4 |
| POLI SCI 529 | Arab-Israeli Conflict | 3-4 |
| POLI SCI 534 | Socialism and Transitions to the Market | 3-4 |
| POLI SCI 537 | Electoral Systems and Representation | 3-4 |
| POLI SCI 538 | Politics and Policies in the European Union | 3-4 |
| POLI SCI 635 | Comparative Politics of Sport | 3-4 |
| POLI SCI 637 | Comparative Political Economy | 3-4 |
| POLI SCI 690 | Study Abroad Topics in Political Science: Comparative Politics | 1-4 |

## INTERNATIONAL RELATIONS

## International Relations course options

## Code

 TitlePOLI SCI 140

Introduction to International Relations

| POLI SCI 340 | The European Union: Politics and Political Economy | 3-4 |
| :---: | :---: | :---: |
| POLI SCI 343 | Theories of International Security | 3-4 |
| POLI SCI 345 | Conflict Resolution | 3-4 |
| POLI SCI 346 | China in World Politics | 3-4 |
| POLI SCI 347 | Terrorism | 3 |
| POLI SCI 348 | Analysis of International Relations | 3-4 |
| POLI SCI 350 | International Political Economy | 3-4 |
| POLI SCI 351 | Politics of the World Economy | 3-4 |
| POLI SCI 353 | The Third World in the International System | 3-4 |
| POLI SCI 354 | International Institutions and World Order | 3-4 |
| POLI SCI 356 | Principles of International Law | 3-4 |
| POLI SCI 359 | American Foreign Policy | 3-4 |
| POLI SCI/ GEN\&WS 429 | Gender and Politics in Comparative Perspective | 3-4 |
| POLI SCI/ECON/ ENVIR ST/ URB R PL 449 | Government and Natural Resources | 3-4 |
| POLI SCI 455 | African International Relations | 3-4 |
| POLI SCI 652 | The Politics of Development | 3-4 |
| POLI SCI 390 | Study Abroad Topics in Political Science: International Relations | 1-4 |

## ELECTIVES

Complete additional coursework, if necessary, to reach the minimum of 24 credits.

## PORTUGUESE, BSE

Student access to the Portuguese Education certification program is dependent upon available supervisory and cooperating teacher resources. For this reason, prospective Portuguese Education students must consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651 Students who do not have previous teaching experience or have not completed a teacher preparation program should expect to participate in the foursemester World Language Education program. Teacher candidates with extensive coursework or teaching experience may complete a modified program after consultation with faculty. Admission to the four-semester professional program entails meeting minimum admission requirements and adherence to strict application deadlines. See the WLE program director, Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building, to determine the feasibility of completing certification in this language.

## WORLD LANGUAGE EDUCATION PROGRAM (CURRENTLY CHINESE, FRENCH, GERMAN, JAPANESE, LATIN, AND SPANISH MAJORS)

The mission of the World Language Education (WLE) program is (1) to promote a community-based approach to world language instruction; (2) to educate teachers who understand different cultures, are proficient in their languages, routinely visit other countries, and can build bridges across nations, races, socioeconomic groups, cultures, and languages; and (3) to certify teachers who are prepared to serve the global needs of increasingly multicultural and multilingual schools and are strongly
committed to act for a world in which shared understanding through conflict resolution, negotiation and communication are guiding principles.

There is a growing need for multilingual teachers from diverse backgrounds. The WLE faculty encourages qualified applicants from underrepresented groups to apply for admissions to the program. The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

The objectives of the $\mathrm{K}-12$ WLE program are

- to provide a philosophy of action designed to promote thoughtful curriculum development and classroom teaching in WLE;
- to provide regular contacts with the global community and inservice teachers in schools through field evenings, workshops, conferences, and other professional meetings;
- to provide clinical settings which enhance opportunities for beginning teachers to develop skillful practice and build bridges across languages, cultures, races, and nationalities;
- to help student teachers use multilingual educational technologies and document their experiences in electronic portfolios and implement research-based practices in their teaching;
- to provide university instructors and supervisors who are wellversed in WLE, who have an international orientation, and who are both approachable and helpful to student teachers.

Program majors include Chinese, French, German, Japanese, Latin, and Spanish, and may also include Italian and Portuguese if field placements are available in these subject areas. Completion of the WLE program leads to a Bachelor of Science degree in Education with a major in the specific subject area. Wisconsin state licensing regulations require that students are licensed to teach at the early childhood through adolescence (approximately kindergarten through high school) levels.

Oral and written examinations are required for all world language teacher candidates enrolled in Wisconsin educator preparation programs, as is an extensive immersion experience. (Students becoming certified to teach Latin are exempt from both the Oral Proficiency Exam and immersion experience requirement.)

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the World Language Education program once a year, effective in the fall. Selection is made the previous spring.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in World Language Education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in World Language Education receive the pre-professional classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply
for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1547)). It is not necessary to be a pre-professional student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall; call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## NATIVE AND HERITAGE SPEAKERS

Native or heritage speakers of a language major offered within the World Language Education program are welcome to pursue admission to the World Language Education program. Prospective applicants and transfer students who have previous experience with a language are encouraged to consult with an advisor in Education Academic Services as early as possible; to schedule, call 608-262-1651.

Native or heritage speakers must take a placement exam in the corresponding language to determine the appropriate level of remaining instruction in grammar, communication standards and social customs, and other topics related to language acquisition and proficiency. Placement examinations for Spanish, French, and German are offered on campus through Testing \& Evaluation Services or the University of Wisconsin System's Regional Placement Testing Program. Placement examinations for Chinese,

Japanese, Italian, Latin, and Portuguese are administered by faculty or staff within the relevant academic department. For more information regarding placement in language courses, consult the Languages at UW-Madison placement guide (http:// languages.wisc.edu/advising/placement).

## APPLICATION AND ADMISSION

Applicants to the World Language Education program will be selected once a year, during the spring semester. Admission decisions will be based on coursework completed through the preceding fall semester. Admission is provisional until spring semester work has been completed and posted, and Education Academic Services staff have verified that students have met minimum grade point averages and earned minimum credits in their major. Admitted students will begin the sequence the following fall semester.

Resources limit the number of students who can be served by the UWMadison World Language Education teacher education program. In recent years the World Language Education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to World Language Education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## ELIGIBILITY FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be considered for admission, students must:

- earn 54 or more transferable semester credits (junior standing) by the end of the spring semester of the application year.
- complete all but six credits of the relevant World Language major.
- earn a minimum 2.75 grade point average on all major coursework completed.
- earn a cumulative GPA of at least 2.75 (on a 4.00 scale). ${ }^{1}$
- have completed, or be in the process of completing, an approved Immersion Experience required for the World Language Education degree program.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

1 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## APPLYING FOR CERTIFICATION IN MORE THAN ONE SUBJECT AREA

Students may apply to be certified in more than one language. Eligibility requirements must be met and separate applications must be filed for each area of interest. Students must be admitted as a major in at least one of the program areas as it is not possible to be admitted only to complete a minor.

Students interested in combining the World Language Education degree program with certification in another area altogether must apply to both programs and meet the minimum criteria for admission to each program. It is suggested that students apply as majors in each area of interest, thus maximizing the chances of admission. Certification in two different areas requires the consent and cooperation of the World Language Education program coordinator and the faculty coordinator of the other subject area. Not all subjects can be combined with the World Language Education degree program.

While multiple majors or major-minor combinations are feasible and may be advantageous as a career strategy, it may take extra time to complete the additional subject area coursework. Students are encouraged to work closely with their Education Academic Services advisor to assess the possibility of completing certification in more than one area and to coordinate the requirements of multiple certifications.

## PROGRAM ADMISSION SELECTION CRITERIA

The files of all applicants will be individually and holistically reviewed by a panel of World Language professionals. The criteria used for admission include the following:

- Academic Qualifications: The applicant demonstrates mastery of the target language and knowledge of its literature, civilization, and culture.
- Career Maturity: The applicant demonstrates commitment to teaching the target language to elementary, middle, and high
school students, including consideration of his or her own strengths and limitations as a potential teacher.
- Ability to Relate to Youth: The applicant demonstrates the ability to work effectively with young people.
- Commitment to All Students: The applicant demonstrates commitment to working with all students including those of different racial, ethnic, and socioeconomic backgrounds, and students with disabilities, not just the economically privileged or highly motivated.
- Interpersonal Skills: The applicant demonstrates the ability to work effectively with peers, other professionals, and members of the community outside of school settings.

The application files, including immersion experiences and oral proficiency, are rated according to the above criteria for each language. A final cohort is selected along with rank-ordered alternates, based on a combination of ratings made by the World Language Education review committee and judgement by the faculty program coordinator about optimal cohort characteristics for each language. The availability of field placements in the subject area may also influence the selection process. Admission procedures are reviewed every other year to ensure fairness and effectiveness.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

This program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Prerequisite coursework prepares students for work in the major. Program applicants must also complete and document an immersion experience as a prerequisite to being admitted to the professional program.
- Major coursework offers in-depth study of the subject students will teach.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a four-semester sequence of world language teaching methods course work and field experiences in schools.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

The four semesters of professional coursework are followed sequentially and taken in consecutive semesters. Students are expected to have completed most of their major and liberal studies coursework by the start of the professional sequence.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education
program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## MAJOR REQUIREMENTS

Complete a minimum of 40 credits. At least 15 credits of upper-level major coursework (numbered 300 and above) must be taken in residence on the UW-Madison campus.

## INTRODUCTORY-LEVEL COURSE REQUIREMENTS

Complete the following or demonstrate proficiency at the equivalent levels.

| Code | Title | Credits |
| :--- | :--- | ---: |
| PORTUG 101 | First Semester Portuguese | 4 |
| PORTUG 102 | Second Semester Portuguese | 4 |
| PORTUG 201 | Third Semester Portuguese | 4 |
| PORTUG 202 | Fourth Semester Portuguese | 4 |
| PORTUG 221 | Introduction to Luso-Brazilian | 4 |
| PORTUG 225 | Literatures | Third Year Conversation and |
| PORTUG 226 | Composition |  |
|  | Third Year Conversation and <br> Composition | 3 |

## UPPER-LEVEL COURSE REQUIREMENTS

Select 16 credits from the following list; 4 must be in Composition and Conversation. Placement in advanced composition and conversation will be based upon proficiency. Additional courses may be substituted with the program advisor's permission.

| Code | Title | Credits |
| :--- | :--- | ---: |
| PORTUG 311 | Fourth Year Composition and <br> Conversation | 3 |
| PORTUG 312 | Fourth Year Composition and <br> Conversation | 3 |
| PORTUG 361 | Portuguese Civilization | 3 |
| PORTUG 362 | Brazilian Civilization | 3 |
| PORTUG 411 | Survey of Portuguese Literature <br> before 1825 | 3 |
| PORTUG 412 | Survey of Brazilian Literature before <br> 1890 | 3 |
| PORTUG 467 | Survey of Portuguese Literature <br> since 1825 <br> PORTUG 468 | Survey of Brazilian Literature since <br> 1890 |

Students expecting to become teachers of Portuguese should also elect courses in related fields, such as history, political science, or sociology. Consult the Latin American, Caribbean, and Iberian Studies Program (http://www.lacis.wisc.edu) for a complete listing of related courses. Students should also seek opportunities to work with children and young adults in positions of volunteer/leadership, such as camp counselor, day camp leader, teacher aid, tutor, etc. Prospective teachers should also take every opportunity to increase their oral mastery of the target language, Portuguese.

## ORAL AND WRITTEN PROFICIENCY EXAMS

## ABOUT THE ORAL AND WRITTEN PROFICIENCY EXAMS

Students admitted to the World Language Education program must provide evidence of having earned at least an Intermediate High score on an American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI). Latin Education students are exempt from this requirement, see below.

The interview must be taken prior to beginning the first student teaching experience (second semester of the professional sequence). Students should be aware that it may take as long as three months to obtain results, and factor this delay into the scheduling of the OPI. If the score of Intermediate High is not made after the first examination, a student will be asked to take measures to improve their spoken language proficiency before continuing in the program. The student must repeat the OPI and achieve the required Intermediate High proficiency level.

All students in World Language Education (except Latin Education), are also required to complete the Writing Proficiency Test (WPT) no later than the third semester in the program. It is recommended that students take the test during the second semester of the professional sequence. A proficiency level of Intermediate High is also required for this examination. Students must take and pass the WPT in their program area and the scores must be received by Education Academic Services before beginning the final student teaching semester. Students who do not take and pass the exam will not be permitted to student teach.

The WPT meets the Department of Public Instruction's content exam requirement, a requirement usually met by taking the appropriate Praxis II test.

Both the Oral Proficiency Interview and the Writing Proficiency Test are administered by Language Testing International (LTI) (http:// www.languagetesting.com). Their address is LTI, 3 Barker Avenue, Suite 310, White Plains, NY 10601; 800-486-8444. Students are responsible for costs associated with the OPI and the WPT.

Students seeking Latin certification will be required to take a proficiency exam administered by the Department of Classical and Ancient Near Eastern Studies prior to beginning the first student teaching experience (second semester of the professional sequence). This exam will take the place of the OPI and WPT required for certification in other languages.

See the World Language Education faculty program coordinator with questions about these requirements.

## IMMERSION EXPERIENCE

## ABOUT THE IMMERSION EXPERIENCE

Participation in an intensive immersion experience is one of the most important and meaningful ways of developing competence in a language. In preparation for the proficiency exams, students seeking certification in a language must participate in an approved immersion experience which emphasizes prolonged and intensive interaction within the target language and culture.

Program applicants completing French, German, and Spanish majors must complete and document a full-semester (or minimum four-monthlong) immersion experience as a prerequisite to being admitted to the professional program. Students completing majors in Chinese and Japanese must spend at least one academic year living in China or Japan, respectively-also a prerequisite to being admitted to the professional program.

The immersion experience must be completed by July 15 preceding the program start. The experience must also have been completed no more than three years before this date.

An approved experience involves significant interaction and day-to-day functioning in the host language, including use of the target language on a daily basis such as in college-level courses, a training program, or a work experience. The immersion experience need not involve attendance in an academic program only, but may take some form such that the language of routine communication is the target language. Simply living with relatives or traveling as a tourist is not considered an immersion experience for the purposes of admission to this program. Most students choose to participate in a structured educational or exchange immersion program.

Students should consult with the International Academic Programs (IAP) (http://www.studyabroad.wisc.edu) office, 106 Red Gym, regarding campus-based study abroad programs. These experiences need not receive prior approval. Experiences through off-campus programs must have prior approval of the World Language Education faculty program coordinator. To obtain prior immersion experience approval, download and complete the approval form (http://www.education.wisc.edu/soe/ academics/undergraduate-students/forms), meet with the faculty coordinator, and obtain authorization. Bring two copies of the form to your meeting, obtain signatures on both, and leave one copy with the coordinator.

Native speakers are normally considered to have fulfilled this requirement without further documentation, especially if they received their secondary education in an environment where the target language is the primary means of communication. Heritage speakers are usually considered to have fulfilled this requirement; applicants must consult with the program coordinator about this requirement.

## PROFESSIONAL EDUCATION REQUIREMENTS (PROFESSIONAL SEQUENCE)

## ABOUT THE PROFESSIONAL SEQUENCE

The professional program is typically a full-time, four-semester sequence of education courses and school-based field experiences. The four semesters of required professional coursework must be followed sequentially and taken in consecutive semesters. Students must enroll in all required coursework outlined in each semester of the program, even if similar coursework was taken at another institution. Students begin the professional sequence in the fall.

It is expected that almost all major and liberal studies coursework be completed by the start of the professional sequence; completion of the entire major is preferred. The structure of the sequence allows very little time to pursue remaining coursework in these areas. Many students elect to finish their remaining requirements during the summer, or after the sequence has been completed. In addition, ACTFL OPI certification of speaking ability in the language rated Intermediate High or above is required by the end of the first semester in the program. Students must also complete the Writing Proficiency Test (WPT) no later than their third semester in the program. A rating of Intermediate High or above must be earned before a student is allowed to participate in the final student teaching semester. See further information under Oral and Written Proficiency Exams.

Students admitted to two areas of language certification follow the same four-semester sequence as single certification students; consult with the World Language Education program coordinator to arrange sequence requirements.

The professional program is a full-time commitment and places heavy demands on students' time and energy. The professional sequence is particularly taxing for students completing certification in two subject areas. Students must make satisfactory progress in their program to continue. This professional judgment is made by the faculty program coordinator in consultation with cooperating teachers and supervisors.

## PROFESSIONAL SEQUENCE REQUIREMENTS

Complete all of the courses listed below. Required courses must be taken during the semester listed. Other courses may be taken at any time, including summer, but a suggested course sequence is provided.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Semester 1 |  |  |
| Required Courses | Teaching World Languages (K-8) | 3 |
| CURRIC 342 | Practicum in World Languages <br> $(\mathrm{K}-12)^{1}$ | 3 |
| CURRIC 243 |  | 3 |
| Other Courses | School and Society | 3 |
| ED POL 300 |  |  |


| or ED POL/ HISTORY 412 | History of American Education |  |
| :---: | :---: | :---: |
| CURRIC/ RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| ED PSYCH 301 | How People Learn | 3 |
| Semester 2 |  |  |
| Required Courses |  |  |
| CURRIC 442 | Student Teaching in World Languages ( $\mathrm{K}-8$ ) ${ }^{2}$ | 6 |
| or CURRIC 443 | Student Teaching in World Languages (6-12) |  |
| Other Courses |  |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence | 3 |
| Semester 3 |  |  |
| Required Courses |  |  |
| CURRIC 343 | Teaching World Languages (6-12) | 3 |
| CURRIC 443 | Student Teaching in World Languages (6-12) ${ }^{3}$ | 6 |
| or CURRIC 442 | Student Teaching in World Languages (K-8) |  |
| Other Courses |  |  |
| CURRIC 305 | Integrating the Teaching of Reading with Other Language Arts | 3 |

## Semester 4

Required Courses

| CURRIC 443 | Student Teaching in World <br> Languages $(6-12)^{4}$ | 9 |
| :--- | :--- | :--- |
| CURRIC 564 | Advanced Problems on the <br> Teaching of World Languages | 3 |

1 The practicum will take place three days a week; placement will probably be at the elementary level. Fieldwork this semester is a halftime commitment and encompasses an entire semester based on the UW-Madison calendar. Placements are made within a 50 -mile field experiences service area and may not necessarily be in the city of Madison.
2 Placement will probably be at the elementary level, three days a week. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the UW-Madison calendar.
3
Placement will probably be at the middle school level. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the school district calendar. (Fall semester extends from late August through mid-January; spring semester extends from mid-January through early mid-June.)
4 Student teaching this semester is a full-time commitment and will be at the high school level. Fieldwork this semester encompasses an entire semester based on the school district calendar.

## ELECTIVE COURSEWORK

Complete additional coursework as needed to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (https://pubs.wisc.edu/ug/ education_policy.htm\#last60).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level major coursework
- 2.75 cumulative grade point average in all professional education coursework
- Degree candidates must complete at least 120 total credits.
- No more than 40 credits from a single academic department may be applied toward the 120 minimum credits required for graduation.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum work are considered part of the 30 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of

Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure. (p. 1553)

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| Wrade point average specified by the school, college, or |  |
| grachic |  |
| academic program to remain in good academic standing. |  |

## LEARNING OUTCOMES

1. In Semester 1, prior to starting student teaching, students must have acquired Intermediate High proficiency in their target language on the ACTFL OPI scale as measured by two independent external evaluators.
2. In Year 1, student teachers must demonstrate the ability to teach in a K-8 context, as evaluated by their University supervisor and their mentor teacher through repeated direct observations.
3. During their content courses, students must meet (a) teacher education standards; and (b) ACTFL standards, as measured by (a) formative and summative evaluation of their assignments; (b) Teacher Education portfolio.
4. In Year 2, student teachers must demonstrate the ability to teach in a 6-12 school context, as evaluated by their University supervisor and their cooperating teacher through repeated direct observations.
5. To get certified by the Department of Public Instruction, at the end of Year 2, student teachers must have successfully completed an EdTPA Portfolio of their classroom experiences that demonstrates professionalism and meets the EdTPA standards, as evaluated by external evaluators.

## ADVISING AND CAREERS

## PORTUGUESE EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Portuguese. Students may want to consult the undergraduate advisor (https://spanport.wisc.edu/ undergrad-advising) in the Spanish and Portuguese department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are
encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/
or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http:// ci.education.wisc.edu) and Spanish and Portuguese (http:// spanport.wisc.edu/home) departmental websites.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been
placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |


| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| :---: | :---: | :---: |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, $3-5$ lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/

Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-
policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

Withdrawing From/Failing Field Experience Assignments Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a "D") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl//icensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## PORTUGUESE, SED MINOR

## HOW TO GET IN

This minor is only available to students admitted to the World Language Education program, or to teachers already licensed to teach at an appropriate level and subject in Wisconsin. Undergraduate students interested in completing a certification minor in Portuguese must also complete a major in another World Language certification subject area and be admitted to the World Language Education program. It is not possible to be certified only in a minor area. Consult with an Education Academic Services advisor to discuss the feasibility of combining this minor with the major subject area-not all combinations may be possible and will require approval of the WLE program coordinator. Interested students must apply and be admitted to both language subject areas. The oral proficiency exam, any written exams, and the immersion experience required for certification must be completed in both languages.

Licensed teachers interested in pursuing certification in this minor should consult with the World Language Education program director, Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## REQUIREMENTS

Note: The oral proficiency exam, any written exams, and an immersion experience are required for certification in this language. Consult the major requirements (p. 1548) in this subject for an explanation of these requirements and the World Language Education professional sequence.

## MINOR REQUIREMENTS

Complete a minimum of 30 credits. The Portuguese minor also requires a minimum cumulative grade point average of 2.75 , based on all Portuguese minor coursework taken on the UW-Madison campus.

Students may exempt from a course requirement based on demonstrated proficiency at that level.

| Code | Title | Credits |
| :--- | :--- | ---: |
| PORTUG 101 | First Semester Portuguese | 4 |
| PORTUG 102 | Second Semester Portuguese | 4 |
| PORTUG 201 | Third Semester Portuguese | 4 |
| PORTUG 202 | Fourth Semester Portuguese | 4 |
| PORTUG 221 | Introduction to Luso-Brazilian | 4 |
| PORTUG 225 | Literatures | 3 |
| PORTUG 226 Composition | Third Year Conversation and | 3 |

## ADVISING AND CAREERS

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Portuguese. Students may want to consult the undergraduate advisor (https://spanport.wisc.edu/ undergrad-advising) in the Spanish and Portuguese department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## PSYCHOLOGY, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of Psychology is housed in the College of Letters \& Science. Students may wish to consult with an undergraduate advisor (p. 1207) in the department to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 26 credits. A minimum cumulative grade point average of 2.75 is required, based on all psychology minor coursework taken at UW-Madison. Students wishing to complete an additional major in psychology through the College of Letters \& Science must also complete supporting coursework in introductory biology; see Requirements for the Major (p. 1205).

## Code

Title
Credits
3-4

| PSYCH 210 | Basic Statistics for Psychology | 3 |
| :--- | :--- | ---: |
| PSYCH 225 | Research Methods | 4 |
| PSYCH 405 | Abnormal Psychology | $3-4$ |
| PSYCH/SOC 456 | Introductory Social Psychology | $3-4$ |
| PSYCH 403 | Psychology of Personality | 3 |
| Select one of the following: | 3 |  |
| PSYCH 408 | Psychology of Human Emotions |  |
| PSYCH 414 | Cognitive Psychology |  |
| PSYCH 430 | History of Psychology | $3-4$ |
| Select one of the following: |  |  |
| PSYCH 449 | Animal Behavior |  |
| PSYCH 450 | Primates and Us: Insights into <br> Human Biology and Behavior |  |
| PSYCH 454 | Behavioral Neuroscience <br> \& PSYCH Laboratory in Behavioral |  |

Select additional coursework, if necessary, to reach the minimum of 26 credits

1 Note: Effective fall 2017, the course number of Abnormal Psychology changed from Psych 509 to PSYCH 405. The course number of Social Psychology changed from Psych 530 to PSYCH/SOC 456.

## SCIENCE SPECIALIZED, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students may wish to consult with an advisor in Education Academic Services, 139 Education Building, 608-262-1651, to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 22 credits selected from one or more of the following areas. Courses must be taken from the departments indicated. A minimum 2.75 grade point average is required, based on all UWMadison coursework included in this minor.

- Biology: Departments of Botany (http://guide.wisc.edu/courses/ botany), Zoology (http://guide.wisc.edu/courses/zoology), and Bacteriology (http://guide.wisc.edu/courses/microbio) (Microbiology course listings)
- Chemistry: Departments of Chemistry (http://guide.wisc.edu/ courses/chem) and Biochemistry (http://guide.wisc.edu/courses/ biochem)
- Physics: Department of Physics (http://guide.wisc.edu/courses/ physics)
- Earth Science: Departments of Astronomy (http://guide.wisc.edu/ courses/astron), Geography (http://guide.wisc.edu/courses/geog) (Physical Geography courses designated as Physical Science only), Geoscience (http://guide.wisc.edu/courses/geosci), and Atmospheric and Oceanic Sciences (http://guide.wisc.edu/courses/atm_ocn).

At least 10 of the 22 credits must be numbered 200 and above.

## SOCIAL STUDIES, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students may wish to consult with an advisor in Education Academic Services, 139 Education Building, 608-262-1651, to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

The social studies minor is designed for students interested in becoming Middle Childhood through Early Adolescence (Grades 1-8) teachers with a specialty in social studies.

Complete 24 credits to include the requirements listed below. A minimum 2.75 grade point average is required, based on all UW-Madison course work included in the social studies minor. The courses listed here will meet this requirement, but additional courses may be considered. Confer with an advisor in Education Academic Services, 139 Education Building, 1000 Bascom Mall, 608-262-1651, for consideration of additional courses.

Some courses may be listed in multiple categories, but can count in only one.

## HISTORY/CIVILIZATIONS <br> UNITED STATES OR EUROPEAN HISTORY

Select one course from the following.
United States or European History course options
Code Title Credits

Afro-American Studies

| AFROAMER 154 | Hip-Hop and Contemporary <br> American Society | 3 |
| :--- | :--- | ---: |
| AFROAMER 156 | Black Music and American Cultural <br> History | 3 |
| AFROAMER 231 | Introduction to Afro-American <br> History | 3 |
| AFROAMER 272 | Race and American Politics from <br> the New Deal to the New Right | 3 |


| AFROAMER/ AFRICAN/HISTORY/ | African and African-American <br> Linkages: An Introduction | 4 | ASIAN AM/HISTOR LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| POLI SCI 297 |  |  | Chicana/o and Latina/o Studies |  |  |
| AFROAMER 302 | Undergraduate Studies in AfroAmerican History | 3 | CHICLA/AFROAMER/ Introduction to Comparative US AMER IND/ Ethnic and American Indian Studies |  | 3 |
| AFROAMER/ HISTORY 321 | Afro-American History Since 1900 | 3-4 | ASIAN AM/ <br> FOLKLORE 102 |  |  |
| AFROAMER/ HISTORY 322 | Afro-American History to 1900 | 3-4 | CHICLA 201 | Introduction to Chicana/o and Latina/o Studies | 3 |
| AFROAMER/ GEN\&WS 323 | Gender, Race and Class: Women in U.S. History | 3 | CHICLA/GEN\&WS/ HISTORY 245 | Chicana and Latina History | 3 |
| AFROAMER/ GEN\&WS 324 | Black Women in America: Reconstruction to the Present | 3 | CHICLA 301 | Chicana/o and Latina/o History | 3 |
|  |  |  | CHICLA/ | Latinas: Self Identity and Social | 3 |
| AFROAMER/ | Race and Gender in Post-World War II U.S. Society | 3 | GEN\&WS 332 | Change |  |
| GEN\&WS 326 |  |  | CHICLA/HISTORY/ | Latino History and Politics | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 | POLI SCI 422 |  |  |
|  |  |  | CHICLA/ | Colony, Nation, and Minority: The | 3 |
| AFROAMER/ HISTORY 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 | HISTORY 435 | Puerto Ricans' World |  |
|  |  |  | CHICLA/ | The American West to1850 | 3-4 |
| AFROAMER 456 | Soul Music and the African American Freedom Movement | 3 | HISTORY 461 |  |  |
|  |  |  | CHICLA/ | The American West Since 1850 | 3-4 |
| AFROAMER/ MUSIC 509 | Seminar in Afro-American Music History and Criticism | 3 | HISTORY 462 |  |  |
|  |  |  | Educational Policy | udies |  |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 | ED POL/ HISTORY 412 | History of American Education | 3 |
|  |  |  | ED POL/ | History of African American | 3 |
| AFROAMER/ ED POL 567 | History of African American Education | 3 | AFROAMER 567 | Education |  |
|  |  |  | Gender and Women's Studies |  |  |
| AFROAMER/ HISTORY 628 | History of the Civil Rights Movement in the United States | 3 | GEN\&WS/ <br> HIST SCI 537 | Childbirth in the United States | 3 |
| AFROAMER 631 | Colloquium in Afro-American History | 3 | History-United Sta | s History |  |
| AFROAMER 671 | Selected Topics in Afro-American History | 3 | HISTORY 101 | Amer Hist to the Civil War Era, the Origin \& Growth of the U S | 4 |
| American Indian Studies |  |  | HISTORY 102 | American History, Civil War Era to the Present | 4 |
| AMER IND 100 | Introduction to American Indian Studies | 3 | HISTORY 109 | Introduction to U.S. History | 3-4 |
| AMER IND 250 | Indians of Wisconsin | 3 | HISTORY 136 | Sport, Recreation, \& Society in the United States | 3-4 |
| AMER IND/ <br> ANTHRO 314 | Indians of North America | 3 | HISTORY 150 | American Histories: The Nineteenth Century | 4 |
| AMER IND 320 | Native Peoples of the Southwest | 3 | HISTORY/ | Asian American History: Movement | 3-4 |
| AMER IND/ HISTORY 490 | American Indian History | 3-4 | ASIAN AM 160 | and Dislocation |  |
| AMER IND/ SOC WORK 658 | American Indian Affairs | 2-3 | HISTORY/ <br> ASIAN AM 161 | Asian American History: Settlement and National Belonging | 3-4 |
|  |  |  | HISTORY 201 | The Historian's Craft ${ }^{\text {(topic must be }}$ | 3-4 |
| Asian American Studies |  |  |  | approved) |  |
| ASIAN AM/ <br> AFROAMER/ <br> AMER IND/CHICLA/ <br> FOLKLORE 102 | Introduction to Comparative US Ethnic and American Indian Studies | 3 | HISTORY/ <br> JEWISH 213 | Jews and American Pop. Culture | 3-4 |
|  |  |  | HISTORY/ <br> JEWISH 219 | The American Jewish Experience: From Shtetl to Suburb | 4 |
| ASIAN AM/ HISTORY 160 | Asian American History: Movement and Dislocation | 3-4 | HISTORY 221 | Explorations in American History $(H)$ | 3-4 |
| ASIAN AM/ HISTORY 161 | Asian American History: Settlement and National Belonging | 3-4 | HISTORY 227 | Explorations in the History of Race and Ethnicity | 3 |
| ASIAN AM/SOC 220 | Ethnic Movements in the United States | 3-4 | HISTORY/CHICLA/ <br> GEN\&WS 245 | Chicana and Latina History | 3 |


| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| :---: | :---: | :---: |
| HISTORY/ <br> LEGAL ST 261 | American Legal History to 1860 | 3 |
| HISTORY/ LEGAL ST 262 | American Legal History, 1860 to the Present | 3 |
| HISTORY 269 | War, Race, and Religion in Europe and the United States, from the Scramble for Africa to Today | 3-4 |
| HISTORY 272 | History Study Abroad: United States History | 1-4 |
| HISTORY/AFRICAN/ <br> AFROAMER/ <br> POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| HISTORY 302 | History of American Thought, 1859 to the Present | 3-4 |
| HISTORY 304 | United States, 1877-1914 | 3-4 |
| HISTORY 305 | United States 1914-1945 | 3-4 |
| HISTORY 306 | The United States Since 1945 | 3-4 |
| HISTORY/ <br> AFROAMER 321 | Afro-American History Since 1900 | 3-4 |
| HISTORY/ <br> AFROAMER 322 | Afro-American History to 1900 | 3-4 |
| HISTORY 329 | History of American Capitalism | 4 |
| HISTORY 343 | Colonial British North America | 3-4 |
| HISTORY 344 | The Age of the American Revolution, 1763-1789 | 3-4 |
| HISTORY 345 | Military History of the United States | 3-4 |
| HISTORY/ GEN\&WS 353 | Women and Gender in the U.S. to 1870 | 3-4 |
| HISTORY/ GEN\&WS 354 | Women and Gender in the U.S. Since 1870 | 3-4 |
| HISTORY/CHICLA/ LACIS/POLI SCI 355 | Labor in the Americas: US \& Mexico in Comparative \& Historical Perspective | 3 |
| HISTORY/ <br> AFROAMER 393 | Slavery, Civil War, and Reconstruction, 1848-1877 | 3-4 |
| HISTORY/HIST SCI/ MED HIST 394 | Science in America | 3 |
| HISTORY 403 | Immigration and Assimilation in American History | 3-4 |
| HISTORY 408 | American Labor History: 1900Present | 3-4 |
| HISTORY/ <br> ED POL 412 | History of American Education | 3 |
| HISTORY/ JEWISH 416 | Eastern European Jews in the United States, 1880s-1930s | 3-4 |
| HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY 427 | The American Military Experience to 1902 | 3-4 |
| HISTORY 428 | The American Military Experience Since 1899 | 3-4 |
| HISTORY 434 | American Foreign Relations, 1901 to the Present | 3-4 |


| HISTORY/ <br> CHICLA 435 | Colony, Nation, and Minority. The Puerto Ricans' World | 3 |
| :---: | :---: | :---: |
| HISTORY/ LEGAL ST 459 | Rule of Law: Philosophical and Historical Models | 3-4 |
| HISTORY/ENVIR ST/ GEOG 460 | American Environmental History | 4 |
| HISTORY/ <br> CHICLA 461 | The American West to1850 | 3-4 |
| HISTORY/ CHICLA 462 | The American West Since 1850 | 3-4 |
| HISTORY 465 | Global Environmental History,The American Economy to 1865 | 3-4 |
| HISTORY/ECON 466 | The American Economy Since 1865 | 3-4 |
| HISTORY/ CHICLA 468 | Popular Culture in the Multi-racial United States | 3-4 |
| HISTORY/ENVIR ST/ GEOG 469 | The Making of the American Landscape | 4 |
| HISTORY/ <br> AMER IND 490 | American Indian History | 3-4 |
| HISTORY/HIST SCI/ MED HIST 504 | Society and Health Care in American History | 3 |
| HISTORY/ JOURN 560 | History of Mass Communication | 4 |
| HISTORY/L I S 569 | History of American Librarianship | 3 |
| HISTORY 607 | The American Impact Abroad: The Historical Dimension | 3 |
| HISTORY/ <br> AFROAMER 628 | History of the Civil Rights Movement in the United States | 3 |
| History-European History |  |  |
| HISTORY/ CLASSICS 110 | The Ancient Mediterranean | 4 |
| HISTORY 111 | Culture \& Society in the Ancient Mediterranean | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 112 | The World of Late Antiquity (200-900 C.E.) | 4 |
| HISTORY 115 | Medieval Europe 410-1500 | 4 |
| HISTORY 119 | The Making of Modern Europe 1500-1815 | 4 |
| HISTORY 120 | Europe and the Modern World 1815 to the Present | 4 |
| HISTORY 123 | English History: England to 1688 | 3-4 |
| HISTORY 124 | British History: 1688 to the Present | 4 |
| HISTORY 201 | The Historian's Craft ${ }^{\text {(topic must be }}$ approved) | 3-4 |
| HISTORY/ RELIG ST 208 | Western Intellectual and Religious History to 1500 | 3-4 |
| HISTORY/ RELIG ST 209 | Western Intellectual and Religious History since 1500 | 3-4 |
| HISTORY/ RELIG ST 212 | The History of Western Christianity to 1750 | 4 |
| HISTORY/ <br> MEDIEVAL 215 | Life in the Middle Ages: An InterDepartmental Course | 3-4 |
| HISTORY 223 | Explorations in European History (H) | 3-4 |
| HISTORY 224 | Explorations in European History (S) | 3 |


| HISTORY/ <br> GEOG/POLI SCI/ <br> SLAVIC 253 | Russia: An Interdisciplinary Survey | 4 |
| :---: | :---: | :---: |
| HISTORY/ <br> GEOG/POLI SCI/ <br> SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 |
| HISTORY 270 | Eastern Europe since 1900 | 3-4 |
| HISTORY 271 | History Study Abroad: European History | 1-4 |
| HISTORY 303 | A History of Greek Civilization | 3-4 |
| HISTORY 307 | A History of Rome | 3-4 |
| HISTORY/ MEDIEVAL/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 312 | The Medieval Church | 3-4 |
| HISTORY/ <br> MEDIEVAL 313 | Introduction to Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL 314 | Problems in Byzantine History and Civilization | 3-4 |
| HISTORY/ <br> MEDIEVAL/ <br> RELIG ST 318 | Medieval Social and Intellectual History, 1200-1450 | 3-4 |
| HISTORY 320 | Early Modern France, 1500-1715 | 3-4 |
| HISTORY/ <br> HIST SCI 323 | The Scientific Revolution: From Copernicus to Newton | 3 |
| HISTORY/ <br> HIST SCI 324 | Science in the Enlightenment | 3 |
| HISTORY/ <br> ENVIR ST 328 | Environmental History of Europe | 3 |
| HISTORY 333 | The Renaissance | 3-4 |
| HISTORY/ <br> RELIG ST 334 | The Reformation | 3-4 |
| HISTORY 348 | France from Napoleon to the Great War, 1799-1914 | 3-4 |
| HISTORY 349 | Contemporary France, 1914 to the Present | 3-4 |
| HISTORY 350 | The First World War and the Shaping of Twentieth-Century Europe | 3-4 |
| HISTORY 351 | Seventeenth-Century Europe | 3-4 |
| HISTORY 352 | Eighteenth Century Europe | 3-4 |
| HISTORY 357 | The Second World War | 3-4 |
| HISTORY 358 | French Revolution and Napoleon | 3-4 |
| HISTORY 359 | History of Europe Since 1945 | 3-4 |
| HISTORY 361 | The Emergence of Mod Britain: England 1485-1660 | 3-4 |
| HISTORY 367 | Society and Ideas in Shakespeare's England | 3-4 |
| HISTORY/JEWISH/ <br> MEDIEVAL/ <br> RELIG ST 368 | The Bible in the Middle Ages | 3 |
| HISTORY/ JEWISH 373 | Modern Political History of the Jews: 1655-1919 | 4 |


| HISTORY/ JEWISH 374 | Modern Political History of the Jews: Era of Mass Movements, 1870-1970 | 4 |
| :---: | :---: | :---: |
| HISTORY/ GEN\&WS 392 | Women and Gender in Modern Europe | 3-4 |
| HISTORY 410 | History of Germany, 1871 to the Present | 3-4 |
| HISTORY/ <br> RELIG ST 411 | The Enlightenment and Its Critics | 3 |
| HISTORY 417 | History of Russia | 3-4 |
| HISTORY 418 | History of Russia | 3-4 |
| HISTORY 419 | History of Soviet Russia | 3-4 |
| HISTORY 420 | Russian Social and Intellectual History | 3-4 |
| HISTORY 424 | The Soviet Union and the World, 1917-1991 | 3-4 |
| HISTORY 425 | History of Poland and the Baltic Area | 3-4 |
| HISTORY/ LEGAL ST 426 | The History of Punishment | 3-4 |
| HISTORY/ SCAND ST 431 | History of Scandinavia to 1815 | 3 |
| HISTORY/ SCAND ST 432 | History of Scandinavia Since 1815 | 3 |
| HISTORY/ RELIG ST 437 | Western Christianity from Augustine to Darwin | 4 |
| HISTORY 467 | Economic and Social History of Europe 1500-1750 | 3-4 |
| HISTORY/ <br> RELIG ST 470 | Religious Thought in Modern Europe | 3-4 |
| HISTORY 474 | European Social History, 1830-1914 | 3-4 |
| HISTORY 475 | European Social History, 1914Present | 3-4 |
| HISTORY/ LEGALST 476 | Medieval Law and Society | 3 |
| HISTORY/ <br> ED POL 478 | Comparative History of Childhood and Adolescence | 3 |
| HISTORY/ LEGALST 502 | Law and Colonialism | 3 |
| HISTORY/HIST SCI/ MED HIST 507 | Health, Disease and Healing I | 3-4 |
| HISTORY/HIST SCI/ MED HIST 508 | Health, Disease and Healing II | 3-4 |
| HISTORY 514 | European Cultural History Since $1870$ | 3-4 |
| HISTORY/CURRIC/ JEWISH 515 | Holocaust: History, Memory and Education | 3 |
| HISTORY/CLASSICS/ RELIG ST 517 | Religions of the Ancient Mediterranean | 3 |
| HISTORY/ JEWISH 518 | Anti-Semitism in European Culture, 1700-1945 | 3 |
| HISTORY/JEWISH/ RELIG ST 529 | Intellectual and Religious History of European Jewry, 1648-1939 | 4 |
| HISTORY 540 | Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 |


| HISTORY/CLASSICS/ FRENCH/ITALIAN/ MEDIEVAL 550 | Advanced Interdisciplinary Studies in Medieval Civilization | 3 |
| :---: | :---: | :---: |
| HISTORY/CLASSICS/ HIST SCI/MED HIST/ S\&A PHM 561 | Greek and Roman Medicine and Pharmacy | 3 |
| HISTORY/ SCAND ST 577 | Contemporary Scandinavia: Politics and History | 3-4 |
| History of Science |  |  |
| HIST SCI/ GEN\&WS 537 | Childbirth in the United States | 3 |
| Medical History and Bioethics |  |  |
| MED HIST/ <br> HIST SCI 218 | History of Twentieth Century American Medicine | 3 |
| Political Science |  |  |
| POLI SCI/CHICLA/ HISTORY 422 | Latino History and Politics | 3 |

## WORLD/GLOBAL OR NON-WESTERN HISTORY

Select one course from the following.

| World/Global or Non-Western History course options |  |
| :--- | :--- | ---: |
| Code |  |
| Title |  |
| African Languages \& Literature |  | Credits

ANTHRO/ Latin America: An Introduction 3-4
AFROAMER/
C\&E SOC/GEOG/
HISTORY/LACIS/
POLI SCI/SOC/
SPANISH 260
ANTHRO/AFRICAN/ Africa: An Introductory Survey 4
AFROAMER/GEOG/
HISTORY/POLI SCI/
SOC 277
ANTHRO/ Indians of North America 3
AMER IND 314
ANTHRO 333 Prehistory of Africa 3
Community \& Environmental Sociology
C\&E SOC/ Latin America: An Introduction 3-4
AFROAMER/
ANTHRO/GEOG/
HISTORY/LACIS/
POLI SCI/SOC/
SPANISH 260
East Asian Area Studies

| E A STDS/ | Introduction to East Asian History: | $3-4$ |
| :--- | :--- | :---: |
| HISTORY 103 | China |  |
| E A STDS/ | Introduction to East Asian History: | $3-4$ |
| HISTORY 104 | Japan | $3-4$ |
| E A STDS/HISTORY/ | Introduction to East Asian |  |
| POLI SCI 255 | Civilizations | $3-4$ |

ASIAN AM/
HISTORY 276
E A STDS/ Social and Intellectual History of 3-4
$\begin{array}{lll}\text { HISTORY } 337 & \text { China, } 589 \text { AD-1919 } & \\ \text { E A STDS/ } & \text { History of Modern China, 1800-1949 }\end{array}$
HISTORY 341 History of the Peoples Republic of 3-4
HISTORY $342 \quad$ China, 1949 to the Present $\quad 3-4$
$\begin{array}{lll}\text { HISTORY } 363 & & 3-4\end{array}$

| HISTORY 454 |  |  |
| :--- | :--- | :--- |
| E A STDS/ Pearl Harbor \& Hiroshima: Japan, |  |  |

HISTORY 456 the US \& The Crisis in Asia
East Asian Languages \& Literature
E ASIAN/HISTORY/ Asian Religions in Global 3
RELIG ST 267 Perspective
E ASIAN/HISTORY/ Introduction to Buddhism 3-4
LCA/RELIG ST 308
Gender and Women's Studies
$\begin{array}{lll}\text { GEN\&WS/ Women and Gender in World History } & 3-4 \\ \text { HISTORY } 134 & \end{array}$
HISTORY 134
Geography
GEOG/HISTORY/ Introduction to Southeast Asia: 4
LCA/POLI SCI/ Vietnam to the Philippines
SOC 244
GEOG/HISTORY/ The Civilizations of India-Modern 4
LCA/POLI SCI/ Period
SOC 252

| GEOG/AFROAMER/ | Latin America: An Introduction | 3-4 | HISTORY/ | Latin America: An Introduction | 3-4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ANTHRO/C\&E SOC/ |  |  | AFROAMER/ |  |  |
| HISTORY/LACIS/ |  |  | ANTHRO/C\&E SOC/ |  |  |
| POLI SCI/SOC/ |  |  | GEOG/LACIS/ |  |  |
| SPANISH 260 |  |  | POLI SCI/SOC/ |  |  |
| GEOG/AFRICAN/ | Africa: An Introductory Survey | 4 | SPANISH 260 |  |  |
| AFROAMER/ |  |  | HISTORY/LCA 265 | An Introduction to Central Asia: | 3 |
| ANTHRO/HISTORY/ |  |  |  | From the Silk Route to Afghanistan |  |
| POLI SCI/SOC 277 |  |  | HISTORY/E ASIAN/ | Asian Religions in Global | 3 |
| History |  |  | RELIG ST 267 | Perspective |  |
| HISTORY/ <br> EASTDS 103 | Introduction to East Asian History: China | 3-4 | HISTORY 273 | History Study Abroad: Non-Western History | 1-4 |
| HISTORY/ <br> E A STDS 104 | Introduction to East Asian History: Japan | 3-4 | HISTORY/ASIAN AM/ EASTDS 276 | Chinese Migrations since 1500 | 3-4 |
| HISTORY 105 | Introduction to the History of Africa | 3-4 | HISTORY/AFRICAN/ | Africa: An Introductory Survey | 4 |
| HISTORY/ASIAN 108 | Introduction to East Asian History Korea | 3-4 | AFROAMER/ ANTHRO/GEOG/ |  |  |
| HISTORY/ | Africa on the Global Stage | 3-4 | POLI SCI/SOC 277 |  |  |
| AFRICAN 129 |  |  | HISTORY 278 | Africans in the Americas, 1492-1808 | 3-4 |
| HISTORY 130 | An Introduction to World History | 3-4 | HISTORY 279 | Afro-Atlantic History, 1808-Present | 3-4 |
| HISTORY/ GEN\&WS 134 | Women and Gender in World History | 3-4 | HISTORY/AFRICAN/ AFROAMER/ | African and African-American Linkages: An Introduction | 4 |
| HISTORY 139 | The Middle East in the 20th Century | 3-4 | POLI SCI 297 |  |  |
| HISTORY 142 | History of South Asia to the Present | 3-4 | HISTORY/E ASIAN/ | Introduction to Buddhism | 3-4 |
| HISTORY 144 | Traveling the World: South Asians in Diaspora | 4 | HISTORY/ | The Crusades: Christianity and | 3-4 |
| HISTORY 201 | The Historian's Craft ${ }^{\text {(topic must be }}$ approved) | 3-4 | MEDIEVAL/ RELIG ST 309 |  |  |
| HISTORY/ | Id: | 3-4 | HISTORY 319 | The Vietnam Wars | 3-4 |
| RELIG ST 205 | The Middle East, 500-1500 |  | HISTORY 335 | Korean History, 1945 to present | 3-4 |
| HISTORY 225 | Explorations in Third World History (H) | 3-4 | HISTORY 336 | Chinese Economic and Business History. From Silk to iPhones | 3-4 |
| HISTORY 228 | Explorations in Transnational/ Comparative History (Social | 3 | HISTORY/ <br> EASTDS 337 | Social and Intellectual History of China, 589 AD-1919 | 3-4 |
|  | Science) ${ }^{\text {(topic must be approved) }}$ |  | HISTORY/ | History of Modern China, 1800-1949 | 3-4 |
| HISTORY 229 | Explorations in Transnational/ | 3 | E A STDS 341 |  |  |
|  | Comparative History (Humanities) (topic must be approved) |  | HISTORY/ <br> EASTDS 342 | History of the Peoples Republic of China, 1949 to the Present | 3-4 |
| HISTORY 241 | Latin America from 1780 to 1940 | 4 | HISTORY/ | The Caribbean and its Diasporas | 3 |
| HISTORY 242 | Modern Latin America, 1898 to the | 4 | AFROAMER 347 |  |  |
|  | Present |  | HISTORY/ | China and World War II in Asia | 3-4 |
| HISTORY/GEOG/ | Introduction to Southeast Asia: | 4 | E A STDS 363 |  |  |
| LCA/POLI SCI/ | Vietnam to the Philippines |  | HISTORY 377 | History of Africa, 1500 to 1870 | 3-4 |
| SOC 244 |  |  | HISTORY 378 | History of Africa Since 1870 | 3-4 |
| HISTORY/CHICLA/ GEN\&WS 245 | Chicana and Latina History | 3 | HISTORY/ RELIG ST 379 | Islam in Iran | 3 |
| HISTORY/ASIAN AM/ LCA 246 | Southeast Asian Refugees of the "Cold" War | 4 | HISTORY/CHICLA/ POLI SCI 422 | Latino History and Politics | 3 |
| HISTORY/GEOG/ LCA/POLI SCI/ | The Civilizations of India-Modern Period | 4 | HISTORY/ <br> CHICLA 435 | Colony, Nation, and Minority. The Puerto Ricans' World | 3 |
| SOC 252 |  |  | HISTORY/LCA/ | Buddhism and Society in Southeast | 3-4 |
| HISTORY/E A STDS/ | Introduction to East Asian | 3-4 | RELIG ST 438 | Asian History |  |
| POLI SCI 255 | Civilizations |  | HISTORY/ RELIG ST 439 | Islamic History From the Origin of Islam to the Ottoman Empire | 3-4 |
|  |  |  | HISTORY 441 | Revolution and Conflict in Modern Latin America | 3-4 |
|  |  |  | HISTORY 444 | History of East Africa | 3-4 |


| HISTORY 445 | History of Equatorial Africa | 3-4 | POLI SCI/GEOG/ | Introduction to Southeast Asia: | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HISTORY 450 | Making of Modern South Asia | 3-4 | HISTORY/LCA/ | Vietnam to the Philippines |  |
| HISTORY/ | Samurai: History and Image | 3-4 | SOC 244 |  |  |
| E A STDS 454 |  |  | POLI SCI/GEOG/ | The Civilizations of India-Modern | 4 |
| HISTORY/ <br> EASTDS 456 | Pearl Harbor \& Hiroshima: Japan, the US \& The Crisis in Asia | 3-4 | HISTORY/LCA/ <br> SOC 252 | Period |  |
| HISTORY/LCA 457 | History of Southeast Asia to 1800 | 3-4 | POLI SCI/E A STDS/ HISTORY 255 | Introduction to East Asian | 3-4 |
| HISTORY/LCA 458 | History of Southeast Asia Since 1800 | 3-4 | POLI SCI/ | Latin America: An Introduction | 3-4 |
| HISTORY 463 | Topics in South Asian History | 3 | AFROAMER/ |  |  |
| HISTORY/GEN\&WS/ LCA 472 | Women in Turkish Society | 3 | GEOG/HISTORY/ <br> LACIS/SOC/ |  |  |
| HISTORY 533 | Multi-Racial Societies in Latin | 3-4 | SPANISH 260 |  |  |
| HISTORY 540 | America <br> Balkans and Middle East, 1700-1918: The Rise of National States | 3-4 | POLI SCI/AFRICAN/ AFROAMER/ ANTHRO/GEOG/ HISTORY/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY/LCA/ RELIG ST 547 | Religion, Colonialism \& Modernity in Southeast Asia | 3 | POLI SCI/AFRICAN/ AFROAMER/ | African and African-American Linkages: An Introduction | 4 |
| HISTORY 555 | History of Brazil | 3-4 | HISTORY 297 |  |  |
| HISTORY/HIST SCI/ | Disease, Medicine and Public | 3 | Religious Studies |  |  |
| MED HIST 564 | Health in the History of Latin America and the Caribbean |  | RELIG ST/ HISTORY 205 | The Making of the Islamic World: The Middle East, 500-1500 | 3-4 |
| International Studies |  |  | RELIG ST/E ASIAN/ | Asian Religions in Global | 3 |
| INTL ST 266 | Introduction to the Middle East | 3 | HISTORY 267 | Perspective |  |
| Jewish Studies |  |  | RELIG ST/E ASIAN/ | Introduction to Buddhism | 3-4 |
| JEWISH/ | Jewish Cultural History (in English) | 4 | HISTORY/LCA 308 |  |  |
| RELIG ST 377 |  |  | RELIG ST/HISTORY/ | The Crusades: Christianity and | 3-4 |
| Languages and Cultur | res of Asia |  | MEDIEVAL 309 | Islam |  |
| LCA/GEOG/ | Introduction to Southeast Asia: | 4 | RELIG ST/LCA 355 | Hinduism | 4 |
| HISTORY/POLI SCI/ <br> SOC 244 | Vietnam to the Philippines |  | RELIG ST/AFRICAN/ <br> LCA 370 | Islam: Religion and Culture | 4 |
| LCA/ASIAN AM/ HISTORY 246 | Southeast Asian Refugees of the "Cold" War | 4 | RELIG ST/ JEWISH 377 | Jewish Cultural History (in English) | 4 |
| LCA/GEOG/ HISTORY/POLI SCI/ | The Civilizations of India-Modern Period | 4 | RELIG ST/ HISTORY 379 | Islam in Iran | 3 |
| SOC 252 |  |  | RELIG ST/HISTORY/ | Buddhism and Society in Southeast | 3-4 |
| LCA/HISTORY 265 | An Introduction to Central Asia: | 3 | LCA 438 | Asian History |  |
|  | From the Silk Route to Afghanistan |  | RELIG ST/ | Islamic History From the Origin of | 3-4 |
| LCA/E ASIAN/ | Introduction to Buddhism | 3-4 | HISTORY 439 | Islam to the Ottoman Empire |  |
| HISTORY/ |  |  | Sociology |  |  |
| RELIG ST 308 |  |  | SOC/GEOG/ | Introduction to Southeast Asia: | 4 |
| LCA/RELIG ST 355 | Hinduism | 4 | HISTORY/LCA/ | Vietnam to the Philippines |  |
| LCA/AFRICAN/ | Islam: Religion and Culture | 4 | POLI SCI 244 |  |  |
| RELIG ST 370 |  |  | SOC/GEOG/ | The Civilizations of India-Modern | 4 |
| LCA/HISTORY/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 | HISTORY/LCA/ <br> POLI SCI 252 | Period |  |
| LCA/HISTORY 457 | History of Southeast Asia to 1800 | 3-4 | SOC/AFROAMER/ | Latin America: An Introduction | 3-4 |
| LCA/HISTORY 458 | History of Southeast Asia Since 1800 | 3-4 | ANTHRO/C\&E SOC/ GEOG/HISTORY/ |  |  |
| Medieval Studies |  |  | LACIS/POLI SCI/ <br> SPANISH 260 |  |  |
| MEDIEVAL/ HISTORY/ RELIG ST 309 | The Crusades: Christianity and Islam | 3-4 | SOC/AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ | Africa: An Introductory Survey | 4 |
| Political Science |  |  | HISTORY/ <br> POLI SCI 277 |  |  |


| Spanish | Latin America: An Introduction | $3-4$ |
| :--- | :--- | ---: |
| SPANISH/ |  |  |
| AFROAMER/ |  |  |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  |  |
| LACIS/POLI SCI/ |  |  |
| SOC 260 |  |  |

## LANDS/PEOPLE

UNITED STATES OR EUROPE
Select one course from the following. Courses have been selected from the departments of Afro-American Studies, American Indian Studies, Anthropology, Asian American Studies, Chican@ and Latin@ Studies, Geography, and Sociology.

## United States or European course options Code Title

## Credits

## Afro-American Studies

| AFROAMER 151 | Introduction to Contemporary AfroAmerican Society | 3 |
| :---: | :---: | :---: |
| AFROAMER 156 | Black Music and American Cultural History | 3 |
| AFROAMER/ GEN\&WS 221 | Introduction to Black Women's Studies | 3 |
| AFROAMER/ <br> ANTHRO/C\&E SOC/ <br> GEOG/HISTORY/ <br> LACIS/POLI SCI/ <br> SOC/SPANISH 260 | Latin America: An Introduction | 3-4 |
| AFROAMER 272 | Race and American Politics from the New Deal to the New Right | 3 |
| AFROAMER/ <br> AFRICAN/HISTORY/ POLI SCI 297 | African and African-American Linkages: An Introduction | 4 |
| AFROAMER 303 | Blacks, Film, and Society | 3 |
| AFROAMER/ GEN\&WS 333 | Black Feminisms | 3 |
| AFROAMER/ HISTORY 347 | The Caribbean and its Diasporas | 3 |
| AFROAMER/ ASIAN AM 443 | Mutual Perceptions of Racial Minorities | 3 |
| AFROAMER/ POLI SCI 519 | African American Political Theory | 3-4 |
| AFROAMER/HDFS/ SOC WORK 521 | African American Families | 3 |
| AFROAMER/ <br> HIST SCI/ <br> MED HIST 523 | Race, American Medicine and Public Health | 3 |
| AFROAMER/ GEN\&WS 624 | African American Women's Activism (19th \& 20th Centuries) | 3 |
| AFROAMER 673 | Selected Topics in Afro-American Society | 3 |

## American Indian Studies

| AMER IND 100 | Introduction to American Indian <br> Studies | 3 |
| :--- | :--- | :--- |
| AMER IND 250 | Indians of Wisconsin | 3 |

COM ARTS 419

| AMER IND/ | Indians of North America | 3 |
| :--- | :--- | :---: |
| ANTHRO 314 |  | 3 |
| AMER IND/ | Indians of the Western Great Lakes |  |
| ANTHRO 353 |  | 3 |
| AMER IND/ <br> LINGUIS 371 | Survey of North American Indian <br> AMER IND/ANTHRO/ American Indian Women | 3 |

FOLKLORE/
GEN\&WS 437
AMER IND/LSC 444 Native American Environmental 3 Issues and the Media
AMER IND 450 Issues in American Indian Studies 3
AMER IND/ American Indian Families 3

HDFS 522
AMER IND/C\&E SOC/ Poverty and Place 3
SOC 578
AMER IND/ American Indian Affairs 2-3
SOC WORK 658
Anthropology

| ANTHRO 104 | Cultural Anthropology and Human <br> Diversity | 3 |
| :--- | :--- | :--- |

Asian American Studies

| ASIAN AM 101 | Introduction to Asian American <br> Studies | 3 |
| :--- | :--- | ---: |
| ASIAN AM/SOC 220 | Ethnic Movements in the United <br> States | $3-4$ |
| ASIAN AM 240 | Topics in Asian American Studies | 3 |
| ASIAN AM/ | Chinese Migrations since 1500 | $3-4$ |

E A STDS/

HISTORY 276
ASIAN AM/ Asian Americans and Media 3

## COM ARTS 420

ASIAN AM/ Mutual Perceptions of Racial 3

| AFROAMER 443 | Minorities |  |
| :--- | :--- | :--- |
| ASIAN AM 540 | Special Topics | 3 |

ASIAN AM/ Mass Media and Minorities 4

JOURN 662
Chican@ and Latin@ Studies
CHICLA/AFROAMER/ Introduction to Comparative US 3
AMER IND/ Ethnic and American Indian Studies
ASIAN AM/
FOLKLORE 102
CHICLA 201 Introduction to Chicana/o and 3

|  | Latina/o Studies |
| :--- | :--- | :--- |
| CHICLA 210 | Chicana/o and Latina/o Cultural |


| CHICLA/ | Politics in Multi-Cultural Societies | $3-4$ |
| :--- | :--- | :--- |


| POLI SCI 231 |  |  |
| :--- | :--- | :--- |
| CHICLA 330 | Topics in Chicano/a Studies |  |

CHICLA/ Latinas: Self Identity and Social 3
GEN\&WS $332 \quad$ Change

CHICLA/ Race, Ethnicity, and Media
3
COM ARTS 347
CHICLA/ Latino/as and Media 3

3

3

3

3

3
Change
Latino/as and Media
3

| CHICLA/ <br> HISTORY 435 | Colony, Nation, and Minority: The Puerto Ricans' World | 3 |
| :---: | :---: | :---: |
| CHICLA/ <br> SOC WORK 657 | Understanding Latino Families and Communities | 3 |
| Geography |  |  |
| GEOG/HISTORY/ <br> POLI SCI/ <br> SLAVIC 253 | Russia: An Interdisciplinary Survey | 4 |
| GEOG/HISTORY/ <br> POLI SCI/ <br> SLAVIC 254 | Eastern Europe: An Interdisciplinary Survey | 4 |
| GEOG 342 | Geography of Wisconsin | 3 |
| GEOG 344 | The American West | 3 |
| GEOG 349 | Europe | 3 |
| Sociology |  |  |
| SOC 120 | Marriage and Family | 3-4 |
| SOC 125 | American Society: How It Really Works | 3-4 |
| SOC 134 | Problems of American Racial and Ethnic Minorities | 3-4 |
| SOC 138 | The Sociology of Gender | 3-4 |
| SOC 170 | Population Problems | 3-4 |

## GLOBAL COMPARATIVE OR NON-WESTERN CULTURES

Select one course from the following. Courses have been selected from Anthropology, Asian American Studies, East Asian Area Studies, Folklore, Geography, History, Languages and Cultures of Asia, Latin American, Caribbean, and Iberian Studies, and Sociology.

| Global Comparative or Non-Western Cultures course options |  |
| :--- | :--- | ---: |
| Code |  |
| Citle |  |
| Anthropology |  |$\quad$| Credits |
| ---: | :--- | ---: |


| GEOG/HISTORY/ LCA/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| :---: | :---: | :---: |
| GEOG/AFROAMER/ ANTHRO/C\&E SOC/ HISTORY/LACIS/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| GEOG/AFRICAN/ AFROAMER/ ANTHRO/HISTORY/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| GEOG 301 | Geography of Social Organization | 3 |
| GEOG 302 | Economic Geography: Locational Behavior | 4 |
| GEOG/URB R PL 305 | Introduction to the City | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG 318 | Introduction to Geopolitics | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| GEOG 340 | World Regions in Global Context | 3 |
| GEOG 348 | Latin America | 4 |
| GEOG 355 | Africa, South of the Sahara | 3 |
| GEOG 358 | Human Geography of Southeast Asia | 3 |
| GEOG/ENVIR ST/ HISTORY 460 | American Environmental History | 4 |
| GEOG 501 | Space and Place: A Geography of Experience | 3 |
| History |  |  |
| HISTORY/E A STDS/ <br> POLI SCI 255 | Introduction to East Asian Civilizations | 3-4 |
| HISTORY/LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |
| HISTORY/AFRICAN/ <br> AFROAMER/ <br> ANTHRO/GEOG/ <br> POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY 450 | Making of Modern South Asia | 3-4 |
| International Studies |  |  |
| INTL ST 266 | Introduction to the Middle East | 3 |
| Languages and Cultures of Asia |  |  |
| LCA/GEOG/ HISTORY/POLI SCI/ SOC 244 | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| LCA/ASIAN AM/ HISTORY 246 | Southeast Asian Refugees of the "Cold" War | 4 |
| LCA/GEOG/ HISTORY/POLI SCI/ SOC 252 | The Civilizations of India-Modern Period | 4 |
| LCA/RELIG ST 355 | Hinduism | 4 |
| LCA/HISTORY/ RELIG ST 438 | Buddhism and Society in Southeast Asian History | 3-4 |
| Latin American, Caribbean, and Iberian Studies |  |  |


| LACIS/AFROAMER/ | Latin America: An Introduction | $3-4$ |
| :--- | :--- | :---: |
| ANTHRO/C\&E SOC/ |  |  |
| GEOG/HISTORY/ |  |  |
| POLI SCI/SOC/ |  | 3 |
| SPANISH 260 |  |  |
| Sociology | Introduction to Community and | $3-4$ |

## ELECTIVES

Choose additional electives to reach the minimum of 24 credits. Electives must be chosen from the courses listed above or from the departments of Economics (http://guide.wisc.edu/courses/econ), Geography (http:// guide.wisc.edu/courses/geog), History (http://guide.wisc.edu/courses/ history), Political Science (http://guide.wisc.edu/courses/poli_sci),
Psychology (http://guide.wisc.edu/courses/psych) and Sociology (http:// guide.wisc.edu/courses/soc).

## RECOMMENDED COURSE OPTIONS

It is strongly recommended to take at least one of the following non-Western interdisciplinary courses while meeting the minor requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| GEOG/HISTORY/ <br> LCA/POLI SCI/ $\text { SOC } 244$ | Introduction to Southeast Asia: Vietnam to the Philippines | 4 |
| GEOG/HISTORY/ <br> LCA/POLI SCI/ <br> SOC 252 | The Civilizations of India-Modern Period | 4 |
| GEOG/AFROAMER/ ANTHRO/C\&E SOC/ HISTORY/LACIS/ POLI SCI/SOC/ SPANISH 260 | Latin America: An Introduction | 3-4 |
| GEOG/AFRICAN/ AFROAMER/ ANTHRO/HISTORY/ POLI SCI/SOC 277 | Africa: An Introductory Survey | 4 |
| HISTORY/E A STDS/ POLISCI 255 | Introduction to East Asian Civilizations | 3-4 |
| HISTORY/LCA 265 | An Introduction to Central Asia: From the Silk Route to Afghanistan | 3 |

## SOCIOLOGY, MINOR

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. The Department of Sociology is housed in the College of Letters \& Science. Students may wish to consult with the undergraduate advisor (p. 1259) in the department to discuss course selection and other issues related to this field of study.

## HOW TO GET IN

This minor may be completed only by students admitted to the Middle Childhood through Early Adolescence options of Elementary Education. Students admitted to the Content Focus option (p. 1467) are asked to identify the minor of their choice when admitted to the program. Students admitted to the other Middle Childhood through Early Adolescence options should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 24 credits. A minimum cumulative grade point average of 2.75 is required, based on all sociology minor coursework taken on the UW-Madison campus.

## FOUNDATIONAL CORE COURSES INTRODUCTION

Select one of the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC/C\&E SOC 210 | Survey of Sociology | $3-4$ |
| SOC/C\&E SOC 211 | The Sociological Enterprise | 3 |
| SOC 181 | Honors Introductory Seminar-The | $3-4$ |
|  | Sociological Enterprise |  |

## RESEARCH METHODS AND STATISTICS

Students may take methods and statistics in the same semester. If students take methods and statistics in different semesters, it is recommended that methods be taken before statistics. This will provide a better entry point to the methods and materials of the field.

| Code <br> Research Methods <br> SOC/C\&E SOC 357 | Title | Credits |
| :--- | :--- | ---: |
| Statistics |  |  |
| Complete one of the following statistics courses: |  |  |
| SOC/ |  |  |
| C\&E SOC 360 | Statistics for Sociologists I | $3-4$ |
| ECON 310 | Statistics: Measurement in <br> Economics | $3-4$ |
| GEN BUS 303 | Business Statistics <br> GEOG 360 | Quantitative Methods in <br> Geographical Analysis |
| MATH/STAT 310 | Introduction to Probability and <br> Mathematical Statistics II |  |
| PSYCH 210 | Basic Statistics for Psychology <br> STAT 301 | Introduction to Statistical Methods |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences |  |

## THEORY

Code Title Credits

SOC/C\&E SOC 475 Classical Sociological Theory 3

## DISTRIBUTION REQUIREMENTS

Select at least one course from two of the following groups of departmental offerings. Courses used to meet the requirements above may not be applied to this requirement. Courses that appear in more than one area may fulfill only one area requirement.

## ADDITIONAL METHODS/STATISTICS

Additional Methods/Statistics course options

| Code | Title | Credits |
| :---: | :---: | :---: |
| SOC 351 | Introduction to Survey Methods for Social Research | 3 |
| SOC/C\&E SOC 361 | Statistics for Sociologists II | 3 |
| SOC 362 | Statistics for Sociologists III | 3 |
| SOC/C\&E SOC 365 | Data Management for Social Science Research | 3-4 |
| SOC 375 | Introduction to Mathematical Sociology | 3 |
| SOC 376 | Mathematical Models of Social Systems | 3 |
| SOC 461 | Study Abroad in Additional Methods and Statistics ${ }^{1}$ | 1-6 |

1 This course, taken abroad, could be a UW-Madison sociology course in the designated area although it is not a direct equivalent to a departmental offering.

## ADDITIONAL THEORY

Additional Theory course options

| Code | Title | Credits |
| :--- | :--- | ---: |
| SOC 462 | Study Abroad in Additional Theory ${ }^{1}$ | $1-6$ |
| SOC 476 | Contemporary Sociological Theory | 3 |
| SOC/GEN\&WS 477 | Feminism and Sociological Theory | 3 |

1 This course, taken abroad, could be a UW-Madison sociology course
in the designated area although it is not a direct equivalent to a
departmental offering.

| DEVIANT BEHAVIOR |  |  |
| :--- | :--- | ---: |
| Deviant Behavior course options |  |  |
| Code | Title | Credits |
| SOC 421 | Processes of Deviant Behavior | $3-4$ |
| SOC/SOC WORK | 422 | Social Issues in Aging |
| SOC 441 | Criminology | 3 |
| SOC 446 | Juvenile Delinquency | $3-4$ |
| SOC 463 | Study Abroad in Deviant Behavior ${ }^{1}$ | $3-4$ |

1 This course, taken abroad, could be a UW-Madison sociology course in the designated area although it is not a direct equivalent to a departmental offering.

## SOCIAL PSYCHOLOGY

| Social Psychology course options |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| SOC/PSYCH 453 | Human Sexuality | 4 |
| SOC/PSYCH 456 | Introductory Social Psychology | $3-4$ |
|  | (formerly numbered 530) |  |


| SOC 464 | Study Abroad in Social Psychology 1 | 1-6 |
| :---: | :---: | :---: |
| SOC 531 | Sociology of Medicine | 3 |
| SOC/C\&E SOC 532 | Health Care Issues for Individuals, Families and Society | 3 |
| SOC/C\&E SOC 533 | Public Health in Rural \& Urban Communities | 3 |
| SOC 535 | Talk and Social Interaction | 3 |
| SOC 543 | Collective Behavior | 3 |
| SOC/C\&E SOC 573 | Community Organization and Change | 3 |
| SOC 575 | Sociological Perspectives on the Life Course and Aging | 3 |
| SOC/AMER IND/ <br> C\&E SOC 578 | Poverty and Place | 3 |
| 1 This course, taken abroad, could be a UW-Madison sociology course in the designated area although it is not a direct equivalent to a departmental offering. |  |  |
| SOCIAL ORGANIZATION |  |  |
| Social Organization course options |  |  |
| Code | Title | Credits |
| SOC/LEGAL ST 415 | The Legal Profession | 3-4 |
| SOC 465 | Study Abroad in Social Organization 1 | 1-6 |
| SOC/CHICLA 470 | Sociodemographic Analysis of Mexican Migration | 3 |
| SOC/C\&E SOC 610 | Knowledge and Society | 3 |
| SOC/GEN\&WS 611 | Gender, Science and Technology | 3 |
| $\begin{aligned} & \text { SOC/LCA/ } \\ & \text { RELIG ST } 614 \end{aligned}$ | Social Structures of Muslim Societies | 3 |
| SOC/C\&E SOC/ <br> URB R PL 617 | Community Development | 3 |
| SOC 620 | Comparative Racial Inequality | 3 |
| SOC 621 | Class, State and Ideology: an Introduction to Marxist Social Science | 3 |
| SOC/C\&E SOC 622 | Advanced Topics in Critical Sociology | 3 |
| SOC/C\&E SOC 623 | Gender, Society, and Politics | 3 |
| SOC 624 | Political Sociology | 3 |
| SOC 626 | Social Movements | 3 |
| SOC/C\&E SOC 630 | Sociology of Developing Societies/ Third World | 3 |
| SOC 632 | Sociology of Organizations | 3-4 |
| SOC 633 | Social Stratification | 3 |
| $\begin{aligned} & \text { SOC/LCA/ } \\ & \text { RELIG ST } 634 \end{aligned}$ | Social Structure of India | 3 |
| SOC 640 | Sociology of the Family | 3 |
| SOC/LAW/ <br> LEGAL ST 641 | Sociology of Law | 3-4 |
| SOC 643 | Sociology of Occupations and Professions | 3 |
| SOC/C\&E SOC/ <br> URB R PL 645 | Modern American Communities | 3 |


| SOC 646 | Race and Ethnic Relations | 3 |
| :--- | :--- | :--- |
| SOC 647 | Sociology of Sport | 3 |
| SOC/ED POL 648 | Sociology of Education | 3 |
| SOC/C\&E SOC 649 | Sociology of Work and Employment | 3 |
| SOC/C\&E SOC 650 | Sociology of Agriculture | 3 |
| SOC/C\&E SOC 652 | Sociology of Economic Institutions | 3 |
| SOC/C\&E SOC 655 | Microfoundations of Economic <br> Sociology | 3 |
| SOC/HISTORY 670 | Capitalism, Socialism, and <br> Democracy in America Since 1890 | $3-4$ |
| SOC 678 | Sociology of Persecution | 3 |

1 This course, taken abroad, could be a UW-Madison sociology course in the designated area although it is not a direct equivalent to a departmental offering.

| DEMOGRAPHY AND ECOLOGY |  |  |
| :--- | :--- | ---: |
| Demography and Ecology course options |  |  |
| Code | Title | Credits |
| SOC/C\&E SOC/ | Contemporary Population Problems <br> for Honors | 3 |
| POP HLTH 380 | Study Abroad in Demography and <br> SOC 460 | $1-6$ |
| Ecology ${ }^{1}$ |  |  |

1 This course, taken abroad, could be a UW-Madison sociology course in the designated area although it is not a direct equivalent to a departmental offering.

COMMUNITY AND ENVIRONMENTAL SOCIOLOGY
Community and Environmental Sociology course options Code Title Credits
SOC/C\&E SOC 533 Public Health in Rural \& Urban 3
Communities
SOC/C\&E SOC/ Sociology of International 3
ENVIR ST $540 \quad \begin{aligned} & \text { Development, Environment, and } \\ & \text { Sustainability }\end{aligned}$
SOC/C\&E SOC 541 Environmental Stewardship and 3

SOC/C\&E SOC 573 | Community Organization and |
| :--- | :--- |
| Change |

SOC $575 \quad$ Sociological Perspectives on the 3
SOC/AMER IND/ Poverty and Place 3
C\&E SOC 578
SOC/C\&E SOC/ Community Development
URB R PL 617
SOC/C\&E SOC 650 Sociology of Agriculture

## ELECTIVES

Additional coursework, if needed, to reach the minimum of 24 credits.

## SPANISH, BSE

## WORLD LANGUAGE EDUCATION PROGRAM (CURRENTLY CHINESE, FRENCH, GERMAN, JAPANESE, LATIN, AND SPANISH MAJORS)

The mission of the World Language Education (WLE) program is (1) to promote a community-based approach to world language instruction; (2) to educate teachers who understand different cultures, are proficient in their languages, routinely visit other countries, and can build bridges across nations, races, socioeconomic groups, cultures, and languages; and (3) to certify teachers who are prepared to serve the global needs of increasingly multicultural and multilingual schools and are strongly committed to act for a world in which shared understanding through conflict resolution, negotiation and communication are guiding principles.

There is a growing need for multilingual teachers from diverse backgrounds. The WLE faculty encourages qualified applicants from under-represented groups to apply for admissions to the program. The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

The objectives of the K - 12 WLE program are

- to provide a philosophy of action designed to promote thoughtful curriculum development and classroom teaching in WLE;
- to provide regular contacts with the global community and inservice teachers in schools through field evenings, workshops, conferences, and other professional meetings;
- to provide clinical settings which enhance opportunities for beginning teachers to develop skillful practice and build bridges across languages, cultures, races, and nationalities;
- to help student teachers use multilingual educational technologies and document their experiences in electronic portfolios and implement research-based practices in their teaching;
- to provide university instructors and supervisors who are wellversed in WLE, who have an international orientation, and who are both approachable and helpful to student teachers.

Program majors include Chinese, French, German, Japanese, Latin, and Spanish, and may also include Italian and Portuguese if field placements are available in these subject areas. Completion of the WLE program leads to a Bachelor of Science degree in Education with a major in the specific subject area. Wisconsin state licensing regulations require that students are licensed to teach at the early childhood through adolescence (approximately kindergarten through high school) levels.

Oral and written examinations are required for all world language teacher candidates enrolled in Wisconsin educator preparation programs, as is an extensive immersion experience. (Students becoming certified to teach Latin are exempt from both the Oral Proficiency Exam and immersion experience requirement.)

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the World Language Education program once a year, effective in the fall. Selection is made the previous spring.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in World Language Education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in World Language Education receive the pre-professional classification of PRS.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1571)). It is not necessary to be a pre-professional student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall; call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet
all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## NATIVE AND HERITAGE SPEAKERS

Native or heritage speakers of a language major offered within the World Language Education program are welcome to pursue admission to the World Language Education program. Prospective applicants and transfer students who have previous experience with a language are encouraged to consult with an advisor in Education Academic Services as early as possible; to schedule, call 608-262-1651.

Native or heritage speakers must take a placement exam in the corresponding language to determine the appropriate level of remaining instruction in grammar, communication standards and social customs, and other topics related to language acquisition and proficiency. Placement examinations for Spanish, French, and German are offered on campus through Testing \& Evaluation Services or the University of Wisconsin System's Regional Placement Testing Program. Placement examinations for Chinese, Japanese, Italian, Latin, and Portuguese are administered by faculty or staff within the relevant academic department. For more information regarding placement in language courses, consult the Languages at UW-Madison placement guide (http:// languages.wisc.edu/advising/placement).

## APPLICATION AND ADMISSION

Applicants to the World Language Education program will be selected once a year, during the spring semester. Admission decisions will be based on coursework completed through the preceding fall semester. Admission is provisional until spring semester work has been completed and posted, and Education Academic Services staff have verified that students have met minimum grade point averages and earned minimum credits in their major. Admitted students will begin the sequence the following fall semester.

Resources limit the number of students who can be served by the UWMadison World Language Education teacher education program. In recent years the World Language Education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to World Language Education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## ELIGIBILITY FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be considered for admission, students must:

- earn 54 or more transferable semester credits (junior standing) by the end of the spring semester of the application year.
- complete all but six credits of the relevant World Language major.
- earn a minimum 2.75 grade point average on all major coursework completed.
- earn a cumulative GPA of at least 2.75 (on a 4.00 scale). ${ }^{1}$
- have completed, or be in the process of completing, an approved Immersion Experience required for the World Language Education degree program.
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information regarding this rule is available here (p. 1381).

## APPLYING FOR CERTIFICATION IN MORE THAN ONE SUBJECT AREA

Students may apply to be certified in more than one language. Eligibility requirements must be met and separate applications must be filed for each area of interest. Students must be admitted as a major in at least one of the program areas as it is not possible to be admitted only to complete a minor.

Students interested in combining the World Language Education degree program with certification in another area altogether must apply to both programs and meet the minimum criteria for admission to each program. It is suggested that students apply as majors in each area of interest, thus maximizing the chances of admission. Certification in two different areas requires the consent and cooperation of the World

Language Education program coordinator and the faculty coordinator of the other subject area. Not all subjects can be combined with the World Language Education degree program.

While multiple majors or major-minor combinations are feasible and may be advantageous as a career strategy, it may take extra time to complete the additional subject area coursework. Students are encouraged to work closely with their Education Academic Services advisor to assess the possibility of completing certification in more than one area and to coordinate the requirements of multiple certifications.

## PROGRAM ADMISSION SELECTION CRITERIA

The files of all applicants will be individually and holistically reviewed by a panel of World Language professionals. The criteria used for admission include the following:

- Academic Qualifications: The applicant demonstrates mastery of the target language and knowledge of its literature, civilization, and culture.
- Career Maturity: The applicant demonstrates commitment to teaching the target language to elementary, middle, and high school students, including consideration of his or her own strengths and limitations as a potential teacher.
- Ability to Relate to Youth: The applicant demonstrates the ability to work effectively with young people.
- Commitment to All Students: The applicant demonstrates commitment to working with all students including those of different racial, ethnic, and socioeconomic backgrounds, and students with disabilities, not just the economically privileged or highly motivated.
- Interpersonal Skills: The applicant demonstrates the ability to work effectively with peers, other professionals, and members of the community outside of school settings.

The application files, including immersion experiences and oral proficiency, are rated according to the above criteria for each language. A final cohort is selected along with rank-ordered alternates, based on a combination of ratings made by the World Language Education review committee and judgement by the faculty program coordinator about optimal cohort characteristics for each language. The availability of field placements in the subject area may also influence the selection process. Admission procedures are reviewed every other year to ensure fairness and effectiveness.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

This program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Prerequisite coursework prepares students for work in the major. Program applicants must also complete and document an immersion experience as a prerequisite to being admitted to the professional program.
- Major coursework offers in-depth study of the subject students will teach.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn. The professional sequence is a four-semester sequence of world language teaching methods coursework and field experiences in schools.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

The four semesters of professional coursework are followed sequentially and taken in consecutive semesters. Because of the program structure, students are expected to have completed most of their major and liberal studies coursework by the start of the professional sequence.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits. PREREQUISITE COURSEWORK

Complete the following courses or demonstrate proficiency at the equivalent levels. Prerequisite courses do not count toward the credits required of the major.

| Code | Title | Credits |
| :--- | :--- | ---: |
| SPANISH 101 | First Semester Spanish | 4 |
| SPANISH 102 | Second Semester Spanish | 4 |
| SPANISH 203 | Third Semester Spanish | 4 |
| SPANISH 204 | Fourth Semester Spanish | 4 |
| SPANISH 226 | Intermediate Language Practice | 3 |
|  | with Emphasis on Writing and <br> Grammar |  |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |

## MAJOR REQUIREMENTS

Complete 27 credits of Spanish courses numbered 300 and above, to include the requirements below. At least 15 credits of upper-level major coursework (numbered 220 and above) must be completed in residence on the UW-Madison campus to meet the major residency requirement.

| Code | Title | Credits |
| :--- | :--- | ---: |
| SPANISH 311 | Advanced Language Practice | 3 |
| SPANISH 320 | Spanish Phonetics | 3 |
| SPANISH 361 | Spanish Civilization | 3 |
| or SPANISH 363 | Spanish American Civilization |  |

Select one Spanish language practice course at or above the 300 level ${ }^{1}$
Select one Spanish linguistics course at or above the 300

## level ${ }^{2}$

Select 6 credits of Spanish department literature 300 level
or above to include one survey course
Select 6 credits of electives in Spanish department coursework, 300 level or above
Select additional credits 300 level or above as necessary to total 27 additional credits

1 SPANISH/INTL BUS 329 Spanish for Business and SPANISH 359 Spanish Business Area Studies are excluded.
2 SPANISH 327 Introduction to Spanish Linguistics and SPANISH 331 Spanish Applied Linguistics are highly recommended.

## ORAL AND WRITTEN PROFICIENCY EXAMS

## ABOUT THE ORAL AND WRITTEN PROFICIENCY EXAMS

Students admitted to the World Language Education program must provide evidence of having earned at least an Intermediate High score on an American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI). Latin Education students are exempt from this requirement, see below.

The interview must be taken prior to beginning the first student teaching experience (second semester of the professional sequence). Students should be aware that it may take as long as three months to
obtain results, and factor this delay into the scheduling of the OPI. If the score of Intermediate High is not made after the first examination, a student will be asked to take measures to improve their spoken language proficiency before continuing in the program. The student must repeat the OPI and achieve the required Intermediate High proficiency level.

All students in World Language Education (except Latin Education), are also required to complete the Writing Proficiency Test (WPT) no later than the third semester in the program. It is recommended that students take the test during the second semester of the professional sequence. A proficiency level of Intermediate High is also required for this examination. Students must take and pass the WPT in their program area and the scores must be received by Education Academic Services before beginning the final student teaching semester. Students who do not take and pass the exam will not be permitted to student teach. The WPT meets the Department of Public Instruction's content exam requirement, a requirement usually met by taking the appropriate Praxis II test.

Both the Oral Proficiency Interview and the Writing Proficiency Test are administered by Language Testing International (LTI) (http:// www.languagetesting.com). Their address is LTI, 3 Barker Avenue, Suite 310, White Plains, NY 10601; 800-486-8444. Students are responsible for costs associated with the OPI and the WPT.

Students seeking Latin certification will be required to take a proficiency exam administered by the Department of Classical and Ancient Near Eastern Studies prior to beginning the first student teaching experience (second semester of the professional sequence). This exam will take the place of the OPI and WPT required for certification in other languages.

See the World Language Education faculty program coordinator with questions about these requirements.

## IMMERSION EXPERIENCE

## ABOUT THE IMMERSION EXPERIENCE

Participation in an intensive immersion experience is one of the most important and meaningful ways of developing competence in a language. In preparation for the proficiency exams, students seeking certification in a language must participate in an approved immersion experience which emphasizes prolonged and intensive interaction within the target language and culture.

Program applicants completing French, German, and Spanish majors must complete and document a full-semester (or minimum four-monthlong) immersion experience as a prerequisite to being admitted to the professional program. Students completing majors in Chinese and Japanese must spend at least one academic year living in China or Japan, respectively-also a prerequisite to being admitted to the professional program.

The immersion experience must be completed by July 15 preceding the program start. The experience must also have been completed no more than three years before this date.

An approved experience involves significant interaction and day-to-day functioning in the host language, including use of the target language on a daily basis such as in college-level courses, a training program, or a work experience. The immersion experience need not involve attendance in an academic program only, but may take some form such that the language of routine communication is the target language. Simply living with relatives or traveling as a tourist is not considered an immersion experience for the purposes of admission to this program. Most students
choose to participate in a structured educational or exchange immersion program.

Students should consult with the International Academic Programs (IAP) (http://www.studyabroad.wisc.edu) office, 106 Red Gym, regarding campus-based study abroad programs. These experiences need not receive prior approval. Experiences through off-campus programs must have prior approval of the World Language Education faculty program coordinator. To obtain prior immersion experience approval, download and complete the approval form (http://www.education.wisc.edu/soe/ academics/undergraduate-students/forms), meet with the faculty coordinator, and obtain authorization. Bring two copies of the form to your meeting, obtain signatures on both, and leave one copy with the coordinator.

Native speakers are normally considered to have fulfilled this requirement without further documentation, especially if they received their secondary education in an environment where the target language is the primary means of communication. Heritage speakers are usually considered to have fulfilled this requirement; applicants must consult with the program coordinator about this requirement

## PROFESSIONAL EDUCATION REQUIREMENTS (PROFESSIONAL SEQUENCE)

ABOUT THE PROFESSIONAL SEQUENCE
The professional program is typically a full-time, four-semester sequence of education courses and school-based field experiences. The four semesters of required professional coursework must be followed sequentially and taken in consecutive semesters. Students must enroll in all required coursework outlined in each semester of the program, even if similar coursework was taken at another institution. Students begin the professional sequence in the fall.

It is expected that almost all major and liberal studies coursework be completed by the start of the professional sequence; completion of the entire major is preferred. The structure of the sequence allows very little time to pursue remaining coursework in these areas. Many students elect to finish their remaining requirements during the summer, or after the sequence has been completed. In addition, ACTFL OPI certification of speaking ability in the language rated Intermediate High or above is required by the end of the first semester in the program. Students must also complete the Writing Proficiency Test (WPT) no later than their third semester in the program. A rating of Intermediate High or above must be earned before a student is allowed to participate in the final student teaching semester. See further information under Oral and Written Proficiency Exams.

Students admitted to two areas of language certification follow the same four-semester sequence as single certification students; consult with the World Language Education program coordinator to arrange sequence requirements.

The professional program is a full-time commitment and places heavy demands on students' time and energy. The professional sequence is particularly taxing for students completing certification in two subject areas. Students must make satisfactory progress in their program to continue. This professional judgment is made by the faculty program coordinator in consultation with cooperating teachers and supervisors.

## PROFESSIONAL SEQUENCE COURSES

Complete all of the courses listed below. Required courses must be taken during the semester listed. Other courses may be taken at any time, including summer, but a suggested course sequence is provided.

| Code <br> Semester 1 | Title | Credits |
| :---: | :---: | :---: |
| Required Courses |  |  |
| CURRIC 342 | Teaching World Languages ( $\mathrm{K}-8$ ) | 3 |
| CURRIC 243 | Practicum in World Languages $(K-12)^{1}$ | 3 |
| Other Courses |  |  |
| ED POL 300 or ED POL/ HISTORY 412 | School and Society History of American Education | 3 |
| CURRIC/ RP \& SE 506 | Strategies for Inclusive Schooling | 3 |
| ED PSYCH 301 | How People Learn | 3 |

Semester 2

## Required Courses

CURRIC 442 Student Teaching in World 6
or CURRIC 443 Student Teaching in World Languages (6-12)

| Other Courses |  | 3 |
| :--- | :--- | :--- |
| ED PSYCH 331 | Human Development From <br> Childhood Through Adolescence |  |

Semester 3
Required Courses

| CURRIC 343 | Teaching World Languages (6-12) | 3 |
| :--- | :--- | :---: |
| CURRIC 443 | Student Teaching in World <br> Languages (6-12) |  |
| 3 | 6 |  |
| or CURRIC 442 | Student Teaching in World Languages (K-8) |  |
| Other Courses |  | 3 |
| CURRIC 305 | Integrating the Teaching of Reading |  |

## Semester 4

Required Courses

| CURRIC 443 | Student Teaching in World <br> Languages (6-12) 4 | 9 |
| :--- | :--- | :--- |
| CURRIC 564 | Advanced Problems on the <br> Teaching of World Languages | 3 |

1 The practicum will take place three days a week; placement will probably be at the elementary level. Fieldwork this semester is a halftime commitment and encompasses an entire semester based on the UW-Madison calendar. Placements are made within a 50 -mile field experiences service area and may not necessarily be in the city of Madison. a week. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the UW-Madison calendar.
Placement will probably be at the middle school level. Fieldwork this semester is a half-time commitment and encompasses an entire semester based on the school district calendar. (Fall semester
extends from late August through mid-January; spring semester extends from mid-January through early mid-June.)
4 Student teaching this semester is a full-time commitment and will be at the high school level. Fieldwork this semester encompasses an entire semester based on the school district calendar.

## ELECTIVE COURSEWORK

Complete additional coursework as needed to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.75 cumulative grade point average in all upper-level major coursework
- 2.75 cumulative grade point average in all professional education coursework
- Degree candidates must complete at least 120 total credits.
- No more than 40 credits from a single academic department may be applied toward the 120 minimum credits required for graduation.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum work are considered part of the 30 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $K-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure. (p. 1577)

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements. |
| :---: | :---: |
| Residency | Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs. |
| Quality of Work | Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation. |

## LEARNING OUTCOMES

1. In Semester 1, prior to starting student teaching, students must have acquired Intermediate High proficiency in their target language on the ACTFL OPI scale as measured by two independent external evaluators.
2. In Year 1, student teachers must demonstrate the ability to teach in a K-8 context, as evaluated by their University supervisor and their mentor teacher through repeated direct observations.
3. During their content courses, students must meet (a) teacher education standards; and (b) ACTFL standards, as measured by (a) formative and summative evaluation of their assignments; (b) Teacher Education portfolio.
4. In Year 2, student teachers must demonstrate the ability to teach in a 6-12 school context, as evaluated by their University supervisor and their cooperating teacher through repeated direct observations.
5. To get certified by the Department of Public Instruction, at the end of Year 2, student teachers must have successfully completed an EdTPA Portfolio of their classroom experiences that demonstrates professionalism and meets the EdTPA standards, as evaluated by external evaluators.

## ADVISING AND CAREERS

## SPANISH EDUCATION ADVISING

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Spanish. Students may want to consult the undergraduate advisor (https://spanport.wisc.edu/undergradadvising) in the Spanish and Portuguese department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will
also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for
career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the program can be found on the Curriculum and Instruction (http:// ci.education.wisc.edu) and Spanish and Portuguese (http:// spanport.wisc.edu/home) departmental websites.

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification
candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN/ENVIR ST/ | Atmospheric Environment and | 2 |
| GEOG 121 | Society |  |
| ATM OCN/ | Earth's Water. Natural Science and | 3 |
| SOIL SCI 132 | Human Use | 3 |
| BOTANY 100 | Survey of Botany | 5 |
| BOTANY/BIOLOGY/ | Introductory Biology |  |
| ZOOLOGY 152 |  | 3 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST// | Introductory Ecology | 3 |
| ZOOLOGY 260 |  |  |


| $\begin{aligned} & \text { ECON/A A E/ } \\ & \text { ENVIR ST } 343 \end{aligned}$ | Environmental Economics | 3-4 |
| :---: | :---: | :---: |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the <br> Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: <br> Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| $\begin{aligned} & \text { SOC/C\&E SOC/ } \\ & \text { F\&W ECOL } 248 \end{aligned}$ | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| $\begin{aligned} & \text { SOIL SCI/ } \\ & \text { ENVIR ST } 324 \end{aligned}$ | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, $3-5$ lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a "D") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully
complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## SPANISH, SED MINOR

## HOW TO GET IN

This minor is only available to students admitted to the World Language Education program, or to teachers already licensed to teach at an appropriate level and subject in Wisconsin. Undergraduate students interested in completing a certification minor in Spanish must also complete a major in another World Language certification subject area and be admitted to the World Language Education program. It is not possible to be certified only in a minor area. Consult with an Education Academic Services advisor to discuss the feasibility of combining this minor with the major subject area-not all combinations may be possible and will require approval of the WLE program coordinator. Interested students must apply and be admitted to both language subject areas. The oral proficiency exam, any written exams, and the immersion experience required for certification must be completed in both languages.

Licensed teachers interested in pursuing certification in this minor should consult with the World Language Education program director, Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## REQUIREMENTS

Note: The oral proficiency exam, any written exams, and an immersion experience are required for certification in this language. Consult the major requirements (p. 1572) in this subject for an explanation of these requirements and the World Language Education professional sequence.

## PREREQUISITE COURSEWORK

Complete the following or demonstrate proficiency at the equivalent levels.

| Code | Title | Credits |
| :--- | :--- | ---: |
| SPANISH 101 | First Semester Spanish | 4 |
| SPANISH 102 | Second Semester Spanish | 4 |
| SPANISH 203 | Third Semester Spanish | 4 |
| SPANISH 204 | Fourth Semester Spanish | 4 |

## MINOR REQUIREMENTS

Complete a minimum of 24 credits. The Spanish minor also requires a minimum cumulative grade point average of 2.75 , based on all Spanish minor coursework taken on the UW-Madison campus.

| Code | Title | Credits |
| :--- | :--- | ---: |
| SPANISH 226 | Intermediate Language Practice <br> with Emphasis on Writing and <br> Grammar | 3 |
| SPANISH 223 | Introduction to Hispanic Cultures | 3 |
| SPANISH 224 | Introduction to Hispanic Literatures | 3 |
| One advanced (300 level or above) literature or culture <br> course |  |  |
| One advanced (300 level or above) language practice or <br> linguistics course |  |  |
| Elective credits in Spanish, 300 level or above, to total 24 <br> credits. |  |  |

## ADVISING AND CAREERS

Consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, for general questions regarding certification to teach Spanish. Students may want to consult the undergraduate advisor (https://spanport.wisc.edu/undergradadvising) in the Spanish and Portuguese department regarding course sequencing and other aspects of this field of study.

The director of the World Language Education program is Professor François Tochon, ftochon@education.wisc.edu, 544C Teacher Education Building.

## DANCE

Dance is an art form, an integral part of education, an element of interdisciplinary experimentation and a part of daily life. Dance courses focus on the study and/or practice of various dance techniques, dance repertory, improvisation, composition, movement analysis, anatomy, theory, history, and more. Courses stress personal creativity, individual growth, and strong technical training. An undergraduate major in dance is
an excellent means of gaining in-depth knowledge of the art form and its related fields. Dance elective courses are open to all university students.

Two undergraduate options are offered in dance. The Bachelor of Fine Arts (p. 1587) (BFA) undergraduate degree program in dance is for students with a strong interest and aptitude in dance and/or professional dance theater. The Bachelor of Science-Dance (p. 1581) option was designed for students who wish to prepare for graduate work in theoretical areas of dance or who wish to combine their interest in dance with other fields of study. The BFA requires a minimum of 85 major credits, including public presentations of original work, while the B.S. degree requires a minimum of 57 major credits. These major requirements highlight the differences between the two options: B.S. students can pursue other interests with their remaining credits, while BFA students are able to spend more time in the studio.

Admission to the major in dance is by performance audition only. For more information on the audition schedule and process, contact the Dance department office, 125 Lathrop Hall, 1050 University Avenue, phone: 608-262-1691; www.dance.wisc.edu (http:// www.education.wisc.edu/dance). Students enrolling in a dance major are expected to have had previous dance experience. Junior-level transfers should expect to spend three additional years in the program unless they have had previous experience.

The dance department also offers three certificate programs open to students across campus, the dance certificate program (p. 1592), a certificate in pilates (p. 1594), and a certificate in dance/movement therapy (p. 1594).

## DEGREES/MAJORS/CERTIFICATES

- Dance, B.S. (p. 1581)
- Dance, BFA (p. 1587)
- Dance, Certificate (p. 1592)
- Introductory Studies in Dance/Movement Therapy, Certificate (p. 1594)
- Pilates, Certificate (p. 1594)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Dance can be found on the department's website. (http:// www.dance.wisc.edu)

## DANCE, B.S.

The dance department offers a wide range of courses for majors and nonmajors to study the art and science of human movement. An undergraduate major in dance is an excellent means of gaining in-depth knowledge of the art form and its related fields. Dance degree graduates become well-prepared dance artists/educators who go on to pursue dance professionally, or have careers in related occupations such as administration, health care, or business. Recent graduates have taught in $\mathrm{K}-12$ and higher education, started their own companies, have operated their own studios, and danced with major dance companies throughout the U.S., including Urban Bush Women, Pat Graney, and Nikolais/Louis.

A dance degree at UW-Madison offers opportunities to:

- Study with a world-class faculty with excellent teacher-student ratios
- Rehearse and perform in state-of-the-art facilities
- Experience an interdisciplinary, rigorous approach to dance studies. Courses draw on the biological, physical and social sciences as well as the humanities.
- Earn a scholarship. Departmental awards (https:// www.dance.wisc.edu/dance/admissions/scholarships-awards) for summer or honors study are also available.
- Interact with nationally and internationally renowned guest artists and master class instructors, such as the Bill T. Jones/ Arnie Zane Dance Company, Pilobolus, Meredith Monk, Elizabeth Streb, David Parsons, and Tim Miller.
- Perform frequently
- Pursue a double-major in a second area of interest

The department offers two undergraduate degrees in dance. The Bachelor of Fine Arts (BFA) undergraduate degree program in dance is for students with a strong interest and aptitude in dance and/or professional dance theater. The Bachelor of Science-Dance degree was designed for students who wish to prepare for graduate work in theoretical areas of dance or who wish to combine their interest in dance with other fields of study.

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The dance department also offers three certificates of study: a general dance (p. 1592) certificate, a certificate in introductory studies in dance/ movement therapy (p. 1594), and a Pilates (p. 1594) certificate.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

All students wishing to major in dance must complete a performance audition to be admitted to the program. Consult the dance department website (http://www.dance.wisc.edu/dance/admissions/ how-to-apply) for more detailed information about the audition process.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

On-campus students wishing to be admitted to one of the dance program options must audition and also have earned a minimum 2.5 grade point average. On-campus students should obtain and submit a signed Professional Program Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) to Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, at any time during the academic year. The application must be signed by the appropriate dance department advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UWMadison Office of Admissions and Recruitment (http:// admissions.wisc.edu) for application information.

Prospective transfer students should meet as early as possible with a dance department advisor and with an advisor at Education Academic Services. Coursework taken at another institution may need to be evaluated by a faculty or staff member in dance. Transfer students must audition to be admitted to one of the dance program options. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an School of Education advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

> Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## ADMISSION AND APPLICATION CRITERIA FOR ADMISSION <br> Requirements and selection criteria may be modified from one application/admission period to the next.

Eligibility for consideration:

- The dance department currently admits students to its programs only through a performance audition.
- Cumulative grade point average of at least a 2.50 (on a 4.00 scale). ${ }^{1}$
- Students who have transferred to and are currently enrolled in UW-Madison coursework must have a cumulative grade point average of at least a 2.5 on the UW-Madison campus, as modified by the Last 60 Credits Rule.
- Filing of all required paperwork, including the dance program application and any required transcripts.
1
1 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or
universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.


## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

- Breadth-Humanities/Literature/Arts: 6 credits

Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The B.S. degree in dance has four components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Discipline-related coursework provides an interdisciplinary foundation contributing to the performance and understanding of this art form.
- Major requirements offer an in-depth study of dance.
- Elective credits allow students to pursue areas of interest and complete the minimum number of credits required for the degree.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## DISCIPLINE-RELATED REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ANAT\&PHY 338 | Human Anatomy Laboratory | 2 |
| DANCE 200 | Writing the Moving Body | 3 |
| DANCE 560 | Current Topics in Dance: Workshop | $1-3$ |
|  | (Anatomy for Dancers ) |  |

## MAJOR REQUIREMENTS

Complete a minimum of 57 credits. At least 15 upper-level major Dance credits (numbered 300 and above) must be taken in residence on the UW-Madison campus.

New first-year Dance-B.S. and BFA students should expect to register for three 100-level foundational major courses: DANCE 111 Contemporary Dance Technique and Theory I, 3-5 credits, DANCE 125 Ballet Technique I, and DANCE 162 First Year Workshop. These courses are taken by all dance majors in their first year, regardless of previous dance training and experience. The classes prepare students for advanced study in dance and movement technique. Dance majors are assured enrollment in these courses. DANCE 165 World Dance Cultures: Traditional to Contemporary is also strongly recommended for the first semester; this course will meet the Global Perspectives requirement in liberal studies.

## DANCE TECHNIQUE AND THEORY

## Contemporary Dance Technique and Theory

Select a minimum of 14 credits from the following; 6 credits must be numbered 211 or higher.

| Code | Title | Credits |
| :--- | :--- | ---: |
| DANCE 111 | Contemporary Dance Technique <br> and Theory I | $1-3$ |
| DANCE 112 | Contemporary Dance Technique <br> and Theory II | $1-3$ |
| DANCE 211 | Contemporary Dance Technique <br> and Theory III <br> DANCE 212 | Contemporary Dance Technique <br> and Theory IV |
| DANCE 311 | Contemporary Dance Technique <br> and Theory V | $1-3$ |
| DANCE 312 | Contemporary Dance Technique <br> and Theory VI | $1-3$ |
| DANCE 411 | Contemporary Dance Technique <br> and Theory VII | $1-3$ |
| DANCE 412 | Contemporary Dance Technique <br> and Theory VIII | $1-3$ |

## Ballet Technique

Select a minimum of 8 credits from the following; 4 credits must be numbered 225 or higher:

| Code | Title | Credits |
| :--- | :--- | ---: |
| DANCE 125 | Ballet Technique I | $1-2$ |
| DANCE 126 | Ballet Technique I-B | $1-2$ |
| DANCE 225 | Ballet Technique II | $1-2$ |
| DANCE 226 | Ballet Technique II-B | $1-2$ |
| DANCE 325 | Ballet Technique III | $1-2$ |

DANC
Ballet Technique III-B 1-2

## Additional Techniques

Select a minimum of 2 credits. Students may also select from
Additional Techniques workshops listed under DANCE 1 or DANCE 560. Jazz and Ballroom courses do not count toward this requirement.

| Code | Title | Credits |
| :---: | :---: | :---: |
| DANCE 1 | Workshop in Dance Activity (Hip Hop) | 1-2 |
| DANCE 1 | Workshop in Dance Activity (Tai Ji) | 1-2 |
| DANCE 116 | Workshop in World Dance | 2 |
| DANCE 118 | African Dance | 1 |
| DANCE/ ASIAN AM 121 | Asian American Movement | 3 |
| DANCE/ <br> THEATRE 218 | African Dance Performance | 2 |
| DANCE/AFROAMER/ MUSIC 318 | Cultural Cross Currents: West African Dance/Music in the Americas | 3 |
| DANCE/FOLKLORE/ THEATRE 321 | Javanese Performance | 2 |
| DANCE/FOLKLORE/ THEATRE 421 | Javanese Performance Repertory | 2 |

## ADDITIONAL REQUIRED COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| DANCE 131 | Somatic Theory and Practices | 2 |
| DANCE 140 | Dance Production | 2 |
| DANCE 156 | Movement as Material Through Improvisation | 2 |
| DANCE 162 | First Year Workshop | 1 |
| DANCE 240 | Dance Production Laboratory | 1 |
| DANCE 241 | Music Fundamentals for Dancers | 3 |
| DANCE 255 | Movement Composition for the Performing and Visual Arts | 2 |
| DANCE 265 | Dance History I: Western Theatrical Dance from the Renaissance through the 1920s | 3 |
| DANCE 345 | Video Design for the Performing and Visual Arts | 3 |
| or DANCE/ ART 341 | Sound Design for the Performing and Visual Arts |  |
| DANCE 355 | Dance Composition II | 2 |
| DANCE 365 | Dance History II: Directions and Issues of Contemporary Dance | 3 |
| DANCE 462 | Senior Seminar | 3 |
| DANCE 463 | Senior Project | 1-2 |
| Select one of the following: |  | 1-3 |
| DANCE 451 | Dance Repertory Theater |  |
| DANCE 452 | Dance Repertory Theater |  |

## ELECTIVE COURSEWORK

Complete additional coursework, if necessary, to reach the minimum of 124 credits. DANCE 165 World Dance Cultures: Traditional to

Contemporary is recommended and will meet the Global Perspectives requirement in liberal studies.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Requirements below are based on UW-Madison coursework.

- 2.75 minimum cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.50 cumulative grade point average in all upper-level major coursework. Dance courses numbered 300 and above are considered to be upper-level courses.
- Major Residency. Students must complete a minimum of 15 upper-level major credits on the UW-Madison campus.
- Senior Residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- A minimum of 124 credits are required for graduation.


## DEGREE AUDIT REPORTING SYSTEM (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
\(\left.$$
\begin{array}{ll}\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online } \\
\text { formats and credits earned in UW-Madison Study }\end{array}
$$ <br>

Abroad/Study Away programs.\end{array}\right\}\)| Quality of $\quad$Undergraduate students must maintain the minimum <br> Wrade point average specified by the school, college, or <br> grademic standing. <br> academic program to remain in good academic <br> Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |
| :--- |

## LEARNING OUTCOMES

1. (Body Studies and Dance Technique) Demonstration of proficiency in the physical practice of dance.
2. (Writing and Critical Thinking) Examination of global approaches in dance, in historical, cultural, and theoretical contexts.
3. (Making and Sharing Dances) Utilization of tools of craft to engage in critical and creative investigations and assessment.

## ADVISING AND CAREERS

## DANCE DEPARTMENT ADVISING

Each freshmen cohort is assigned a faculty advisor who works with the group until graduation. In their first year, all dance majors receive targeted advising from Karen McShane-Hellenbrand (http:// dance.wisc.edu/dance/people/instructional-staff/karen-mcshanehellenbrand). Faculty advisors assist students in choosing classes, evaluating their degree path, and assessing their artistic and academic progress. Students undergo a yearly review with a faculty panel to assess the student's progress in their degree program. Faculty advisors in the department include: Kate Corby (http:// dance.wisc.edu/dance/people/faculty/kate-corby), Andrea Harris (http:// dance.wisc.edu/dance/people/faculty/andrea-harris), Li Chiao-Ping (http://dance.wisc.edu/dance/people/faculty/li-chiao-ping), Marlene Skog (http://dance.wisc.edu/dance/academics/bs-program), Chris Walker (https://www.dance.wisc.edu/dance/people/faculty/chris-walker) and Jin-Wen Yu (http://dance.wisc.edu/dance/people/faculty/jin-wenyu ).

Advising in dance is handled through the dance department, 608-262-1691, 125 Lathrop Hall, 1050 University Avenue. Students also meet with Education Academic Services staff regarding other course requirements and concerns, see below.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors
provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Dance can be found on the department's website. (http:// www.dance.wisc.edu)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## ACCREDITATION

## Accreditation

National Association of Schools of Dance (https://nasd.arts-accredit.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## DANCE, BFA

The dance department offers a wide range of courses for majors and nonmajors to study the art and science of human movement. An undergraduate major in dance is an excellent means of gaining in-depth knowledge of the art form and its related fields. Dance degree graduates become well-prepared dance artists/educators who go on to pursue dance professionally, or have careers in related occupations such as administration, health care, or business. Recent graduates have taught in $\mathrm{K}-12$ and higher education, started their own companies, have operated their own studios, and danced with major dance companies throughout the U.S., including Urban Bush Women, Pat Graney, and Nikolais/Louis.

A dance degree at UW-Madison offers opportunities to:

- Study with a world-class faculty with excellent teacher-student ratios
- Rehearse and perform in state-of-the-art facilities
- Experience an interdisciplinary, rigorous approach to dance studies. Courses draw on the biological, physical and social sciences as well as the humanities.
- Earn a scholarship. Departmental awards (https:// www.dance.wisc.edu/dance/admissions/scholarships-awards) for summer or honors study are also available.
- Interact with nationally and internationally renowned guest artists and master class instructors, such as the Bill T. Jones/ Arnie Zane Dance Company, Pilobolus, Meredith Monk, Elizabeth Streb, David Parsons, and Tim Miller
- Perform frequently
- Pursue a double major in a second area of interest

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The dance department also offers three certificates of study: a general dance (p. 1592) certificate, a certificate in introductory studies in dance/ movement therapy (p. 1594), and a Pilates (p. 1594) certificate.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

All students wishing to major in dance must complete a performance audition to be admitted to the program. Consult the Dance department website (http://www.dance.wisc.edu/dance/admissions/ how-to-apply) for more detailed information about the audition process.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

On-campus students wishing to be admitted to one of the dance program options must audition and also have earned a minimum 2.5 grade point average. On-campus students should obtain and submit a signed Professional Program Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission), to Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, at any time during the academic year. The application must be signed by the appropriate dance department advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UWMadison Office of Admissions and Recruitment (http:// admissions.wisc.edu) for application information.

Prospective transfer students should meet as early as possible with a dance department advisor and with an advisor at Education Academic Services. Coursework taken at another institution may need to be evaluated by a faculty or staff member in dance. Transfer students must audition to be admitted to one of the dance program options. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an School of Education advisor in advance of their
application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## ADMISSION AND APPLICATION

## CRITERIA FOR ADMISSION

Requirements and selection criteria may be modified from one application/admission period to the next. Eligibility for consideration:

- The dance department currently admits students to its programs only through a performance audition.
- Cumulative grade point average of at least a 2.50 (on a 4.00 scale). ${ }^{1}$
- On-campus transfer students must have a cumulative grade point average of at least a 2.5 on the UW-Madison campus, as modified by the Last 60 Credits Rule.
- Filing of all required paperwork, including the dance program application and any required transcripts.
1 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.


## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The BFA degree in dance has four components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Discipline-related coursework provides an interdisciplinary foundation contributing to the performance and understanding of this art form.
- Major requirements offer an in-depth study of dance.
- Elective credits allow students to pursue areas of interest and complete the minimum number of credits required for the degree.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

[^49]Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits.
DISCIPLINE-RELATED REQUIREMENTS

| Code | Title | Credits |
| :--- | :--- | ---: |
| ANAT\&PHY 338 | Human Anatomy Laboratory | 2 |
| DANCE 200 | Writing the Moving Body | 3 |
| DANCE 560 | Current Topics in Dance: Workshop | $1-3$ |
|  | (Anatomy for Dancers) |  |

## MAJOR REQUIREMENTS

Complete a minimum of 85 credits. At least 15 upper-level major Dance credits (numbered 300 and above) must be taken in residence on the UW-Madison campus.

New first-year Dance-B.S. and BFA students should expect to register for three 100-level foundational major courses: DANCE 111 Contemporary Dance Technique and Theory I, 5 credits, DANCE 125 Ballet Technique I, and DANCE 162 First Year Workshop for a total of 11 credits. These courses are taken by all dance majors in their first year, regardless of previous dance training and experience. The classes prepare students for advanced study in dance and movement technique. Dance majors are assured enrollment in these courses. DANCE 165 World Dance Cultures:

Traditional to Contemporary is also strongly recommended for the first semester; this course will meet the Global Perspectives requirement in liberal studies.

## DANCE TECHNIQUE AND THEORY

## Contemporary Dance Technique and Theory

Select a minimum of 18 credits from the following; at least 9 credits must be from DANCE 311 , DANCE 312, DANCE 411 or DANCE 412.
Note: 100- and 200-level technique classes must be taken for 3 credits; 300 and 400 level may be taken for 2 credits.

| Code <br> DANCE 111 | Title <br> Contemporary Dance Technique <br> and Theory I |
| :---: | :--- |
| DANCE 112 | Contemporary Dance Technique <br> and Theory II |
| DANCE 211 | Contemporary Dance Technique <br> and Theory III |
| DANCE 212 | Contemporary Dance Technique <br> and Theory IV |
| DANCE 311 | Contemporary Dance Technique <br> and Theory V |
| DANCE 312 | Contemporary Dance Technique <br> and Theory VI |
| DANCE 411 | Contemporary Dance Technique <br> and Theory VII |
| DANCE 412 | Contemporary Dance Technique <br> and Theory VIII |

## Ballet Technique

Select a minimum of 14 credits from the following; 10 must be numbered 225 or higher:

| Code | Title | Credits |
| :---: | :--- | :--- |
| DANCE 125 | Ballet Technique I |  |
| DANCE 126 | Ballet Technique I-B |  |
| DANCE 225 | Ballet Technique II |  |
| DANCE 226 | Ballet Technique II-B |  |
| DANCE 325 | Ballet Technique III |  |
| DANCE 326 | Ballet Technique III-B |  |

## Additional Techniques

Select a minimum of 6 credits of the following. Students may also select from Additional Techniques workshops listed under DANCE 1 or DANCE 560. Jazz and Ballroom courses do not count toward this requirement.

| Code | Title | Credits |
| :--- | :--- | ---: |
| DANCE 1 | Workshop in Dance Activity (Hip | $1-2$ |
|  | Hop) | $1-2$ |
| DANCE 1 | Workshop in Dance Activity (Tai Ji) | 2 |
| DANCE 116 | Workshop in World Dance | 1 |
| DANCE 118 | African Dance | 3 |
| DANCE/ | Asian American Movement |  |
| ASIAN AM 121 |  | 2 |
| DANCE/ | African Dance Performance |  |
| THEATRE 218 |  |  |


| DANCE/AFROAMER/ | Cultural Cross Currents: West | 3 |
| :---: | :---: | :---: |
| MUSIC 318 | African Dance/Music in the Americas |  |
| DANCE/FOLKLORE/ THEATRE 321 | Javanese Performance | 2 |
| DANCE/FOLKLORE/ THEATRE 421 | Javanese Performance Repertory | 2 |
| DANCE 360 or DANCE 560 | Current Topics in Dance <br> Current Topics in Dance: Workshop | 1-3 |

## BODY STUDIES

| Code | Title | Credits |
| :--- | :--- | ---: |
| DANCE 131 | Somatic Theory and Practices | 2 |
| Select 4 credits of the following: | 4 |  |
| DANCE 1 | Workshop in Dance Activity (Yoga) |  |
| DANCE 132 | Workshop in Body Studies and <br> Practices |  |
| DANCE 135 | Pilates Mat I |  |
| DANCE 235 | Pilates Mat II |  |
| DANCE 136 | Pilates Equipment Lab I |  |
| DANCE 236 | Pilates Equipment II |  |
| DANCE 336 | Pilates Equipment Lab III |  |
| DANCE 213 | New Movement Techniques |  |

## CRITICAL AND CREATIVE INVESTIGATIONS

| Code | Title | Credits |
| :---: | :---: | :---: |
| MUSIC 111 | Elements of Music | 3 |
| or MUSIC 151 | Basic Concepts of Music Theory |  |
| DANCE 140 | Dance Production | 2 |
| DANCE 156 | Movement as Material Through Improvisation | 2 |
| DANCE 157 | Introduction to Movement Analysis | 2 |
| DANCE 162 | First Year Workshop | 1 |
| DANCE 241 | Music Fundamentals for Dancers | 3 |
| DANCE 255 | Movement Composition for the Performing and Visual Arts | 2 |
| DANCE 265 | Dance History I: Western Theatrical Dance from the Renaissance through the 1920s | 3 |
| DANCE 345 | Video Design for the Performing and Visual Arts | 3 |
| or DANCE/ <br> ART 341 | Sound Design for the Performing and | Arts |
| DANCE 355 | Dance Composition II | 2 |
| DANCE 365 | Dance History II: Directions and Issues of Contemporary Dance | 3 |

## DANCE PEDAGOGY

Code Title
Credits
Select one of the following:
DANCE 371 Creative Dance for Children
DANCE 372 Teaching of Dance to Adults
DANCE 374 Teaching Dance

| DANCE REPERTORY THEATER |  |  |
| :--- | ---: | ---: |
| Code | Credits |  |
| DANCE 455 | Dance Composition III | 2 |
| DANCE 462 | Senior Seminar | 3 |
| DANCE 463 | Senior Project | $1-2$ |
| Select a minimum of 6 credits of the following: | 6 |  |

DANCE 451 Dance Repertory Theater
DANCE 452 Dance Repertory Theater

## PUBLIC PRESENTATIONS

BFA students must create one solo and one group piece (trio or larger) after the completion of DANCE 255. These works must be submitted for faculty approval and publicly presented in concert. Senior projects must be presented in an approved public forum.

## ELECTIVE CREDITS

Complete additional coursework, if necessary, to reach the minimum of 125 credits. DANCE 165 World Dance Cultures: Traditional to Contemporary is recommended and will meet the Global Perspectives requirement in liberal studies.

## GPA AND OTHER GRADUATION REQUIREMENTS <br> GRADUATION REQUIREMENTS

Requirements are based on UW-Madison coursework.

- 2.75 minimum cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average in all major coursework
- 2.50 cumulative grade point average in all upper-level major coursework. Dance courses numbered 300 and above are considered to be upper-level courses.
- Major Residency. Students must complete a minimum of 15 upper-level major credits on the UW-Madison campus.
- Senior Residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- A minimum of 125 credits are required for graduation.


## DEGREE AUDIT REPORTING SYSTEM (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  | | Undergraduate students must maintain the minimum |
| :--- |
| grade point average specified by the school, college, or |
| Wrademic program to remain in good academic standing. |

## LEARNING OUTCOMES

1. (Body Studies and Dance Technique) Demonstration of proficiency in the physical practice of dance.
2. (Writing and Critical Thinking) Examination of global approaches in dance, in historical, cultural, and theoretical contexts.
3. (Making and Sharing Dances) Utilization of tools of craft to engage in critical and creative investigations and assessment.

## ADVISING AND CAREERS

## DANCE DEPARTMENT ADVISING

Each freshmen cohort is assigned a faculty advisor who works with the group until graduation. In their first year, all dance majors receive targeted advising from Karen McShane-Hellenbrand (http:// dance.wisc.edu/dance/people/instructional-staff/karen-mcshanehellenbrand). Faculty advisors assist students in choosing classes, evaluating their degree path, and assessing their artistic and academic progress. Students undergo a yearly review with a faculty panel to assess the student's progress in their degree program. Faculty advisors in the department include: Kate Corby (http:// dance.wisc.edu/dance/people/faculty/kate-corby), Andrea Harris (http:// dance.wisc.edu/dance/people/faculty/andrea-harris), Li Chiao-Ping (http://dance.wisc.edu/dance/people/faculty/li-chiao-ping), Marlene Skog (http://dance.wisc.edu/dance/academics/bs-program), Chris Walker (https://www.dance.wisc.edu/dance/people/faculty/chris-walker) and Jin-Wen Yu (http://dance.wisc.edu/dance/people/faculty/jin-wen$\mathrm{yu})$.

Advising in dance is handled through the dance department, 608-262-1691, 125 Lathrop Hall, 1050 University Avenue. Students also meet with Education Academic Services staff regarding other course requirements and concerns, see below.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively
with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Dance can be found on the department's website. (http:// www.dance.wisc.edu)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## ACCREDITATION

## Accreditation

National Association of Schools of Dance (https://nasd.arts-accredit.org)
Accreditation status: Accredited. Next accreditation review: 2018-2019.

## DANCE, CERTIFICATE

A dance certificate (19 credits) provides a general, core curriculum in dance that is available for students in other majors and fields. The courses intend to give the certificate student a solid foundation in contemporary dance practice and theory.

## HOW TO GET IN

Undergraduate students in good academic standing, with a cumulative GPA of 2.50 or higher, may declare this certificate.

Students must meet with the dance certificate advisor, Joseph Koykkar (http://dance.wisc.edu/dance/people/faculty/joseph-koykkar), to discuss their intention to pursue the certificate. Interested students should contact Professor Koykkar for an advising appointment. Students will enroll in two semesters of dance technique and apply for admission to the dance certificate program at the end of the second semester. Complete a dance certificate application (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) to declare the certificate.

## REQUIREMENTS

## COURSE REQUIREMENTS

The dance certificate requires the following course distribution for a minimum of 19 credits.

## CONTEMPORARY DANCE TECHNIQUE AND THEORY

| Code | Title | Credits |
| :---: | :---: | :---: |
| DANCE 111 | Contemporary Dance Technique and Theory I | 1-3 |
| DANCE 112 | Contemporary Dance Technique and Theory II | 1-3 |
| DANCE 211 | Contemporary Dance Technique and Theory III | 1-3 |
| DANCE 212 | Contemporary Dance Technique and Theory IV | 1-3 |
| DANCE 311 | Contemporary Dance Technique and Theory V | 1-3 |
| DANCE 312 | Contemporary Dance Technique and Theory VI | 1-3 |
| DANCE 411 | Contemporary Dance Technique and Theory VII | 1-3 |
| DANCE 412 | Contemporary Dance Technique and Theory VIII | 1-3 |

## BALLET TECHNIQUE

Select 2 credits from the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| DANCE 125 | Ballet Technique I | $1-2$ |
| DANCE 126 | Ballet Technique I-B | $1-2$ |
| DANCE 225 | Ballet Technique II | $1-2$ |
| DANCE 226 | Ballet Technique II-B | $1-2$ |
| DANCE 325 | Ballet Technique III | $1-2$ |
| DANCE 326 | Ballet Technique III-B | $1-2$ |

## ADDITIONAL TECHNIQUES

Select 2 credits from the following. Students may also select from Additional Techniques workshops listed under DANCE 1 or DANCE 560.

| Code | Title | Credits |
| :--- | :--- | ---: |
| DANCE 1 | Workshop in Dance Activity (Hip- | $1-2$ |
|  | Hop) | $1-2$ |
| DANCE 1 | Workshop in Dance Activity (Tai-Ji) | 2 |
| DANCE 116 | Workshop in World Dance | 1 |
| DANCE 118 | African Dance | 3 |
| DANCE/ Asian American Movement <br> ASIAN AM 121  <br> DANCE/ African Dance Performance <br> THEATRE 218  <br> DANCE/AFROAMER/ Cultural Cross Currents: West  <br> MUSIC 318 African Dance/Music in the  <br>  Americas | 2 |  |
|  |  | 3 |

DANCE/FOLKLORE/ Javanese Performance 2
THEATRE 321
DANCE/FOLKLORE/ Javanese Performance Repertory 2 THEATRE 421

## ADDITIONAL REQUIRED COURSES

| Code | Title | Credits |
| :--- | :--- | ---: |
| DANCE 131 | Somatic Theory and Practices <br> or DANCE 157 <br> Introduction to Movement Analysis | 2 |
| DANCE 156 | Movement as Material Through <br> Improvisation |  |
| DANCE 255 | Movement Composition for the <br> Performing and Visual Arts | 2 |
| DANCE 265 | Dance History I: Western Theatrical <br> Dance from the Renaissance <br> through the 1920s | 3 |

## VERIFICATION OF CERTIFICATE COMPLETION

Submit the certificate completion form (http://www.education.wisc.edu/ soe/academics/undergraduate-students/academic-programs) during the semester that all certificate requirements will be completed. This form starts the administrative process that (1) verifies that the requirements have been completed and (2) posts this information on the student's transcript.

## CERTIFICATE COMPLETION REQUIREMENT

This undergraduate certificate must be completed concurrently with the student's undergraduate degree. Students cannot delay degree completion to complete the certificate.

## LEARNING OUTCOMES

1. Demonstrate technical specificity, musicality and artistic confidence in ballet and contemporary dance techniques through sequenced skill level progressions.
2. Recognize, identify and embody a wide range of somatic theories and practices and produce work investigating its impacts and uses in contemporary dance as practice.
3. Demonstrate an intermediate level of contemporary dance literacy and artistry.
4. Develop and practice vocabulary and methodology for analyzing and discussing dance in performance and historical contexts and begin to respond critically and thoughtfully to dance scholarship.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Dance can be found on the department's website. (http:// www.dance.wisc.edu)

## INTRODUCTORY STUDIES IN DANCE/ MOVEMENT THERAPY, CERTIFICATE


#### Abstract

Dance/movement therapy is a creative form of psychotherapy that uses movement, as well as words, to help people-those who are generally healthy as well as those dealing with emotional, mental, or physical problems-to regain a sense of wholeness by experiencing the fundamental unity of body, mind, and spirit. The dance therapy certificate introduces students to the fascinating nonverbal aspects of human communication and its applications to a wide range of other fields such as social work, teaching, occupational therapy, physical therapy, and communication disorders.

Students will also be introduced to the use of movement in the topical fields of violence prevention, behavior management and social skills development from a movement or body/mind perspective. Students leave prepared to either go to graduate school in the field of dance/ movement therapy or to use embodied practices in related fields. In addition, students develop a repertoire of strategies to help cope with the stress and anxiety inherent in college life.


This certificate is also available to individuals who have already completed a bachelor's degree; see the Nondegree/Visiting Student Guide (http://guide.wisc.edu/nondegree).

## HOW TO GET IN

## DECLARATION PROCESS

Prospective certificate students should meet with the dance/movement therapy certificate advisor, Rena Kornblum (http://dance.wisc.edu/dance/ people/instructional-staff/rena-kornblum), to discuss their intentions to pursue the certificate. Enroll in the first- or second-semester dance/ movement therapy course:

- DANCE 231 Introduction to Dance/Movement Therapy or
- DANCE 232 Introduction to Dynamics of Dance Therapy.

Application is usually made directly after the completion of Introduction to Dynamics of Dance Therapy. Complete a Dance/Movement Therapy certificate application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) to declare the certificate.

## REQUIREMENTS

## CERTIFICATE COURSE REQUIREMENTS

The DMT certificate requires a minimum of 19 credits.

## SUPPORTIVE DISCIPLINARY COURSEWORK

Choose a course ( 3 -credit minimum) from the following departments: Counseling Psychology (http://guide.wisc.edu/courses/coun_psy), Educational Psychology (http://guide.wisc.edu/courses/ed_psych), Psychology (http://guide.wisc.edu/courses/psych), Rehabilitation Psychology and Special Education (http://guide.wisc.edu/courses/ rp_se).

| DANCE DEPARTMENT COURSEWORK |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| DANCE 131 | Somatic Theory and Practices | 2 |
| DANCE 156 | Movement as Material Through <br>  <br>  <br> Improvisation | 2 |
| DANCE 157 | Introduction to Movement Analysis | 2 |
| DANCE 231 | Introduction to Dance/Movement | 2 |
| DANCE 232 | Therapy | 2 |
| DANCE 331 | Introduction to Dynamics of Dance | 2 |
| DANCE 431 | Therapy | 3 |

## VERIFICATION OF CERTIFICATE COMPLETION

Submit the certificate completion form (http://www.education.wisc.edu/ soe/academics/undergraduate-students/academic-programs) during the semester that all certificate requirements will be completed. This form starts the administrative process that (1) verifies that the requirements have been completed and (2) posts this information on the student's transcript.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. (Body Studies) Gain skill in expressing through movement and understanding its connection to emotion.
2. Develop literacy about the field of Dance/Movement Therapy.
3. Practice and practical work in movement analysis as a tool for Dance/ Movement Therapy

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Dance can be found on the department's website. (http:// www.dance.wisc.edu)

## PILATES, CERTIFICATE

The Pilates certificate includes coursework in Pilates mat and equipment exercises, teaching methods, and functional anatomy. The certificate prepares students to teach Pilates in a studio setting, and also creates a practical foundation for those who wish to pursue graduate work in movement-based fields.

Students commonly pair the certificate with dance, nutrition, and/ or kinesiology majors, although it is open to all interested students. The curriculum spans 2.5 years, including two summer courses. Upon completion, students are encouraged to sit for the Pilates Method Alliance certification exam to earn their credentials as nationally certified Pilates teachers.

This certificate is also available to individuals who have already completed a bachelor's degree; see the Nondegree/Visiting Student Guide (http://guide.wisc.edu/nondegree).

## HOW TO GET IN

## DECLARATION PROCESS

Students should meet with the Pilates certificate advisor, Collette Stewart (http://dance.wisc.edu/dance/people/instructional-staff/ collette-stewart), to discuss their intention to pursue the certificate. Appointments may be arranged via email. Students must complete a Pilates certificate application (http://www.education.wisc.edu/soe/ academics/undergraduate-students/academic-program-admission) to declare the certificate.

## REQUIREMENTS

## CERTIFICATE COURSE REQUIREMENTS

The Pilates certificate requires a total of 20 credits. Collette Stewart is the advisor for the Pilates certificate, stewart1@wisc.edu; interested students should contact her for an advising appointment.

| Code | Title | Credits |
| :--- | :--- | ---: |
| DANCE 135 | Pilates Mat I | 1 |
| DANCE 136 | Pilates Equipment Lab I | 1 |
| DANCE 235 | Pilates Mat II | 1 |
| DANCE 236 | Pilates Equipment II | 1 |
| DANCE 237 | Pilates Studio I | 3 |
| DANCE 330 | Functional Anatomy for Movement | 1 |
| DANCE 336 | Practices | 2 |
| DANCE 337 | Pilates Equipment Lab III | 3 |
| DANCE 375 | Pilates Studio II Teaching Methods | 1 |
| DANCE 376 | Pilates Teaching I | 3 |
| DANCE 476 | Pilates Teaching II | 3 |

## VERIFICATION OF CERTIFICATE COMPLETION

Submit the certificate completion form (http://www.education.wisc.edu/ soe/academics/undergraduate-students/academic-programs) during the semester that all certificate requirements will be completed. This form starts the administrative process that (1) verifies that the requirements have been completed and (2) posts this information on the student's transcript.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. (Pilates Practice - Strength, Focus, Movement Efficiency) Demonstrate proficiency in Pilates exercises, including fundamental exercises and beginner through advanced mat and equipment work. Students will show significant improvement in body awareness, physical skill and strength, and efficient movement patterning.
2. (Pilates Teaching - Safety, Clarity, Communication) Confidently teach one-on-one and group Pilates classes, effectively communicating physical and conceptual ideas about the body to a variety of learning styles, body types and physical backgrounds.
3. (Anatomical Approaches to Pilates) Integrate current anatomical research into practice and teaching, using a variety of somatic approaches to embodying healthy anatomical function.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Dance can be found on the department's website. (http:// www.dance.wisc.edu)

## EDUCATION - SCHOOL-WIDE

## DEGREES/MAJORS/CERTIFICATES

- Individual Major, BSE (p. 1595)


## INDIVIDUAL MAJOR, BSE

The individual major provides undergraduates with an opportunity to develop a unique course of study; one that is interdepartmental and not reflected in existing degree programs. Completion of the individual major does not lead to a professional license or certification, although graduates may be interested in pursuing alternative educational careers or graduate work. Graduates earn a B.S.-Education degree.

## HOW TO GET IN

## ADMISSION ELIGIBILITY REQUIREMENTS

To be eligible, applicants must:

- earn a 2.75 cumulative GPA on the UW-Madison campus. ${ }^{1}$
- complete a minimum of 54 credits
- receive approval of major program proposal submitted by the applicant.

1
For alternative calculation of cumulative GPA, see Last 60 Credits Rule.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to the program. GPAs will be calculated using

- all transferable college-level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eliogibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## APPLICATION PROCEDURES

Once a committee of three persons has been chosen in accord with the guidelines and required courses have been selected, students should proceed as follows:

- Submit an Individual Major in Education proposal form (http:// www.education.wisc.edu/soe/academics/undergraduate-students/academic-program-admission).
- Submit the program plan and narrative with the transfer application for associate dean's approval. The three-member committee must sign the proposal in the spaces indicated. Failure to submit a program narrative will void the transfer. Obtain the program plan form from Education Academic Services.

Once an application form has been submitted, changes must be approved by both the chair of the committee and the associate dean. Changes must be recorded on the program plan. If more than two program changes are made, a new application form must be filed by the student.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The bachelor of science (B.S.) degree program with an individual major has three components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Major requirements permit in-depth study of a unique area within the School of Education. Students create their own, interdepartmental major following the guidelines established by the school. When completed, the title of the individual major is listed on the student's transcript.
- Elective credits make it possible to pursue additional areas of interest and are necessary to reach the minimum of 120 credits required for the degree.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement
Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## REQUIREMENTS OF THE INDIVIDUAL

## MAJOR

## DEVELOPMENT OF THE MAJOR

Students must have an area of interest that they wish to develop into a 36 - 42 credit formalized program of study, or major. Advisors in Education Academic Services, Room 139 Education Building, 1000 Bascom Mall, 608-262-1651, can discuss students' interests and help frame the written narrative required of the major. Applicants must develop a narrative describing the proposed course of study and its related career goals. Information should be included which will enable a faculty committee to identify the relationship among the proposed program of study, a general interest in education, and career goals. A program title cannot duplicate the existing title of any program at UW-Madison.

## SELECTION OF MAJOR COURSEWORK

Select courses that support the program narrative, in consultation with the major advisor; see below. All courses in the major must be from School of Education course offerings. All credits in the major must be completed after admission into the program (IME classification).

Additional requirements regarding the major are:

- To ensure depth and breadth of study, no more than two-thirds of the total credits in a major can be taken from any one department (i.e., if a major is 36 credits, no more than 24 credits can be in one department).
- A sequential development of courses must be planned in consultation with the major advisor and committee, and must be approved by the committee. The course sequence must include beginning through advanced levels of work as prescribed by the credit distribution.
- At least 20 of the IME credits must be at the intermediate or advanced levels (generally numbered 300 or above, but this varies in some departments).
- Courses in the School of Education completed prior to admission to the IME classification may not be used toward satisfaction of the 36-42 credits in the major without the faculty committee and associate dean's approval. The credits may count toward the 120 credits required for graduation.
- Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- An individual major which essentially parallels an existing departmental major will not be accepted.
- Directed study credits (e.g. 399,699 ) are acceptable, but each course must be accompanied by a statement that includes a description of the focus of study, the requirements for successful completion of the credits, and a discussion of the applicability of content to the proposed individual major. Usually no more than 3 credits of Independent Study will be allowed. Approval of the associate dean is required in order to exceed three credits.
- Students must complete prerequisites for all courses and, in some departments, may be required to complete foundational courses.


## SELECTING THE ADVISORY COMMITTEE AND MAJOR ADVISOR

The applicant must create a three-member committee to oversee his or her work. Only assistant, associate, and full professors may serve on the committee; individuals holding such titles as Lecturer or Instructor cannot serve in this capacity. One of the committee members will be selected by the student to be the major advisor. The major advisor must be from a department within the School of Education and from the department in which the majority of courses for the individual major will be taken, i.e., the core area of study. The second faculty member must be from the same department as the major advisor/committee chair. The third faculty member must be from another department in the School of Education in which courses will be taken for the individual major. The associate dean serves as ex officio to the three-member committee and gives final approval to all programs and any exceptions.

## ELECTIVE CREDITS

Elective credits make it possible to pursue additional areas of interest. Many students, for example, use their elective credits to complete an additional major from the College of Letters \& Science. Some use this second major to complement their individual major, while others select second majors that are completely unrelated to their first. Elective credits are necessary to reach the minimum of 120 credits required for the degree.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Graduation requirements are based on UW-Madison coursework. Graduation GPA requirements may be modified by the Last 60 Credits Rule (p. 1381).

- 2.75 cumulative grade point average.
- 2.75 cumulative grade point average across all major coursework
- 2.75 cumulative grade point average across all upper-level (numbered 300 and above) major coursework
- Degree candidates must complete at least 120 total credits.
- Major residency. Degree candidates must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  | | Undergraduate students must maintain the minimum |
| :--- |
| grade point average specified by the school, college, or |
| academic program to remain in good academic standing. |

## ADVISING AND CAREERS

## ADVISING FOR THE INDIVIDUAL MAJOR

Students interested in the individual major should first consult with an advisor in Education Academic Services; call 608-262-1651 to schedule
an appointment. Eventually, a committee to oversee the major will be formed and also provide advising in the major.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS) <br> 105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651 <br> www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)

The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners
to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## EDUCATIONAL POLICY STUDIES

The Department of Educational Policy Studies offers many courses for undergraduate students. Multidisciplinary courses in the history, sociology, and philosophy of education, comparative and international education, urban education, and educational anthropology are available to all students. Courses in policy analysis emphasize the social context and implications of policy decisions. The department has strong ties with institutions and scholars in other countries.

A new undergraduate degree program in education studies (p. 1599) was recently approved by the University of Wisconsin System Board of Regents. The bachelor of science in education studies is designed to meet the needs of a growing number of undergraduate students who are interested in becoming involved in the realm of education, but not as teachers in the classroom. Major course work offers the multidisciplinary training needed to answer questions regarding domestic and global education policy and practice.

The popular educational policy studies certificate (p. 1605) is also available to all undergraduate students. The completion of the EPS certificate formalizes a student's interest in the multiple dimensions of this discipline.

## DEGREES/MAJORS/CERTIFICATES

- Education Studies, B.S. (p. 1599)
- Educational Policy Studies, Certificate (p. 1605)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Educational Policy Studies can be found on the department's website. (http://eps.education.wisc.edu)

## EDUCATION STUDIES, B.S.

The education studies degree program addresses urgent questions related to domestic and global education policy and practice. Majors will
become well-informed leaders who can engage critically, thoughtfully, and ethically in the educational policy debates in Wisconsin, the nation, and the world.

Undergraduates interested in issues of inequality and social justice will study these dimensions of educational reform. Courses explore the interconnections between education and other major social institutions, including the justice system, the healthcare system, family advocacy systems, economic development, and foreign affairs. Students study debates concerning education-related social disparities and the pursuit of equal educational opportunities for all

The education studies major prepares students for work in educational and governmental agencies, non-governmental organizations (both domestic and international), think tanks, policy institutes, community organizations, and other out-of-school educational spaces. Graduates might serve as policy directors or in other positions of institutional leadership and will be well prepared to work in education-related businesses or to pursue advanced studies in educational policy at the graduate level.

Graduates will receive a bachelor of science degree in education studies from the School of Education. This program does not lead to teacher certification.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

New freshmen and off-campus transfers are admitted directly to the Bachelor of Science-Education Studies degree program. Current UWMadison students must meet with an advisor in Education Academic Services prior to applying for admission to the B.S.-Education Studies degree program. The program currently admits on-campus students to begin in the fall, spring, and summer.

## ENTERING THE SCHOOL OF EDUCATION

 NEW AND CURRENT UW-MADISON STUDENTSIncoming freshmen and transfer students enter directly into the Bachelor of Science-Education Studies degree program upon admission to UW-Madison. All other on-campus students should complete and submit an application following a meeting with an advisor in Education Academic Services at any time during the academic year

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UWMadison Office of Admissions and Recruitment (http:// admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their
application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381)

## APPLICATION AND ADMISSION

While new freshmen and off-campus transfers are admitted directly to the Bachelor of Science-Education Studies degree program, all other current UW-Madison students seeking to enter the B.S.-Education Studies degree program must apply for admission to the program. Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult with an advisor in Education Academic Services prior to submitting an application. Students interested in applying to the program should call 608-262-1651 to schedule an appointment

## CRITERIA FOR ADMISSION

Eligibility for admission consideration to Bachelor of Science-Education Studies degree:

- Cumulative grade point average of at least a 2.5 based on UW-Madison campus coursework, as modified by the Last 60 Credits Rule (detailed below).
- Filing of all required paperwork and other application materials, including program application and transcripts.


## Last 60 Credits Rule

Two grade point averages may be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core
of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The education studies program has three primary components:

- Liberal studies and general education courses that expose students to a broad range of academic disciplines.
- Major coursework in education studies, including core courses, depth, and breadth requirements. Students choose either a U.S. or Global concentration.
- Elective credits to pursue individual areas of interest. Education studies majors are encouraged to consider completing complementary coursework in the College of Letters \& Science, possibly including an additional major. The structure of the education studies degree program makes it possible to complete an additional major and still graduate in four years.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements ( $p$. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## MAJOR REQUIREMENTS

The education studies major requires 30 credits, to include core courses ( 9 credits), depth requirements ( 12 credits) and breadth requirements ( 9 credits). Students will select either a U.S. concentration or Global Concentration to fulfill the depth requirement of the major.

## CORE COURSES, 9 CREDITS

Complete the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| ED POL 300 | School and Society | 3 |
| ED POL 340 | Comparative Education | 3 |
| ED POL/ | History of American Education | 3 |
| HISTORY 412 |  |  |

## DEPTH REQUIREMENTS, 12 CREDITS

Complete a minimum of four courses ( 12 credits) in either the United States or Global concentration to facilitate in-depth study of education policy and practice.

## U.S. Concentration

| Code | Title | Credits |
| :--- | :--- | ---: |
| ED POL/ | The History of the University in the | $3-4$ |
| HISTORY 107 | West |  |
| ED POL 140 | Introduction to Education | 3 |


| ED POL 145 | Introduction to Education Policy | 3 |
| :---: | :---: | :---: |
| ED POL 150 | Education and Public Policy (U.S. topics only) | 3 |
| ED POL 200 | Race, Ethnicity, and Inequality in American Education | 3 |
| ED POL 210 | Youth, Education, and Society | 3 |
| ED POL 220 | Human Rights and Education | 3 |
| ED POL 450 | Rethinking "After-School" Education | 3 |
| ED POL 460 | Immigration, Education, and Equity | 3 |
| ED POL/ HISTORY 478 | Comparative History of Childhood and Adolescence | 3 |
| ED POL 500 | Topics on Social Issues and Education (U.S. topics only) | 3 |
| ED POL 505 | Issues in Urban Education | 3 |
| ED POL 510 | Urban School Policy | 3 |
| ED POL/CURRIC/ RELIG ST 516 | Religion and Public Education | 3 |
| ED POL 518 | Introduction to Debates in Higher Education Policy | 3 |
| ED POL/PHILOS 545 | Philosophical Conceptions of Teaching and Learning | 3 |
| ED POL/PHILOS 550 | Philosophy of Moral Education | 3 |
| ED POL/ GEN\&WS 560 | Gender and Education | 3 |
| ED POL/ AFROAMER 567 | History of African American Education | 3 |
| ED POL/ ANTHRO 570 | Anthropology and Education | 3 |
| ED POL 575 | Education Policy and Practice | 3 |
| ED POL 595 | Language Politics, Ethnicity, and Education | 3 |
| ED POL 600 | Problems in Educational Policy (U.S. topics only) | 1-3 |
| ED POL 618 | Community Colleges: Issues and Research | 3 |
| ED POL/ HISTORY 622 | History of Radical and Experimental Education in the US and UK | 3 |
| ED POL/SOC 648 | Sociology of Education | 3 |
| ED POL/ <br> HISTORY 665 | History of the Federal Role in American Education | 3 |

## Global Concentration

| Code | Title | Credits |
| :--- | :--- | ---: |
| ED POL/ | The History of the University in the | $3-4$ |
| HISTORY 107 | West | 3 |
| ED POL 140 | Introduction to Education | 3 |
| ED POL 150 | Education and Public Policy (Global <br> topics only) | 3 |
| ED POL 220 | Human Rights and Education | 3 |
| ED POL/INTL ST 335 | Globalization and Education | 3 |
| ED POL 460 | Immigration, Education, and Equity | 3 |
| ED POL/ | Comparative History of Childhood <br> HISTORY 478 | Topics on Social Issues and |
| ED POL 500 | Education (Global topics only) | 3 |


| ED POL/CURRIC/ <br> RELIG ST 516 | Religion and Public Education | 3 |
| :--- | :--- | :---: |
| ED POL/ <br> GEN\&WS 560 | Gender and Education | 3 |
| ED POL 595 | Language Politics, Ethnicity, and <br> Education | 3 |
| ED POL 600 | Problems in Educational Policy <br> (Global topics only) | $1-3$ |
| ED POL/ | History of Radical and Experimental <br> HISTORY 622 | Education in the US and UK |
| ED POL 675 | Introduction to Comparative and <br> International Education | 3 |
| ED POL/CURRIC 677 | Education, Health and Sexuality: |  |
| Global Perspective and Policies |  |  |

## BREADTH REQUIREMENTS, 9 CREDITS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Required Breadth Course |  |  |
| Complete one of the f | following: | 3 |
| ED PSYCH 301 | How People Learn |  |
| ED PSYCH 320 | Human Development in Infancy and Childhood |  |
| ED PSYCH 321 | Human Development in Adolescence |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence |  |
| Additional Breadth Course Options |  |  |
| Complete additional coursework from the concentration NOT selected above, or from the courses listed below. ED PSYCH 301, 320, 321 and 331 may also count here, but not toward both breadth requirements. |  |  |
| CURRIC 240 | Critical Aspects of Teaching, Schooling, and Education | 3 |
| CURRIC/CHICLA 321 | Chicano/Latino Educational Justice | 3 |
| ED PSYCH 326 | Mind, Brain and Education | 3 |
| ED PSYCH 506 | Contemporary Issues in Educational Psychology | 3 |
| ED PSYCH 541 | Applied Behavior Analysis in Classrooms | 3 |
| ELPA 640 | Legal Rights and Responsibilities for Teachers | 1-3 |

## ELECTIVE CREDITS

Complete additional credits to complete the minimum of 120 required for the degree. Education studies majors are encouraged to consider completing complementary coursework in the College of Letters \& Science, possibly including an additional major. The structure of the education studies degree program makes it possible to complete an additional major and still graduate in four years.

## GPA AND OTHER GRADUATION REQUIREMENTS

GRADUATION REQUIREMENTS
Based on UW-Madison coursework.

- 2.5 minimum cumulative grade point average. This may be modified by the Last 60 Credits Rule.
- 2.5 cumulative major grade point average.
- 2.5 cumulative grade point average in all upper-level major coursework ("upper-level" defined as numbered 300 and above).
- Major Residency: Students must complete at least 15 credits of upper-level major coursework in residence on the UW-Madison campus.
- Senior Residency: Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- Total credits: A minimum of 120 credits are required for graduation.


## DEGREE AUDIT REPORTING SYSTEM (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Formulate research-based arguments on topics in education policy using academic literature, including both primary and secondary sources.
2. Demonstrate an understanding of the social, cultural, and/or historical contexts of education policy.
3. Examine education policy from multiple theoretical perspectives (e.g., ethical/philosophical, economic/political, etc.).
4. Learn to use different historical and/or qualitative social-science methods to answer major questions in education policy research, both contemporary and enduring.
5. Analyze education policy issues from diverse perspectives related to race, class, and/or gender, and other forms of social difference.

## ADVISING AND CAREERS

## EDUCATION STUDIES ADVISING

Students are advised by staff from Education Academic Services (Room 139 Education Building) at SOAR and during the regular academic year. Staff from the Office of Undergraduate Recruitment and Retention (Room 105 Education Building) provide additional support and assistance to under-represented students in the School of Education. See below. Admitted students are also assigned a departmental advisor.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field
placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities.
Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Educational Policy Studies can be found on the department's website. (http://eps.education.wisc.edu)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page

## EDUCATIONAL POLICY STUDIES, CERTIFICATE

The educational policy studies undergraduate certificate program was designed specifically for undergraduate students from across the campus. The department offers multidisciplinary courses in the history, sociology, and philosophy of education, comparative and international education, and in educational anthropology. Courses in policy analysis emphasize the social context and implications of policy decisions. The completion of the EPS certificate formalizes a student's interest in the multiple dimensions of this discipline.

Students interested in pursuing this certificate are encouraged to consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651. The EPS certificate is also available to individuals who have already completed a bachelor's degree; see the Nondegree/Visiting Student Guide (http://guide.wisc.edu/ nondegree).

## HOW TO GET IN

## DECLARATION PROCESS

Students must complete at least one Educational Policy Studies (ED POL) (http://guide.wisc.edu/courses/ed_pol) course with a grade of $B$ or better prior to applying to the certificate program. Students intending to complete the educational policy studies certificate should visit the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page to complete the declaration form.

Students pursuing the education studies major are not eligible to complete the educational policy studies certificate.

## REQUIREMENTS

## COURSE REQUIREMENTS

- Complete a minimum of five courses from the Department of Educational Policy Studies (15 credits).
- At least two courses must be at the advanced level.
- Students must earn a grade of at least a B in each educational policy studies course in order to count toward the certificate requirements.
- No more than 3 credits of independent study may count toward the 15 credits.


## VERIFICATION OF CERTIFICATE COMPLETION

Submit the certificate completion form (http://www.education.wisc.edu/ soe/academics/undergraduate-students/academic-programs) during the semester that all certificate requirements will be completed. This form starts the administrative process that (1) verifies that the requirements have been completed and (2) posts this information on the student's transcript.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. Demonstrate an understanding of the social, cultural, and/or historical contexts of education policy.
2. Examine education policy from multiple theoretical perspectives (e.g., ethical/philosophical, economic/political, etc.).
3. Analyze education policy issues from diverse perspectives related to race, class, and/or gender, and other forms of social difference.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Educational Policy Studies can be found on the department's website. (http://eps.education.wisc.edu)

## EDUCATIONAL PSYCHOLOGY

Although the department does not offer an undergraduate major, students from across the campus may take undergraduate courses in each of the major content areas: human development, learning sciences, quantitative methods, and school psychology. The department also offers courses specific to teacher education programs.

Educational psychology is the academic home of the undergraduate certificate program in education and educational services (p. 1606). This certificate provides a cohesive set of courses for undergraduate students interested in the many aspects of education, but who choose not to major in education during their undergraduate degree. Students interested in child development, neuroscience and the process of learning, or education-related policies, for example, may wish to complement their current major with this substantive program in education.

## DEGREES/MAJORS/CERTIFICATES

- Education and Educational Services, Certificate (p. 1606)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Educational Psychology can be found on the department's website (http://www.education.wisc.edu/edpsych). (https:// edpsych.education.wisc.edu)

## EDUCATION AND EDUCATIONAL SERVICES, CERTIFICATE

Education is a topic of widespread interest to UW-Madison students and is one of the hotly contested subjects in today's politics and society. The Education and Educational Services (EES) Certificate Program provides a cohesive set of courses for undergraduate students interested in the many aspects of education, but who choose not to major in education during their undergraduate degree.

Students interested in child development, neuroscience and the process of learning, or education-related policies, for example, may wish to complement their current major with this substantive program in education. The certificate also provides grounding and learning experiences that will increase access to careers in education. Students completing the certificate may be considering future plans to:

- Enter a post-baccalaureate teacher education program.
- Pursue a graduate program focused on educational services, including programs such as counseling psychology, school psychology, and rehabilitation psychology.
- Complete advanced work in educational psychology or educational administration.
- Begin a career in teaching and learning settings and practices outside the $\mathrm{K}-12$ education system.

This 15-credit certificate program offers a variety of course options that can be customized to each student's area of interest. It is also available to individuals who have already completed a bachelor's degree; see the Non-Degree/Visiting Student Guide (http://guide.wisc.edu/nondegree).

## HOW TO GET IN

## DECLARATION PROCESS

Students intending to complete the education and educational services certificate may find the declaration form on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/ academics/undergraduate-students/academic-program-admission) page. The declaration for this certificate program can be submitted at any time during the calendar year.

Please note: Students completing a course of study designed to lead to teacher certification are not eligible to complete the EES certificate. This also includes School of Education degree students pursuing the education studies or communication sciences and disorders majors. Other students completing a major within the School of Education are limited to 6 credits of overlap between their major and the certificate; that is, no more than 6 credits of coursework used to satisfy requirements for a major within the School of Education may also be counted toward completion of the EES certificate.

## REQUIREMENTS

Requirements of this 15-credit certificate program include both Foundation and Focus coursework. All coursework must be taken for a letter grade (not credit/no-credit or pass/fail) and students must earn at
least a C grade in each course of the certificate. At least 12 credits of the certificate must be earned in residence at UW-Madison.

There is no formal prerequisite structure to the certificate, although students will generally be expected to take CURRIC 240 Critical Aspects of Teaching, Schooling, and Education first, followed by the two remaining Foundation courses and then the two Focus courses.

## FOUNDATION COURSES, 9 CREDITS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Required Foundation Course |  | 3 |
| CURRIC 240 | Critical Aspects of Teaching, Schooling, and Education |  |
| Social Context of Education |  | 3 |
| Select one of the following: |  |  |
| ED POL 145 | Introduction to Education Policy |  |
| ED POL 300 | School and Society |  |
| $\begin{aligned} & \text { ED POL/ } \\ & \text { INTL ST } 335 \end{aligned}$ | Globalization and Education |  |
| ED POL/ HISTORY 412 | History of American Education |  |
| ED POL 210 | Youth, Education, and Society |  |
| ELPA 640 | Legal Rights and Responsibilities for Teachers |  |
| Individual Processes in Teaching and Learning |  | 3 |
| Select one of the following: |  |  |
| ED PSYCH 320 | Human Development in Infancy and Childhood |  |
| ED PSYCH 321 | Human Development in Adolescence |  |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence |  |
| ED PSYCH 301 | How People Learn |  |
| ED PSYCH 326 | Mind, Brain and Education |  |
| RP \& SE 300 | Individuals with Disabilities |  |
| FOCUS COURSE WORK, 6 CREDITS |  |  |
| Code | Title | Credits |
| Select from the following and any other Foundation courses: |  | 6 |
| COUN PSY 110 | Human Resources Development: Career Strategies |  |
| COUN PSY 115 | Human Resources Development: Educational Effectiveness |  |
| COUN PSY 225 | Coming to Terms with Cultural Diversity: Invitation to Dialogue |  |
| COUN PSY 230 | Race and the Developing Child |  |
| COUN PSY 300 | Special Topics: Counseling and Counseling Psychology |  |
| COUN PSY 325 | Seminar: Students Seeking Educational Equity and Diversity (SEED) |  |
| COUN PSY 650 | Theory and Practice in Interviewing |  |
| CURRIC 305 | Integrating the Teaching of Reading with Other Language Arts |  |
| CURRIC 277 | Videogames \& Learning |  |


| CURRIC 375 | Proseminar |
| :---: | :---: |
| ELPA/ COUN PSY 350 | Peer Leadership and Mentorship with Transitioning Students |
| ELPA 502 | Workshop in Educational Leadership and Policy Analysis |
| ELPA/INTER- <br> HE 660 | Foundations of Education for Work |
| ELPA/INTERHE 661 | Organization and Operation of Education for Work Programs |
| ELPA/ COUN PSY 665 | Career Development Throughout the Life Span |
| ED POL/ HISTORY 107 | The History of the University in the West |
| ED POL 140 | Introduction to Education |
| ED POL 150 | Education and Public Policy |
| ED POL 200 | Race, Ethnicity, and Inequality in American Education |
| ED POL 450 | Rethinking "After-School" Education |
| ED POL 500 | Topics on Social Issues and Education |
| ED POL 505 | Issues in Urban Education |
| ED POL 510 | Urban School Policy |
| ED POL/CURRIC/ RELIG ST 516 | Religion and Public Education |
| ED POL 518 | Introduction to Debates in Higher Education Policy |
| ED POL/ AFROAMER 567 | History of African American Education |
| ED POL/ ANTHRO 570 | Anthropology and Education |
| ED POL 575 | Education Policy and Practice |
| ED POL/SOC 648 | Sociology of Education |
| ED PSYCH 506 | Contemporary Issues in Educational Psychology |
| ED PSYCH 540 | Introduction to Professional School Psychology |
| ED PSYCH 541 | Applied Behavior Analysis in Classrooms |
| ED PSYCH 542 | The Biological Basis of Behavior |
| ED PSYCH 551 | Quantitative Ethnography |
| ED PSYCH 563 | Design of Educational Games and Simulations |
| ED PSYCH 570 | Foundations of Educational Measurement |
| RP \& SE 500 | Rehabilitation-Counseling Psychology: Foundations |

1 Students may also substitute up to 3 credits of independent study with faculty from the departments of Coun Psy, Curric, ELPA, Ed Pol, Ed Psych or RP\&SE. Independent study work with faculty from other School of Education departments may be considered; contact an advisor in Education Academic Services.

## VERIFICATION OF CERTIFICATE COMPLETION

Submit the certificate completion form (http://www.education.wisc.edu/ soe/academics/undergraduate-students/academic-programs) during the semester that all certificate requirements will be completed. This form starts the administrative process that (1) verifies that the requirements have been completed and (2) posts this information on the student's transcript.

## UNDERGRADUATE/SPECIAL STUDENT CERTIFICATES

This certificate may be completed within the context of an undergraduate degree or as a Special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a Special student. Candidates are encouraged to contact the certificate coordinator to discuss course enrollment and the sequencing of certificate requirements.

## LEARNING OUTCOMES

1. Understand how learning environments and pedagogical practices for students are grounded in concepts and interpretive frameworks provided by disciplines that study human development and learning. Understand both typical and atypical development in relation to education.
2. Understand basic cognitive, social, emotional, and biological bases of teaching and learning.
3. Understand how issues of race, class, gender, cultural, sexual orientation, immigrant status, language background, and disability status interact with various educational contexts to affect learning and its outcomes.
4. Understand how local, state, national, and global social and political contexts differentially affect schooling and its outcomes for students both typical and atypical development in relation to education.
5. Understand the multiple contexts in which education occurs.
6. Understand historical, political, and cultural influences on education and educational institutions.
7. Understand supportive services available to learners in educational contexts and institutions.
8. Be familiar with some of the issues and controversies surrounding the selection of concepts taught, the assumptions associated with content choices, tools of inquiry, and ways of reasoning.
9. Be an informed consumer of educational research and policy prescriptions.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Educational Psychology can be found on the department's website (http://www.education.wisc.edu/edpsych). (https:// edpsych.education.wisc.edu)

## KINESIOLOGY

The study of movement, exercise, and occupation has the potential to dramatically impact health and quality of life. Department programs focus on the scientific study of exercise, movement, and human occupation, applying this study to health, physical education, and functional performance. The department's ultimate goal is to enhance human health, productivity, and quality of life.

The B.S. degree in athletic training ( p . 1608) prepares students to become certified athletic trainers. The B.S. degree in kinesiology (p. 1617) prepares students for graduate or professional study, and the B.S. degree in physical education (p. 1624) prepares teacher education students to teach physical education in elementary and secondary schools.

The department also offers theory, activity, and leadership courses to improve understanding, appreciation, and use of the body in movement and sports. These classes are open to all university students.

## DEGREES/MAJORS/CERTIFICATES

- Athletic Training, B.S. (p. 1608)
- Health Education, Minor (p. 1616)
- Kinesiology, B.S. (p. 1617)
- Physical Education, B.S. (p. 1624)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Kinesiology can be found on the department's website. (http:// www.education.wisc.edu/kinesiology)

## ATHLETIC TRAINING, B.S.

The Athletic Training Degree Program prepares students for healthcare careers as athletic trainers. Accredited by the Commission on Accreditation of Athletic Training Education (CAATE), the program provides students with the evidence-based theoretical and clinical foundation needed to succeed in a wide range of athletic training healthcare settings. Interested students should contact Andrew Winterstein, program director, at andrew.winterstein@wisc.edu (winterstein@education.wisc.edu).

This program places an emphasis on the basic sciences. In addition to introductory courses in athletic training, anatomy, and first aid, applicants must complete prerequisite coursework in biology, chemistry, and physics as part of the application process. Students must also complete a minimum of 20 hours of clinical observations prior to applying to the AT program.

The professional requirements include (1) athletic training courses that encompass the prevention, examination, diagnosis, treatment, and rehabilitation of emergent, acute or chronic injuries and medical conditions, (2) content area coursework in general medical issues with full-semester courses in nutrition and pharmacology, and (3) course credit for athletic training clinical and field work, including one experience taken in conjunction with a high school rotation.

The program is dedicated to maintaining a tradition of excellence and outstanding program outcomes (https://kinesiology.education.wisc.edu/ at/outcomes). Interested students may enjoy the AT program video (https://www.youtube.com/watch?v=2Jckqk5FS5Q\&feature=youtu.be).

## IMPORTANT - UPCOMING CHANGES IN ATHLETIC TRAINING

In May of 2015, the AT Strategic Alliance released an official statement recommending the elevation of the professional (http://caate.net/wp-content/uploads/2015/05/Strategic-Alliance-CCATE-email-pdf.pdf) degree for athletic training to the master's level. Consequently, the UWMadison AT Program plans to suspend admission to the undergraduate AT program after the fall of 2019. Applicants to the final undergraduate BS-Athletic Training class must apply by February 1, 2019; see eligibility requirements under How to Get In. (p. 1608)

The AT program is in the planning stages of transitioning the professional preparation program to a new master's degree. Pending approval, students will first enroll in the new master's degree program in the summer of 2021.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Admission to the Athletic Training Degree Program is limited and competitive. Students must meet the minimum eligibility requirements outlined below to be considered for selection. Most students apply for admission during their sophomore year. Students are admitted to the program only once a year, effective for the summer following admission. Once admitted, students usually take two years to complete the professional part of the AT degree program.

## Important-Upcoming Changes in Athletic Training

In May of 2015, the AT Strategic Alliance released an official statement recommending the elevation of the professional (http://caate.net/wp-content/uploads/2015/05/Strategic-Alliance-CCATE-email-pdf.pdf) degree for athletic training to the master's level. Consequently, the UWMadison AT Program plans to suspend admission to the undergraduate AT program after the fall of 2019. Applicants to the final undergraduate BS-Athletic Training class must apply by February 1, 2019. The AT program is in the planning stages of transitioning the professional preparation program to a new master's degree. Pending approval, students will first enroll in the new master's degree program in the summer of 2021.

## ENTERING THE SCHOOL OF EDUCATION NEW \& CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in athletic training are admitted directly to the School of Education with a "preprofessional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in the athletic training degree program or the exercise and movement science degree program within Kinesiology receive a classification of PKN. This classification indicates that a student is interested in one (or both) of these programs, but has not applied and been admitted to the professional part of the undergraduate program.

On-campus students wishing to be admitted to the School while working on eligibility requirements and application can apply for admission to the School of Education by completing a PreProfessional Application (http://www.education.wisc.edu/soe/ academics/undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the School. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1610)). It is not necessary to be a "pre-professional" student before applying to a professional program. Admission as a "pre-professional" student does not guarantee admission to the professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall. Students may call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the University to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

Prospective applicants must complete prerequisite coursework for eligibility and should make progress toward meeting the School of Education's Liberal Studies requirements. Students are admitted only once a year, effective for the summer following admission. Once admitted, students in Athletic Training typically spend two-and-a-half years completing remaining coursework

Professional program applicants not already enrolled on the UWMadison campus must be admissible to the University to enroll in a School of Education professional program. Thus, program admission is contingent upon admission to the campus. Admission to UW-Madison requires a separate application and admission process. See Office of

Admissions and Recruitment (http://www.admissions.wisc.edu) for application information.

## ELIGIBILITY FOR ADMISSION TO THE PROFESSIONAL PROGRAM

Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be eligible for admission, applicants must:

- complete at least 54 credits of college coursework by the end of the spring semester of the application year.
- complete the following coursework by the end of the spring semester of the application year.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Biology Sequence |  |  |
| Complete one of the following Biology sequences: |  |  |
| BIOLOGY/ <br> ZOOLOGY 101 <br> \& BIOLOGY/ <br> ZOOLOGY 102 | Animal Biology and Animal Biology Laboratory | 5 |
| $\begin{aligned} & \text { BIOLOGY/BOTANY/ } \\ & \text { ZOOLOGY } 151 \\ & \text { \& BIOLOGY/BOTANY/ } \\ & \text { ZOOLOGY } 152 \end{aligned}$ | Introductory Biology and Introductory Biology ${ }^{1}$ | 10 |
| BIOCORE 381 <br> \& BIOCORE 382 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory | 5 |
| Advanced Placement (AP) Biology exam score of 4 or $5^{2}$ |  |  |
| International Baccalaureate (IB) Biology exam score of 4 or $5^{3}$ |  |  |
| Chemistry Sequence |  |  |
| Complete one of the following Chemistry sequences: |  |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II | 9 |
| CHEM 109 | Advanced General Chemistry | 5 |
| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II | 10 |
| Physics Course |  |  |
| Complete one of the following Physics courses: |  |  |
| PHYSICS 103 | General Physics | 4 |
| PHYSICS 201 | General Physics | 5 |
| PHYSICS 207 | General Physics | 5 |
| Kinesiology Course |  |  |
| KINES 119 | Introduction to Kinesiology | 2 |

1 Students who take this course at UW-Madison or transfer it from another campus must complete both BIOLOGY/BOTANY/ ZOOLOGY 151 and BIOLOGY/BOTANY/ZOOLOGY 152 to be eligible for admission and to complete the degree requirements.
2 Credit awarded for BIOLOGY/BOTANY/ZOOLOGY 151 via an AP Biology exam score of 4 or 5 fulfills the entire eligibility requirement for admission \& the degree requirements.

Credit awarded for BIOLOGY/BOTANY/ZOOLOGY 151 Introductory Biology via an IB Biology exam score of 4 or 5 fulfills the entire eligibility requirement for admission \& the degree requirements.

- complete all but two of the prerequisite courses listed above by the end of the fall semester of the application year. Exception: Students enrolled in BIOLOGY/BOTANY/ ZOOLOGY 152 during the spring semester of the application year may have this course and up to two additional prerequisites above in progress during the spring semester of the application year. For this purpose, CHEM 109 satisfies the full general chemistry requirement but constitutes one course. BIOLOGY/ ZOOLOGY 101 and BIOLOGY/ZOOLOGY 102 are counted as two courses in determining eligibility for the program.
- complete these additional prerequisite courses by the end of the spring semester of the application year.


Athletic Training Sequence

| KINES 116 | First Aid and Basic Life Support $^{4}$ | 2 |
| :--- | :--- | :--- |
| KINES 127 | Introduction to Athletic Training | 2 |
| KINES 197 | Techniques in Athletic Training | 1 |
| KINES 227 | Introduction to Clinical Anatomy of | 2 |
|  | Human Movement |  |

4 Basic Life Support for Healthcare Providers certification or CPR/ AED for Professional Rescuers certification may substitute for the CPR/AED portion of KINES 116. First Aid certification may substitute for the first aid portion of Kines 116. Students possessing current certifications may submit documentation and request a waiver of KINES 116. Students must present both certifications (CPR/AED and first aid) to exempt from the class.

- Athletic Training Experience-Complete a minimum of twenty (20) total hours of volunteer or observation experiences in athletic training. Students must gain experience in at least two different locations. Each experience must be a minimum of (10) hours in length. Documentation of the experience (forms signed by certified athletic trainers) must be submitted along with application materials by the application deadline. Students may seek observational experiences in any setting employing a certified athletic trainer where the athletic trainer is performing job duties consistent with the BOC Role Delineation domains of athletic training.
- earn a minimum 2.75 cumulative GPA or last 60 credits GPA by the end of the fall semester of the application year. ${ }^{5}$
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/academic-program-admission) page.

A comprehensive cumulative GPA of all college-level, transferable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the
comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using:

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## APPLICATION REVIEW AND SELECTION

Applicants to the Athletic Training Degree Program will compete for an identified number of admission openings assigned to this program. Each application will be reviewed by at least two academic faculty or staff from the Admissions Committee. Each committee member will independently examine and rate applicants' files on a scale of 1 (do not accept) to 5 (definitely accept) based on the criteria above. Committee members will then share and discuss their ratings and select the final cohort for admission.

## The Admissions Committee will review application files with four key areas in mind:

- Academic Qualifications. The athletic training program seeks students with strong academic credentials. This includes cumulative undergraduate grade point average (GPA), course selection and trend of college grades.
- Goals. The required personal statement provides an opportunity for students to express their reasons for studying kinesiology and can provide insight into the student's long-term goals.
- Recommendation Letters. Thoughtful letters from teachers or employers addressing the student's interest and experience are beneficial to the selection process. Recommendation letters should provide information about a student's intellect, imagination, or diligence that is not evident in other parts of the application.
- Other Contributions. The athletic training program seeks students whose diverse work experience, life experience, stated goals, and cultural background are assets to the learning environment in the program.


## PROVISIONAL ADMISSION

Students will be provisionally accepted in April. The offer of admission will be revoked and the student withdrawn from fall Kinesiology courses (typically during July) if any of the following requirements are not met:

- All prerequisite courses completed by the end of the spring semester of the application year.
- Maintenance of a cumulative GPA or last 60 -credit GPA of at least 2.75.


## TECHNICAL STANDARDS

The Athletic Training Degree Program at the University of WisconsinMadison is a rigorous and intensive program that places specific requirements and demands on the students enrolled in the program. For this reason the program has established Technical Standards for program completion.

Students must document that they are in compliance with the program's Technical Standards as a condition of accepting program admission. Students who feel they are not in compliance with the above standards are encouraged to seek evaluation and assistance from the McBurney Disability Resource Center.

## CRIMINAL BACKGROUND INVESTIGATION

Criminal background investigations will be conducted for all students admitted to this program. Detailed instructions on how to complete the required criminal background check will be included in offers of admission. This is not completed until after an applicant has been offered admission.

Results of criminal background checks may be shared with other agencies when required by state code, or with a cooperating school or other agency in which the student has been assigned to complete field experiences. Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. Field site administrators have the right to determine the appropriateness of a student placement.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## ADVISING AFTER ADMISSION

Included with the offer of admission is information about mandatory spring orientation sessions for new majors, led by a departmental advisor. Sequencing of coursework and enrollment in Kinesiology courses will be addressed at these meetings. Students will be authorized to enroll in Kinesiology courses after the orientation meetings are completed. Upon formal admission to the program, advising about the major will be provided by the Department of Kinesiology. Majors are required to meet with the departmental advisor at least once per semester. All questions about School of Education and University requirements should be referred to an advisor in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as
needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or
Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The Athletic Training program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Science core coursework offers in-depth study of the basic sciences and mathematics.
- Kinesiology core courses look at how the body responds and adapts to exercise, the role of psychological factors in sports and exercise, mechanics applied to biological systems, and how movement is controlled, learned, and developed over the life span.
- Advanced coursework in Athletic Training that focuses on evidenceguided practice and patient-centered care in the prevention, management, and rehabilitation of injuries and illnesses.
- Elective classes that are generally related to the student's area of study.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements ( $p$. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits.
SCIENCE CORE

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 5-10 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II |  |
| Select one of the following: |  | 4-10 |
| AP or IB Biology score of 4 or above |  |  |
| BIOLOGY/ Animal Biology <br> ZOOLOGY 101 and Animal Biology Laborato <br> \& BIOLOGY/  <br> ZOOLOGY 102  |  |  |
| BIOLOGY/ BOTANY/ ZOOLOGY 151 \& BIOLOGY/ BOTANY/ ZOOLOGY 152 | Introductory Biology and Introductory Biology |  |
| BIOCORE 381 <br> \& BIOCORE 382 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory |  |
| Select one of the following: |  | 4-5 |


| PHYSICS 103 | General Physics |  |
| :---: | :---: | :---: |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| MATH 221 | Calculus and Analytic Geometry <br> 1 (Meets General Education Quantitative Reasoning B requirement) | 5 |
| or MATH 211 | Calculus |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences (STAT 371 is preferred) | 3 |
| or PSYCH 210 | Basic Statistics for Psychology |  |
| ANAT\&PHY 335 | Physiology (formerly Physiol 335) | 5 |
| ANAT\&PHY 337 | Human Anatomy (formerly Kines 337) ${ }^{1}$ | 3 |
| ANAT\&PHY 338 | Human Anatomy Laboratory ${ }^{1}$ | 2 |
| PSYCH 202 | Introduction to Psychology | 3 |
| Effective fall 2017, Anatomy/Kines 328 and 329 were replaced by Kines 337 and 338 . These courses were subsequently moved to a new department as ANAT\&PHY 337 and ANAT\&PHY 338. |  |  |

## KINESIOLOGY CORE

| Code | Title | Credits |
| :---: | :---: | :---: |
| KINES 119 | Introduction to Kinesiology ${ }^{1}$ | 2 |
| KINES 227 | Introduction to Clinical Anatomy of Human Movement | 2 |
| KINES 314 | Physiology of Exercise | 4 |
| KINES 318 | Biomechanics of Human Movement | 3 |
| KINES 330 | Research in Kinesiology | 2 |
| KINES 350 | Introduction to Exercise Psychology 1 | 3 |
| KINES 361 | Motor Learning and Performance | 3 |
| KINES 116 | First Aid and Basic Life Support ${ }^{12}$ | 2 |
| admis |  |  |
| Basic L <br> AED for <br> CPR/A <br> for the certific | for Healthcare Providers certificatio nal Rescuers certification may subst of KINES 116. First Aid certification rtion of KINES 116. Students must p R/AED and first aid) to exempt from | R/ <br> the <br> stitute <br> oth <br> 16. |

## ATHLETIC TRAINING CORE

Students with an interest in Athletic Training should enroll in KINES 127, KINES 197 and KINES 227. First-year students are eligible and encouraged to take KINES 127 and KINES 197. Enrollment in KINES 227 requires completion of, or concurrent enrollment in KINES 127, or consent of the instructor. These three introductory courses are the only athletic training courses that may be taken prior to program admission.

KINES 301, KINES 317, KINES 357, KINES 358 and KINES 450 provide required clinical field experiences in athletic training settings.

| Code | Title | Credits |
| :--- | :--- | ---: |
| KINES 127 | Introduction to Athletic Training | 2 |
| KINES 197 | Techniques in Athletic Training | 1 |


| KINES 301 | Advanced Techniques in Athletic Training | 2 |
| :---: | :---: | :---: |
| KINES 317 | Evaluation and Diagnosis of Orthopedic Conditions | 4 |
| KINES 357 | Therapeutic Strategies in Athletic Training I | 4 |
| KINES 358 | Therapeutic Strategies in Athletic Training II | 4 |
| KINES 400 | Organization and Administration of Athletic Training Programs | 3 |
| KINES 417 | Advanced Clinical Assessment Techniques in Athletic Training | 2 |
| KINES 450 | Clinical Field Experience in Athletic Training (take twice for a total of 6 credits) | 3 |
| KINES 457 | Medical Problems of Exercise and Sports | 3 |
| KINES 475 | Seminar in Athletic Training | 1 |
| NUTR SCI 332 <br> or KINES/ <br> NUTR SCI 525 | Human Nutritional Needs <br> Nutrition in Physical Activity and Health | 3 |
| PHM SCI 401 | Survey of Pharmacology | 3 |

## ADDITIONAL ELECTIVES

Select additional electives as necessary to bring credit total to 120

## TECHNICAL STANDARDS-ATHLETIC TRAINING PROGRAM

The Athletic Training Program at the University of Wisconsin-Madison is a rigorous and intense program that places specific requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the Athletic Training Program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (Commission on Accreditation of Athletic Training Education).

## Details of Required Technical Standards

Compliance with the program's technical standards does not guarantee a student's eligibility for the Board of Certification exam. A candidate for the Athletic Training Program at the University of Wisconsin-Madison must have abilities and skills in five categories: observation, communication, motor, intellectual, and behavioral/social. Reasonable accommodation for persons with documented disabilities will be considered on an individual basis, but a candidate must be able to perform in an independent manner.
The following skills are required, with or without accommodation.
Observation: Candidates must have sufficient sensory capacity to observe in the lecture hall, the laboratory, the outpatient clinical setting, and in direct patient interaction. Sensory skills adequate to perform a physical examination are required. Functional vision, hearing and tactile sensation must be adequate to observe a patient's condition and to elicit information through procedures regularly required in
a physical examination, such as inspection, palpation, and special tests.

Communication: Candidates must be able to communicate effectively in both academic and health care settings. Candidates must show evidence of effective written and verbal communication skills. Students for whom English is a second language must have a facility in English adequate for university work. Results of the ESL assessment test may require students to take one or more English courses in English as a second language.

Motor: The ability to participate in basic diagnostic and therapeutic maneuvers and procedures (e.g. palpation, auscultation) is required. Candidates must have sufficient motor function to execute movements reasonably required to provide care to patients. Candidates must be able to negotiate patient care environments and must be able to move between settings, such as classroom building and clinical setting. Physical stamina sufficient to complete the rigorous course of didactic and clinical study is required. Long periods of sitting, standing, or moving are required in classroom, laboratory, and clinical experiences.

Intellectual: Candidates must be able to measure, calculate, reason, analyze and synthesize. Problem solving, one of the critical skills demanded of athletic trainers, requires all of these intellectual abilities. In addition, candidates should be able to comprehend three-dimensional relationships and understand the spatial relationships of structures. Candidates must be able to read and understand allied health and medical literature. In order to complete the Athletic Training Program, candidates must be able to demonstrate mastery of these skills and the ability to use them together in a timely fashion in problem-solving and patient care.

Behavioral and social attributes: Candidates must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, and the prompt completion of all academic and patient care responsibilities. The development of mature, sensitive and effective relationships with patients and other members of the health care team are essential. The ability to function in the face of uncertainties inherent in clinical practice, flexibility, compassion, integrity, motivation, interpersonal skills, and concern for others are all required.

Students who feel they are in compliance with the above standards must fill out the Technical Standards Signature Form and submit it with their application materials.

Students who feel they are not in compliance with the above standards are encouraged to seek evaluation and assistance from the McBurney Disability Resource Center.

McBurney Disability Resource Center
702 West Johnson Street, Suite 2104
Madison, WI 53715
phone: 608-263-2741
text: 608-225-7956
mcburney@studentlife.wisc.edu

The UW-Madison Athletic Training Program complies with all federal and state laws and university policies including Affirmative Action and Equal Opportunity (http://www.wisc.edu/policies/aaeo).

## CONTINUATION REQUIREMENT: DEPARTMENT OF KINESIOLOGY

All students admitted to undergraduate programs in the Department of Kinesiology, including Physical Education, must maintain a cumulative grade point average (GPA) of at least 2.75, based on all UW-Madison campus coursework. Consult the School of Education's Academic Policies and Procedures (p. 1381) for additional information about the continuation requirement.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Based on UW-Madison coursework.

- Must earn a minimum 2.75 cumulative grade point average. Graduation GPA may be modified by the Last 60 Credits Rule (p. 1381).
- Major residency: Students must complete a minimum of 15 credits from the Department of Kinesiology while enrolled on the UW-Madison campus.
- Senior residency: Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- Must complete a minimum of 120 credits


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Understand the role of the athletic trainer within the broader health care system.
2. Demonstrate appropriate oral and written communication skills.
3. Develop and apply strategies to prevent the incidence and/or severity of injury and illnesses.
4. Demonstrate the clinical skills needed to appropriately diagnose patients for treatment and referral.
5. Apply clinical and decision making skills to respond to acute injury and illness; including emergencies.
6. Assess patient status and develop treatment and rehabilitation that are consistent with contemporary disablement models.
7. Maintain the highest standards of evidence-guided clinical practice by formulating clinical questions, incorporating evidence into clinical practice, and examining the quality of patient care through the use of patient outcomes.

## ADVISING AND CAREERS

## ATHLETIC TRAINING ADVISING

Students not yet admitted to athletic training (pre-professional classification of PKN) meet with their assigned advisor in Education Academic Services (EAS) and/or the Office of Undergraduate Recruitment and Retention (OURR), see below. Interested students should also contact Andrew Winterstein, program director, at andrew.winterstein@wisc.edu (winterstein@education.wisc.edu).

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities.
Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Kinesiology can be found on the department's website. (http:// www.education.wisc.edu/kinesiology)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the School's Resources (p. 1402) page.

## ACCREDITATION

## ACCREDITATION

Commission on Accreditation of Athletic Training Education (https:// caate.net)

Accreditation status: Active-in good standing. Next accreditation review: 2025-2026.

## CERTIFICATION/LICENSURE

Board of Certification for the Athletic Trainer (http://bocatc.org)

| Year of <br> Exam | UW-Madison <br> Graduates: <br> First Attempt | National <br> First <br> Attemp1 |
| :---: | :---: | :---: |
| $2016-2017$ | $100 \%$ | $84.00 \%$ |
| $2015-2016$ | $100 \%$ | $81.00 \%$ |
| $2014-2015$ | $100 \%$ | $80.65 \%$ |

Note: The table shows pass rates on the national certification exam. Licenses are awarded at the state-level.

## HEALTH EDUCATION, MINOR

The health minor may be completed by students in physical education or by teachers already licensed to teach at an appropriate level in Wisconsin.

This minor prepares teachers to (1) teach health as a separate course or as a planned integral part of other areas of instruction and (2) assist the school administration and teaching staff in developing a broad school health program.

Certification in a major area of interest must accompany the completion of this minor; students cannot be certified to only teach health.

## HOW TO GET IN

Upon admission into their teacher education degree program in the School of Education, students should meet immediately with the health education program coordinator, Cindy Kuhrasch, ckuhrasch@education.wisc.edu, to develop a course schedule and to be authorized for the following required courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| KINES/CURRIC/ | Organization and Administration of | 3 |
| ELPA 541 | School Health Programs |  |
| KINES/CURRIC 542 | Teacher Education About Alcohol <br> and Other Drugs | 3 |
| KINES/CURRIC 561 | Teacher Education in Human <br> Sexuality | 3 |
| KINES/CURRIC 567 | Issues, Materials and Methods in <br> Health Education | 3 |

Registration in this coursework is contingent upon this meeting.

To indicate the intent to complete the health education minor, students should fill out a minor declaration form available in Education Academic Services, Room 139 Education Building.

## REQUIREMENTS

Complete a minimum of 30 credits to include all coursework below. A minimum 2.75 GPA is required, based on all UW-Madison coursework included in the minor requirements.

The program coordinator for the health minor is Cindy Kuhrasch, ckuhrasch@education.wisc.edu. Students may also wish to consult with advising staff at Education Academic Services (EAS), Room 139 Education Building, 1000 Bascom Mall, 608-262-1651.

Upon acceptance into a major program in the School of Education, students should meet immediately with the health education program advisor to work out a schedule and to be authorized for required Kines/ Curric courses KINES/CURRIC/ELPA 541, KINES/CURRIC 542, KINES/ CURRIC 561, and KINES/CURRIC 567. Registration in this coursework is contingent upon this meeting.
CORE REQUIREMENTS (22-24 CREDITS)

| Code | Title | Credits |
| :---: | :---: | :---: |
| KINES 116 | First Aid and Basic Life Support ${ }^{1}$ | 2 |
| KINES/CURRIC 501 | Health Information for Teachers | 3 |
| ANAT\&PHY 335 | Physiology (formerly Physiol 335) | 5 |
| KINES/CURRIC/ ELPA 541 | Organization and Administration of School Health Programs | 3 |
| KINES/CURRIC 542 | Teacher Education About Alcohol and Other Drugs | 3 |
| KINES/CURRIC 561 | Teacher Education in Human Sexuality | 3 |
| KINES/CURRIC 567 | Issues, Materials and Methods in Health Education | 3 |
| CURRIC 457 | Student Teaching in Health Education ${ }^{2}$ | 2 |

1
Basic Life Support for Healthcare Providers certification or CPR/ AED for Professional Rescuers certification may substitute for the CPR/AED portion of KINES 116. First Aid certification may substitute for the first aid portion of KINES 116. Students must present both certifications (CPR/AED and first aid) to exempt from KINES 116. Documentation of current certification (either adult or child) must be presented to the health education program advisor. If the certification equivalent is used, the minor will require 30 credits.
2
Eligibility for student teaching requires the completion of all courses required for the minor with a minimum GPA of 2.75. Students must also meet the content knowledge requirements for Health. A meeting with the health education coordinator is required before submitting a student teaching application. Students should bring a current transcript to this meeting. Special arrangements can be made for teachers seeking add-on certification in Health.

## BREADTH REQUIREMENTS (8 CREDITS)

Choose from the following list. A wide variety of other relevant courses related to teaching about health are offered on campus. Substitution of another course (maximum of 3 credits) is possible, but must be approved in advance by the health program advisor.

| Code | Title | Credits |
| :--- | :--- | ---: |
| CNSR SCI 478 | Consumer Information | 3 |
| COM ARTS 325 | Media and Human Behavior | 3 |
| FOOD SCI 120 | Science of Food | 3 |
| NUTR SCI 132 | Nutrition Today | 3 |
| NUTR SCI/A A E/ <br> AGRONOMY/INTER- | World Hunger and Malnutrition | 3 |
| AG 350 |  | 2 |
| KINES 100 | Exercise, Nutrition, and Health | $3-4$ |
| SOC/PSYCH 160 | Human Sexuality: Social and | 2 |
| SOC WORK/ | Psychological Issues |  |
| NURSING/ | Interdisciplinary Approach | $2-4$ |
| S\&A PHM 105 | Alcohol and Other Drug Abuse | 3 |
| SOC WORK 453 | Environmental Studies: The Social | 2 |
| ENVIR ST 112 | Perspective |  |

## KINESIOLOGY, B.S.

Exercise and movement science (EMS) is a named option offered in the Department of Kinesiology. The department's mission is to research, teach, and apply knowledge related to movement, exercise, and human occupation with the ultimate goal of enhancing human health, productivity, and quality of life.

Students in this major take coursework grounded in the basic sciences (e.g., physiology, anatomy, physics) and in kinesiology. EMS core courses examine how the body responds to physical activity, the role of physiological and psychological factors in exercise, mechanics driving movement, and how movement is controlled, learned, and developed over the lifespan.

The curriculum includes coursework, laboratory research opportunities, and hands-on learning experiences. In addition, at least 11 credits of electives in exercise and movement science are required, giving students some flexibility to tailor the program to their specific interests. Examples
of elective topics include strength and conditioning, leadership, clinical exercise prescription and advanced courses in exercise physiology, psychology and biomechanics.

The EMS science major is a pre-professional program. This means that our students are well prepared for subsequent graduate or professional training in different health-related disciplines such as physical therapy, occupational therapy, medicine, or biomedical research. The major also prepares students for graduate training programs in kinesiology (e.g., exercise physiology, cardiac rehabilitation, biomechanics, physical activity epidemiology, exercise psychology, motor learning). Exercise and movement science graduates may also pursue entry-level careers in the fitness area.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Admission to the Kinesiology-Exercise and Movement Science degree program is limited and competitive. Students must meet the minimum eligibility requirements outlined below to be considered for selection. Students are admitted to the program only once a year, effective for the summer following selection. Once admitted, exercise and movement science students typically spend two years completing their remaining coursework.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in kinesiology are admitted directly to the School of Education with a "preprofessional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in the exercise and movement science degree program within Kinesiology or the athletic training degree program receive a classification of PKN. This classification indicates that a student is interested in one (or both) of these programs, but has not applied and been admitted to the professional part of the undergraduate program.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the School of Education by completing a PreProfessional Application (http://www.education.wisc.edu/soe/ academics/undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the School. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1619)). It is not necessary to be a "pre-professional" student before applying to a professional program. Admission as a "pre-professional" student does not guarantee admission to the professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall. Students may call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of

Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

Prospective applicants must complete prerequisite coursework for eligibility and should make progress toward meeting the School of Education's Liberal Studies requirements. Students typically apply for admission during the sophomore year. Students are admitted only once a year, effective for the summer following admission. Once admitted, exercise and movement science students typically spend two years completing remaining coursework.

Professional program applicants not already enrolled on the UWMadison campus must be admissible to the University to enroll in a School of Education professional program. Thus, program admission is contingent upon admission to the campus. Admission to UW-Madison requires a separate application and admission process. Prospective applicants not already enrolled on the UW-Madison campus are strongly encouraged to contact an academic advisor in Education Academic Services for assistance with planning their applications to both the professional program and to the UW-Madison campus. See Office of Admissions and Recruitment (http://www.admissions.wisc.edu) for application information.

## ELIGIBILITY FOR ADMISSION TO THE PROFESSIONAL PROGRAM

Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

To be eligible for admission, applicants must:

- complete at least 54 credits of college coursework by the end of the spring semester of the application year.
- complete the following prerequisite coursework by the end of the spring semester of the application year.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Biology Sequence |  |  |
| Complete one of the following Biology sequences: |  |  |
| BIOLOGY/ <br> ZOOLOGY 101 <br> \& BIOLOGY/ <br> ZOOLOGY 102 | Animal Biology and Animal Biology Laboratory | 5 |
| BIOLOGY/BOTANY/ ZOOLOGY 151 \& BIOLOGY/BOTANY/ ZOOLOGY 152 | Introductory Biology and Introductory Biology ${ }^{1}$ | 10 |
| BIOCORE 381 <br> \& BIOCORE 382 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory | 5 |
| Advanced Placement (AP) Biology exam score of 4 or $5^{2}$ |  |  |
| International Baccalaureate (IB) Biology exam score of 4 or $5^{3}$ |  |  |
| Chemistry Sequence |  |  |
| Complete one of the following Chemistry sequences: |  |  |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II | 9 |
| CHEM 109 | Advanced General Chemistry | 5 |
| CHEM 115 \& CHEM 116 | Chemical Principles I and Chemical Principles II | 10 |
| Physics Course |  |  |
| Complete one of the following Physics courses: |  |  |
| PHYSICS 103 | General Physics | 4 |
| PHYSICS 201 | General Physics | 5 |
| PHYSICS 207 | General Physics | 5 |
| Kinesiology Course |  |  |
| KINES 119 | Introduction to Kinesiology | 2 |

1 Students who take BIOLOGY/BOTANY/ZOOLOGY 151 at UWMadison or transfer it from another campus must complete both BIOLOGY/BOTANY/ZOOLOGY 151 and BIOLOGY/BOTANY/ ZOOLOGY 152 to be eligible for admission and to complete the degree requirements.
Credit awarded for BIOLOGY/BOTANY/ZOOLOGY 151 via an AP Biology exam score of 4 or 5 fulfills the entire eligibility requirement for admission \& the degree requirements.
3 Credit awarded for BIOLOGY/BOTANY/ZOOLOGY 151 via an IB Biology exam score of 4 or 5 fulfills the entire eligibility requirement for admission \& the degree requirements.

- complete all but two of the prerequisite courses listed above by the end of the fall semester of the application year. Exception: Students enrolled in BIOLOGY/BOTANY/ZOOLOGY 152 during the spring semester of the application year may have this course and up to two additional prerequisites above in progress during the spring semester of the application year. For this purpose, Advanced General Chemistry (CHEM 109) satisfies the full general chemistry requirement
but constitutes one course. BIOLOGY/ZOOLOGY 101 Animal Biology and BIOLOGY/ZOOLOGY 102 Animal Biology Laboratory are counted as two courses in determining eligibility for the program.
- earn a minimum 2.75 cumulative GPA or last 60 credits GPA by the end of the fall semester of the application year (see "Last 60 Credits Rule," below). ${ }^{4}$
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.

4 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## APPLICATION REVIEW AND SELECTION

Applicants to the Exercise and Movement Science Degree Program in Kinesiology will compete for an identified number of admission openings assigned to this program. Each application will be reviewed by at least two academic faculty or staff from the Admissions Committee. Each committee member will independently examine and rate applicants' files on a scale of 1 (do not accept) to 5 (definitely accept) based on the criteria above. Committee members will then share and discuss their ratings and select the final cohort for admission.

## The Admissions Committee will review application files with four key areas in mind:

- Academic Qualifications. The kinesiology program seeks students with strong academic credentials. This includes cumulative undergraduate grade point average (GPA), course selection and trend of college grades.
- Goals. The required personal statement provides an opportunity for students to express their reasons for studying kinesiology and can provide insight into the student's long-term goals.
- Recommendation Letters. Thoughtful letters from teachers or employers addressing the student's interest and experience are beneficial to the selection process.

Recommendation letters should provide information about a student's intellect, imagination, or diligence that is not evident in other parts of the application.

- Other Contributions. The kinesiology program seeks students whose diverse work experience, life experience, stated goals, and cultural background are assets to the learning environment in the kinesiology program.


## PROVISIONAL ADMISSION

Students will be provisionally accepted in April. The offer of admission will be revoked and the student withdrawn from fall Kinesiology courses (typically during July) if any of the following requirements are not met:

- All prerequisite courses completed by the end of the spring semester of the application year.
- Maintenance of a cumulative GPA or last 60-credit GPA of at least 2.75.


## CRIMINAL BACKGROUND INVESTIGATION

Criminal background investigations will be conducted for all students admitted to this program. Detailed instructions on how to complete the required criminal background check will be included in offers of admission. This is not completed until after an applicant has been offered admission.

Results of criminal background checks may be shared with other agencies when required by state code, or with a cooperating school or other agency in which the student has been assigned to complete field experiences. Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. Field site administrators have the right to determine the appropriateness of a student placement.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## ADVISING AFTER ADMISSION

Included with the offer of admission is information about mandatory spring orientation sessions for new majors, led by a departmental advisor. Sequencing of coursework and enrollment in Kinesiology courses will be addressed at these meetings. Students will be authorized to enroll in Kinesiology courses after the orientation meetings are completed. Upon formal admission to the program, advising about the major will be provided by the Department of Kinesiology. Majors are required to meet with the departmental advisor at least once per semester. All questions about School of Education and university requirements should be referred to an advisor in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic
values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The Exercise and Movement Science degree program has five components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Science core coursework offers in-depth study of the basic sciences and mathematics.
- Kinesiology core courses look at how the body responds and adapts to exercise, the role of psychological factors in sports and exercise, mechanics applied to biological systems, and how movement is controlled, learned, and developed over the life span.
- Advanced coursework in Exercise and Movement Science requires at least 11 credits of Kinesiology electives, thus giving students some flexibility to tailor the program to their specific interests.
- Elective classes are generally related to the student's area of study and are taken to reach the minimum of 120 credits.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education
program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits. SCIENCE CORE

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  | 5-10 |
| CHEM 103 <br> \& CHEM 104 | General Chemistry I and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 <br> \& CHEM 116 | Chemical Principles I and Chemical Principles II |  |
| Select one of the following: |  | 4-10 |
| AP or IB Biology score of 4 or above |  |  |
| $\begin{aligned} & \text { BIOLOGY/ } \\ & \text { ZOOLOGY } 101 \\ & \text { \& BIOLOGY/ } \\ & \text { ZOOLOGY } 102 \end{aligned}$ | Animal Biology and Animal Biology Laboratory |  |
| BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 151 <br> \& BIOLOGY/ <br> BOTANY/ <br> ZOOLOGY 152 | Introductory Biology and Introductory Biology |  |


| BIOCORE 381 <br> \& BIOCORE 382 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory |  |
| :---: | :---: | :---: |
| Select one of the following: |  | 4-5 |
| PHYSICS 103 | General Physics |  |
| PHYSICS 201 | General Physics |  |
| PHYSICS 207 | General Physics |  |
| Select one of the following: |  | 4-5 |
| PHYSICS 104 | General Physics |  |
| PHYSICS 202 | General Physics |  |
| PHYSICS 208 | General Physics |  |
| PSYCH 202 | Introduction to Psychology | 3-4 |
| Code | Title | Credits |
| Complete the following: |  |  |
| MATH 221 or MATH 211 | Calculus and Analytic Geometry 1 Calculus | 5 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences | 3 |
| or PSYCH 210 | Basic Statistics for Psychology |  |
| ANAT\&PHY 335 | Physiology (formerly Physiol 335) | 5 |
| ANAT\&PHY 337 | Human Anatomy (formerly Kines 337) ${ }^{1}$ | 3 |
| ANAT\&PHY 338 | Human Anatomy Laboratory ${ }^{1}$ | 2 |
| 1 Effective fall 2017, Anatomy/Kines 328 and 329 were replaced by Kines 337 and 338. These courses were subsequently moved to a new department as ANAT\&PHY 337 and ANAT\&PHY 338. |  |  |

## KINESIOLOGY CORE

| Code | Title | Credits |
| :--- | :--- | ---: |
| KINES 116 | First Aid and Basic Life Support ${ }^{12}$ | 2 |
| KINES 119 | Introduction to Kinesiology | 2 |
| KINES 300 | Practicum in Kinesiology | 3 |
| KINES 314 | Physiology of Exercise | 4 |
| KINES 318 | Biomechanics of Human Movement | 3 |
| KINES 330 | Research in Kinesiology | 2 |
| KINES 350 | Introduction to Exercise Psychology $_{1}$ | 3 |
| KINES 361 | Motor Learning and Performance | 3 |

1 KINES 116, KINES 119 and KINES 350 may be taken prior to admission into the professional part of the undergraduate program.
2 Basic Life Support for Healthcare Providers certification or CPR/ AED for Professional Rescuers certification may substitute for the CPR/AED portion of KINES 116. First Aid certification may substitute for the first aid portion of KINES 116. Students must present both certifications (CPR/AED and first aid) to exempt from KINES 116.

## EXERCISE \& MOVEMENT SCIENCE OPTION CORE COURSE REQUIREMENTS

[^50]
## ELECTIVE COURSEWORK

Select additional courses to reach the minimum of 120 credits.

## CONTINUATION REQUIREMENT: DEPARTMENT OF KINESIOLOGY

All students admitted to undergraduate programs in the Department of Kinesiology, including Physical Education, must maintain a cumulative grade point average (GPA) of at least 2.75, based on all UW-Madison campus coursework. Consult the School of Education's Academic Policies and Procedures (p. 1381) for additional information about the Continuation requirement.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

These requirements are based on UW-Madison coursework.

- Must earn a minimum 2.75 cumulative grade point average. Graduation GPA may be modified by the Last 60 Credits Rule (p. 1381).
- Major residency: Students must complete a minimum of 15 credits from the Department of Kinesiology while enrolled on the UW-Madison campus.
- Senior residency: Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- Must complete a minimum of 120 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| WorkAbroad/Study Away programs. |  |
|  | Undergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. (Knowledge) Define and explain major concepts across the breadth of kinesiology.
2. (Application) Apply their knowledge related to movement and physical activity techniques and approaches in clinical and applied settings to enhance human health and quality of life.
3. (Critical Thinking) Demonstrate competence in the scientific research process, which includes the ability to consume, analyze, interpret and critically review scientific literature.
4. (Communication) Develop appropriate styles of written and oral communication to use both within and outside of the scientific community.

## ADVISING AND CAREERS

## EXERCISE AND MOVEMENT SCIENCE ADVISING

Students not yet admitted to Kinesiology: Exercise and Movement Science meet with advising staff in Education Academic Services (EAS) and/or the Office of Undergraduate Recruitment and Retention (OURR), see below. Once admitted to the professional program, students are also advised in the Department of Kinesiology.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors
provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Kinesiology can be found on the department's website. (http:// www.education.wisc.edu/kinesiology)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## KINESIOLOGY: EXERCISE \& MOVEMENT SCIENCE

## REQUIREMENTS

Courses listed here are part of the Kinesiology, B.S. Degree (p. 1619) requirements.

| Select at least 11 credits from the following: |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| KINES 325 | Group Development and Behavior Management | 3 |
| KINES 360 | Lifespan Motor Development | 3 |
| KINES 390 | Principles of Exercise Leadership | 2 |
| KINES 427 | Fitness Testing and Exercise Prescription | 3 |
| KINES/CURRIC 501 | Health Information for Teachers | 3 |
| KINES 508 | Workshop in Kinesiology (Topic: <br> Theories and Strategies for Behavioral Change) | 3 |
| KINES/MEDICINE/ NURSING 523 | Clinical Exercise Testing \& Training | 3 |
| KINES/ <br> NUTR SCI 525 | Nutrition in Physical Activity and Health | 3 |
| KINES 527 | Principles of Strength and Conditioning | 3 |
| KINES 531 | Neural Control of Movement | 3 |
| KINES 614 | Biological Factors Influencing Exercise Performance | 3 |
| KINES 615 | Laboratory Techniques in Exercise Physiology | 2 |
| KINES 618 | Biomechanics | 2-3 |


| Select one of the following: |  |  |
| :--- | ---: | ---: |
| Code | Title | Credits |
| KINES 355 | Socio-Cultural Aspects of Physical <br> Activity | 3 |
| KINES 516 | Physical Activity for Diverse <br> Abilities | 3 |
| KINES 521 | Physical Activity and Health | 3 |

## PHYSICAL EDUCATION, B.S.

The bachelor of science degree in physical education prepares individuals for careers in a variety of areas. At the heart of the degree is the physical education teacher education program, which has been preparing excellent physical educators since 1911. The bachelor of science degree in physical education is the key to obtaining physical education teaching positions in Wisconsin, other states, and internationally.

A degree in physical education also readies individuals for teaching positions outside of school settings. Graduates of the program have pursued successful careers in many positions unrelated to teaching. Program alumni are well represented in the areas of coaching and officiating, recreation, fitness, healthcare, and sport management.

The careers of some of our physical education alumni are highlighted here. (http://guide.wisc.edu/undergraduate/education/kinesiology/ physical-education-bs/\%20https://kinesiology.education.wisc.edu/pete/ alumni)

UW-Madison's PE program has recently been redesigned to address emerging trends in physical education pedagogy. Critical elements of the new curriculum include:

- A cutting-edge conceptual approach to teaching physical education
- "Hands-on" guided teaching
- An emphasis on urban, inclusive, and multicultural settings
- Community building and behavior management activities
- Completion of the degree in four years

Physical education students also benefit from:

- Nationally and state recognized faculty and staff members
- Certification options in Adapted Physical Education and Health Education
- Small class sizes and advising groups
- A strong science and technology based curriculum
- Instruction within the nationally ranked UW-Madison School of Education

Graduates are eligible to apply for a Wisconsin Physical Education license at the Early Childhood through Adolescence (Pre-K through 12) level.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Undergraduate physical education students generally apply to the professional part of the physical education degree program in their sophomore year. Currently, students are admitted to the program twice a year, effective for the fall or spring semester following selection. Once admitted, students typically spend five semesters completing their remaining coursework.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in physical education are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in physical education receive a pre-classification of PED. This classification indicates that a student is interested in physical education, but has not applied and been admitted to the professional part of the undergraduate program.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the School of Education by completing a PreProfessional Application (http://www.education.wisc.edu/soe/ academics/undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the School. This GPA may be modified by the Last 60 Credits rule (detailed below (p. 1625)). It is not necessary to be a "pre-professional" student before applying to a professional program. To remain in good standing, students with a PED classification must maintain campus and semester GPAs of 2.75, as modified by the Last 60 Credits rule. Admission as a "pre-professional" student does not guarantee admission to the professional program.

It is strongly recommended that students interested in physical education consult with an advisor in the Kinesiology department. It would also be helpful to speak with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall. Students may call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the University to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet
all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

Certification to teach physical education requires that a student be admitted into the professional part of the degree program. The School of Education admits students into the physical education program twice a year, effective for the fall or spring semester following selection. Resources limit the number of students who can be served by the UWMadison Physical Education Teacher Education Program. In recent years the physical education program has been able to accommodate all qualified applicants; however, if the number of qualified applicants to physical education exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## PROGRAM ADMISSION ELIGIBILITY REQUIREMENTS

Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be considered for admission to the professional program, students must meet the following criteria:

- Total Credits/Prerequisite Coursework: Earn 40 or more credits by the end of the semester in which the application is submitted, including the following prerequisite courses:
- KINES 116 First Aid and Basic Life Support (2 cr), or exemption. Basic Life Support for Healthcare Providers certification or CPR/AED for Professional Rescuers certification may substitute for the CPR/AED portion of Kines 116. First Aid certification may substitute for the first aid portion of Kines 116. Students possessing current certifications may submit documentation and request a waiver of KINES 116. Students must present both certifications (CPR/AED and first aid) to exempt from the class.
- KINES 119 Introduction to Kinesiology (2 cr)
- Cumulative Grade Point Average: Earn a minimum 2.75 (on a 4.00 scale) cumulative GPA on all college coursework attempted or a 2.75 cumulative GPA based on the Last 60 Credits Rule (detailed below (p. 1625)) by the end of summer of the application year. ${ }^{1}$ This 2.75 GPA must be maintained through the semester during which the application is submitted to remain eligible for admission.
- Submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this
program. The exam requirement was officially removed by the School of Education on November 15, 2017.

1
A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.


#### Abstract

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) Currently, retention and graduation GPAs are based on all credits attempted at UW-Madison as an undergraduate student. If each semester's GPA after admission to the program meets the required GPA for retention, the student will be allowed to continue and complete the program. More information on this rule is available here (p. 1381).


## ADMISSION CRITERIA

The Admissions Committee will review application files with three key areas in mind:

- Academic Qualifications: The Department of Kinesiology and the Physical Education Teacher Education Program seek students with strong academic credentials. This includes cumulative undergraduate grade point average (GPA), course selection, and trend of college grades.
- Goals: The required personal statement provides an opportunity for students to express their reasons for pursuing a career in physical education and what has shaped their desire to do so. The admissions committee expects applicants to have a foundational understanding of physical education and to have a sense of some of the issues that physical educators face. Observing or volunteering in physical education settings can help applicants demonstrate an understanding of the field.
- Other Contributions: The Department of Kinesiology and the Physical Education Teacher Education Program seek students whose diverse work experiences, life experience, stated goals, and cultural background are assets to the learning environment in both the department and the professional program.


## APPLICATION REVIEW AND SELECTION

Applicants to the Physical Education Teacher Education Program will compete for a specific number of openings in the program. Each application will be reviewed by at least two academic faculty or staff from the Admissions Committee. Each committee member will independently
examine and rate applicants' files on a scale of 1 (do not accept) to 5 (definitely accept) using a holistic view based on the criteria above. The committee members will then share and discuss their ratings and select the final cohort for admission.

Students will be provisionally accepted in December or May. The offer of admission will be revoked and the student withdrawn from subsequent Kinesiology courses (typically during January or August) if any of the following requirements are not met:

- All prerequisite courses completed by the end of the semester in which the application is submitted.
- Maintenance of a cumulative GPA of last 60-credit GPA of at least 2.75.

If there are more eligible applicants than spaces available, eligible applicants will be rank-ordered for admission based on

1. cumulative GPA or 60-credit GPA and
2. nonacademic factors.

## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK-12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The Physical Education program has six components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Science Core coursework offers in-depth study of the basic sciences and mathematics.
- Kinesiology Core courses look at how the body responds and adapts to exercise, the role of psychological factors in sports and exercise, mechanics applied to biological systems, and how movement is controlled, learned, and developed over the life span.
- The Physical Education requirements focus on advanced study in Physical Education pedagogy, including teaching methods coursework and field experiences in the schools.
- Education coursework includes an examination of the school's relationship to our society and also of the processes by which students grow and learn.
- Elective coursework is taken to reach the minimum of 120 credits required for the degree.

While not required, teaching certifications in Adapted Physical Education (https://kinesiology.education.wisc.edu/home/adapted-fitness-personal-training-2) and Health Education (p. 1616) are also offered.

## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education
program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p.1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits.
SCIENCE AND KINESIOLOGY CORE COURSES
With the exception of KINES 116, KINES 119 and KINES 121, Kinesiology coursework must be taken after admission into the professional part of the undergraduate program.

| Code | Title | Credits |
| :---: | :---: | :---: |
| MATH 112 | Algebra | 3 |
| CHEM 103 | General Chemistry I | 4-5 |
| or CHEM 108 | Chemistry in Our World |  |
| ANAT\&PHY 337 | Human Anatomy (formerly Kines 337) ${ }^{1}$ | 3 |
| ANAT\&PHY 338 | Human Anatomy Laboratory ${ }^{1}$ | 2 |
| KINES 235 | Human Physiology and Health ${ }^{2}$ | 4 |
| KINES 116 | First Aid and Basic Life Support ${ }^{3}$ | 2 |
| KINES 119 | Introduction to Kinesiology | 2 |
| KINES 314 | Physiology of Exercise | 4 |
| KINES 318 | Biomechanics of Human Movement | 3 |
| KINES 350 | Introduction to Exercise Psychology | 3 |
| KINES 361 | Motor Learning and Performance | 3 |

Basic Life Support for Healthcare Providers certification or CPR/ AED for Professional Rescuers certification may substitute for the CPR/AED portion of KINES 116. First Aid certification may substitute for the first aid portion of KINES 116. Students must present both certifications (CPR/AED and first aid) to exempt from KINES 116.

## PHYSICAL EDUCATION COURSES

Effective for Summer, 2018 program admission.

| Code | Title | Credits |
| :--- | :--- | ---: |
| KINES 121 | Foundations of Physical Education | 2 |
| KINES 315 | Assessment and Research in <br> Physical Activity Pedagogy | 3 |
| KINES 316 | Adapted Physical Activity |  |
| KINES 325 | Group Development and Behavior <br> Management | 3 |
| KINES 353 | Health and Physical Education in a <br> Multicultural Society | 3 |
| KINES 370 | Planning, Teaching and Assessment <br> in Physical Education | 2 |
| KINES 371 | Methods of Teaching PK-12 Dance <br> and Gymnastics | 3 |
| KINES 372 | Methods of Teaching PK-12 <br> Educational Games and Fitness | 3 |
| KINES 373 | Methods of Teaching Secondary <br> Sport Concepts and Skills | 3 |
| KINES 412 | Organization and Administration of <br> Physical Education | 3 |
| KINES/CURRIC 478 | Elementary School Physical <br> Education Student Teaching | 2 |
| KINES/CURRIC 479 | Middle School or High School <br> Physical Education Student <br> Teaching | 6 |

## PROFESSIONAL EDUCATION COURSES

| Code | Title | Credits |
| :---: | :---: | :---: |
| Learning (Minimum of 3 credits) |  |  |
| ED PSYCH 301 | How People Learn | 3 |
| Foundations of the Profession: (Minimum of 3 credits) |  |  |
| ED POL 300 or ED POL/ HISTORY 412 | School and Society <br> History of American Education | 3 |
| Literacy, Including Reading: |  |  |
| CURRIC 305 | Integrating the Teaching of Reading with Other Language Arts (also meets Communication Part B requirement) | 3 |

## ADDITIONAL CERTIFICATION OPTIONS

Physical Education students are encouraged to increase their content knowledge and teaching capabilities through additional training.

Although not required, teaching certifications are available in health education and adapted physical education. Students may pursue more than one additional certification.

## HEALTH EDUCATION MINOR, 30 CREDITS.

Contact Cindy Kuhrasch, ckuhrasch@education.wisc.edu, for additional information about the Health Education minor (p. 1616).

## ADAPTED PHYSICAL EDUCATION, 15 CREDITS.

Contact Tim Gattenby, gattenby@education.wisc.edu, 608-262-9562, for additional information regarding Adapted Physical Education (https:// kinesiology.education.wisc.edu/home/adapted-fitness-personal-training) at UW-Madison.

Certification in Adapted Physical Education requires:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Required Courses |  |  |
| KINES 316 | Adapted Physical Activity (required of all PE majors) | 3 |
| KINES 300 | Practicum in Kinesiology (Adapted Sport and Fitness:Adults) | 1-3 |
| KINES 364 | Assessment and Programming in Adapted Physical Education | 3 |
| KINES 365 | Practicum: Adapted Physical Education (Children) | 2 |
| RP \& SE 300 | Individuals with Disabilities | 3 |
| Select one elective. Requires advisor approval. |  |  |
| RP \& SE 330 | Behavior Analysis: Applications to Persons with Disabilities | 3 |
| RP \& SE 450 | Collaborating with Families of Individuals with Disabilities | 3 |
| RP \& SE 470 | Individuals with Learning and Behavioral Disabilities | 3 |
| RP \& SE 505 | Biological, Psychosocial, and Vocational Aspects of Disabilities | 3 |
| RP \& SE/ CURRIC 506 | Strategies for Inclusive Schooling | 3 |
| CS\&D 110 | Introduction to Communicative Disorders | 3 |
| CS\&D 240 | Language Development in Children and Adolescents | 3 |
| CS\&D 424 | Sign Language I | 2 |
| PSYCH 405 | Abnormal Psychology ${ }^{1}$ | 3-4 |
| PSYCH 512 | Behavior Pathology-Psychoses | 3 |

1 Effective fall 2017, the course number of Abnormal Psychology changed from Psych 509 to PSYCH 405.

## CONTINUATION REQUIREMENT: DEPARTMENT OF KINESIOLOGY

All students admitted to undergraduate programs in the Department of Kinesiology, including Physical Education, must maintain a cumulative grade point average (GPA) of at least 2.75, based on all UW-Madison campus course work. Consult the School of Education's Academic Policies and Procedures (p. ) for additional information about the continuation requirement.

## GPA AND OTHER GRADUATION REQUIREMENTS

GRADUATION REQUIREMENTS

Based on UW-Madison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule.
- 2.75 cumulative grade point average across all professional education courses (excluding practicum and student teaching).
- 2.75 cumulative grade point average in the major.
- A minimum of 120 credits.
- Major residency: Degree candidates must complete at least 15 credits of upper-level major coursework (numbered 300-699) in residence on the UW-Madison campus.
- Senior residency: Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum are considered part of the 30 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $K-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available under Certification/Licensure (p. 1631).

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. <br> formats and credits earned in UW-Madison Study |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. (Standard 1) Incorporates Understanding of Human Learning and Development. Teachers design learning environments and pedagogical practices for students that are grounded in concepts and interpretive frameworks provided by disciplines that study human development and learning.
2. (Standard 2) Understands Social Context of Schooling. Teachers understand how local, state, national, and global social and political contexts differentially affect schooling and its outcomes for students.
3. (Standard 3) Demonstrates Sophisticated Curricular Knowledge. Teachers understand the central concepts, assumptions, tools of inquiry, ways of reasoning, uncertainties, and controversies of exercise science and physical educations.
4. (Standard 4) Demonstrates Pedagogical Knowledge in Specific Domains. Teachers are knowledgeable about the problems, challenges, and opportunities that commonly arise as students develop understanding or competence in physical education.
5. (Standard 5) Explains and Justifies Educational Choices. Teachers can articulate and defend their curricular and instructional choices with sound ethical and pedagogical justifications.
6. (Standard 6) Connects School and Community. Teachers use the knowledge and abilities necessary for collaboration with individuals, groups, and agencies within the school and community. They base instruction of students on an understanding of curricular goals, subject matter, and the community, and help the students make connections between community-based knowledge and school knowledge.
7. (Standard 7) Understands and Adapts to Multiple Forms of Communication. Teachers understand and adapt to students' multiple forms of expressing and receiving experiences, ideas, and feelings.
8. (Standard 8) Employs Varied Assessment Processes. Teachers understand and thoughtfully use formal and informal evaluation strategies to assess students' achievements, strengths, challenges, and learning styles for continuous development.
9. (Standard 9) Manages Learning Environment. Teachers establish and maintain an environment that engages students in learning while providing for their physical and socio-emotional well-being.
10. (Standard 10) Employs Varied Instructional Strategies. Teachers understand and use a variety of instructional strategies to enhance students' learning.
11. (Standard 11) Uses Technologies. Teachers appropriately incorporate new and proven technologies into instructional practice. They understand the major social, cultural, and economic issues surrounding their implementation.
12. (Standard 12) Accommodates for All Students. Teachers design educational environments and use instructional practices that accommodate students' achievements, strengths, challenges, interests, and learning styles.
13. (Standard 13) Is a Reflective Practitioner. Teachers are reflective practitioners who evaluate the effects of their assumptions, choices, and actions on others (students, parents, and other professionals in the learning community) and who actively seek out opportunities to grow professionally. They examine assumptions enmeshed in ways of thinking and in familial, institutional, and cultural lore, and practices.

14: (Standard 14) Relates Well with Students, Families, and Communities. Teachers relate to students, families, and community members in a fair, respectful, and sensitive manner. They show an appreciation for the cultural diversity of our society.
15. (Standard 15) Understands Legal Rights and Responsibilities. Teachers understand the legal rights and responsibilities of professional educators and the law as it applies to their specific domains of teaching.

## ADVISING AND CAREERS

## ADVISING

## PHYSICAL EDUCATION ADVISING

Prospective off-campus and on-campus physical education students will meet with Dan Timm in the kinesiology department. Students considering physical education should schedule an appointment with Dr. Timm as soon as possible; call 608-262-0259. Pre-admission advising is conducted by the kinesiology department and staff at Education Academic Services (EAS), see below.

Students with either a pre-certification (PED) or certification (BSPE) classification are required to meet with their department advisor at least once per semester. Mandatory advising meetings are conducted every semester, just before enrollment begins for the following semester.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each
student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS) <br> 105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651 <br> www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)

The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education,
service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Kinesiology can be found on the department's website. (http:// www.education.wisc.edu/kinesiology)

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background
check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, $3-5$ lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31, 2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student
teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a " D ") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules "PI 34," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The

Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.

- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall. Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## REHABILITATION PSYCHOLOGY AND SPECIAL EDUCATION

The Department of Rehabilitation Psychology and Special Education prepares personnel, through professional education, research, and service, for the education and/or rehabilitation of people of all ages with disabilities. Instruction and research emphasize educational and behavioral assessment and treatment of children, as well as counseling, assessment, case management, advocacy, and job placement with adults to facilitate improved personal, social, and vocational adjustment.

Targeted populations encompassed by the program include adults and children with physical disabilities, emotional disabilities, intellectual disabilities, learning disabilities, traumatic brain injuries, alcohol and other drug abuse, and persons involved with the criminal justice system.

Special education and rehabilitation psychology are intrinsically related, both in basic objectives and in professional education and research. The instructional program includes core study areas, practica, and research experiences relevant to the development of various professional roles.

Three undergraduate programs are available to undergraduate students:

- A cross-categorical teacher certification program in Special Education. (p. 1640)
- A pre-professional undergraduate program in Rehabilitation Psychology (p. 1634).
- A Special Education/Elementary Education dual major (http:// guide.wisc.edu/undergraduate/education/curriculum-instruction/ elementary-bse/\#requirementstext) is also being offered jointly with the Department of Curriculum and Instruction.


## DEGREES/MAJORS/CERTIFICATES

- Rehabilitation Psychology, B.S. (p. 1634)
- Special Education, BSE (p. 1640)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Rehabilitation Psychology and Special Education can be found on the department's website. (http://rpse.education.wisc.edu)

## REHABILITATION PSYCHOLOGY, B.S.

Rehabilitation Psychology is the academic home to many students interested in the health or helping professions. Rehab Psych students enjoy working with people with disabilities. They gravitate toward psychology and other coursework in the social sciences.

In this major, students learn how to promote and support the independence and full inclusion of people with disabilities in employment and the community. Various types of disabilities examined in the major include physical, mental, intellectual, emotional, and developmental disabilities. Graduates are prepared to provide quality entry-level general services in a variety of community settings, including advocacy, behavioral support, independent living, and supported employment.

Many students go on to complete graduate programs in rehabilitation counseling, mental health counseling, occupational therapy, physical therapy, nursing, special education, social work, and other human services and health professions.

The rehabilitation psychology program emphasizes course work in the following areas:

- Psychology and educational psychology
- Sociology and social work
- Rehabilitation services and community supports for individuals with disabilities
- Biological, psycho-social, and vocational aspects of working with individuals with disabilities
- Positive psychology and health promotion for individuals with disabilities
- Working collaboratively with community agencies advocating and supporting individuals with disabilities

The culminating experience in the degree program is the communitybased internship. Students complete six credits of internship working with agencies that serve individuals with disabilities. Graduates receive a bachelor of science degree with a major in rehabilitation psychology.

Visit the departmental website for more information about the undergraduate program (http://rpse.education.wisc.edu/rpse/ programs/undergraduate-programs/rehabilitation-psychology-undergraduate-program), the field of rehabilitation psychology (https:// rpse.education.wisc.edu/rpse/programs/graduate-degree-programs/ rehabilitation-psychology-graduate-program/the-profession-of-rehabilitation-counseling), and what current students have to say (http:// youtu.be/Zu0u1MOjvB4?list=PL9F9013685146C73A) about the program.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Students are admitted to the rehabilitation psychology undergraduate program twice a year, for the fall and spring semesters. Students usually apply for admission to the rehabilitation psychology program during their sophomore year. Selection to the program will be made at the end of the fall and spring semesters, after the previous semester grades are reported.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in rehabilitation psychology are admitted directly to the School of Education with a "pre-professional" classification. This classification indicates that a student is interested in a program offered by the School, but has not applied and been admitted to the professional program. Students interested in rehabilitation psychology receive the "pre-professional" classification of PSR.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the School of Education by completing a PreProfessional Application (http://www.education.wisc.edu/soe/ academics/undergraduate-students/academic-program-admission). A minimum GPA of 2.5 , based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified
by the Last 60 Credits rule (detailed below (p. 1636)). It is not necessary to be a "pre-professional" student before applying to a professional program. Admission as a "pre-professional" student does not guarantee admission to the professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall. Students may call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the University to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an School of Education advisor in advance of their application. Consultations with advisors are available in person and via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION ELIGIBILITY FOR ADMISSION TO THE PROFESSIONAL PROGRAM

Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be eligible for admission, applicants must:

- complete at least 54 credits of transferable college-level coursework by the end of the semester the application is filed.
- complete RP \& SE 300 Individuals with Disabilities by the end of the program-application semester.
- earn a cumulative grade point average of 2.5 (on a 4.0 scale) based on all transferable college-level coursework attempted. ${ }^{1}$
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/academic-program-admission) page.

1
A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to the program. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## APPLICATION REVIEW AND SELECTION

Selection to the program will be made at the end of the fall and spring semesters, after the previous semester grades are reported. The number of applicants admitted each semester will be determined by the faculty according to available resources. While all eligible applicants have been admitted to the professional program in recent years, this may not always be the case; see stipulations below. Admission is not final until all acceptance related materials are received by EAS and criminal background investigation results are reviewed.

If the applicant pool exceeds the resources available for any admission period, admission will become limited and competitive. Selection will be based upon cumulative grade point average. Remaining students will be placed on a waiting list based on ranked order of cumulative grade point average.

## CRIMINAL BACKGROUND INVESTIGATION

Criminal background investigations will be conducted for all students admitted to this program. Detailed instructions on how to complete the required criminal background check will be included in offers of admission. This is not completed until after an applicant has been offered admission.

Results of criminal background checks may be shared with other agencies when required by state code, or with a cooperating school or other agency in which the student has been assigned to complete
field experiences. Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. Field site administrators have the right to determine the appropriateness of a student placement.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

## General

Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The bachelor of science (B.S.) degree program in rehabilitation has four components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Related coursework comes from departments related to Rehabilitation Psychology—Psychology, Educational Psychology, Sociology, Social Work, and Educational Policy Studies.
- Rehabilitation Psychology coursework offers an in-depth study of rehabilitation psychology, including multiple opportunities for supervised field work. In addition, at least 6 credits of electives in rehabilitation psychology are required, giving students some flexibility to tailor the program to their specific interests.
- Elective coursework is taken to meet the minimum of 120 credits required for the degree.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements ( $p$. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits. RELATED COURSE REQUIREMENTS PSYCHOLOGY/EDUCATIONAL PSYCHOLOGY
Complete 18 credits selected from Educational Psychology (http:// guide.wisc.edu/courses/ed_psych) and/or Psychology (http:// guide.wisc.edu/courses/psych) to include PSYCH 405 Abnormal Psychology

Note: Effective fall 2017, the course number of Abnormal Psychology changed from Psych 509 to PSYCH 405.

## SOCIOLOGY/SOCIAL WORK

Complete 9 credits selected from Sociology (http://guide.wisc.edu/ courses/soc) and/or Social Work (http://guide.wisc.edu/courses/ soc_work). Recommended areas include social disorganization, deviant behavior, alcohol and other drug abuse, community development, and issues in social welfare.

## EDUCATIONAL POLICY STUDIES

Complete a 3-credit course from Educational Policy Studies (http:// guide.wisc.edu/courses/ed_pol).

| Code | Title | Credits |
| :--- | :--- | ---: |
| Recommended Courses |  |  |
| ED POL 300 | School and Society | 3 |
| ED POL 460 | Immigration, Education, and Equity | 3 |
| ED POL 500 | Topics on Social Issues and | 3 |
| ED POL/ | Education | 3 |
| ANTHRO 570 | Anthropology and Education |  |

## REHABILITATION PSYCHOLOGY COURSE REQUIREMENTS DIDACTIC CORE <br> Complete the following 18 credits:

| Code | Title | Credits |
| :--- | :--- | ---: |
| RP \& SE 300 | Individuals with Disabilities | 3 |
| RP \& SE 500 | Rehabilitation-Counseling <br> Psychology: Foundations | 3 |
| RP \& SE 501 | Rehabilitation-Counseling <br> Psychology: Applications | 3 |
| RP \& SE 505 | Biological, Psychosocial, and <br> Vocational Aspects of Disabilities | 3 |
| COUN PSY 650 | Theory and Practice in Interviewing | 3 |
| RP \& SE 660 | Special Topics (Health Promotion <br> for Disability and Chronic Illness) | 3 |

## SUPERVISED FIELD EXPERIENCE

Students are required to take 6 credits of RP \& SE 630 Internship in Rehabilitation or Special Education; once in conjunction with RP \& SE 501. The remaining 3 credits may be completed in another semester.

## REHABILITATION PSYCHOLOGY AND SPECIAL EDUCATION ELECTIVES

Complete 6 credits from the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| RP \& SE 310 | Positive Psychology and Well Being | 3 |
| RP \& SE 330 | Behavior Analysis: Applications to <br> Persons with Disabilities | 3 |
| RP \& SE 401 | Augmentative and Alternative <br> Communication and Assistive | 1 |
|  | Technology for Students with <br> Disabilities |  |
| RP \& SE 402 | Methods in Teaching Functional <br> Skills | 1 |
| RP \& SE 405 | Current Topics in Special Education | 1 |
| RP \& SE 660 | Special Topics (Positive Psychology, <br> Substance Abuse topics only) | 3 |

The course options listed below can also be applied toward this requirement, but only if taken summer 2017 or earlier. These include any courses from the departments of Rehabilitation Psychology and Special Education (http://guide.wisc.edu/courses/rp_se), Counseling Psychology (http://guide.wisc.edu/courses/coun_psy), Psychology (http://guide.wisc.edu/courses/psych), Educational Psychology (http:// guide.wisc.edu/courses/ed_psych), Sociology (http://guide.wisc.edu/ courses/soc), Social Work (http://guide.wisc.edu/courses/soc_work), and the following:

| Code | Title | Credits |
| :--- | :--- | ---: |
| KINES/CURRIC 501 | Health Information for Teachers | 3 |
| KINES/CURRIC/ | Organization and Administration of | 3 |
| ELPA 541 | School Health Programs |  |
| KINES/CURRIC 561 | Teacher Education in Human <br> Sexuality | 3 |
| KINES/CURRIC 567 | Issues, Materials and Methods in <br> Health Education |  |
| KINES 508 | Workshop in Kinesiology |  |

1 The only topic accepted to meet the requirement is Adaptation of Physical Education Programs.

## ELECTIVE COURSEWORK

Complete additional coursework to reach the minimum of 120 credits.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Based on UW-Madison coursework.

- 2.50 minimum cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.50 cumulative grade point average in all major coursework. This GPA includes all coursework from the RP \& SE department and COUN PSY 650.
- Major Residency. The rehabilitation psychology program requires that students complete 15 credits of the Didactic

Core and Supervised Field Experience coursework while in residence on the UW-Madison campus.

- Senior Residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- Total Credits. A minimum of 120 degree credits are required for graduation.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Analyze complex social issues using skills gained through the study of communication, quantitative reasoning, humanities, social sciences, natural sciences, ethnic studies, history and global issues.
2. Understand the concept of disability in American society and demonstrate basic knowledge of issues that affect education, rehabilitation, and healthcare services for individuals with chronic illnesses and disabilities.
3. Identify basic theories in the field of psychology and recognize the importance of theoretical foundations in psychology for the study of rehabilitation, disability, and health.
4. Successfully engage with the healthcare and rehabilitation services professional community to develop knowledge of the health and human services delivery systems, and pre-professional skills in communication, teamwork, problem solving, and ethical issues.
5. Prepared for graduate study in a variety of health and human service fields related to disability and rehabilitation, or for entry-level positions in a variety of disability and related human services agencies.

## ADVISING AND CAREERS

## REHABILITATION PSYCHOLOGY ADVISING

Students not yet admitted to rehabilitation psychology meet with their assigned advisor in Education Academic Services (EAS) and/ or the Office of Undergraduate Recruitment and Retention (OURR), see below. Students are assigned an additional departmental advisor when admitted to the professional component of their degree program.. For general information about the program and degree requirements, contact Virginia Waddick, RP \& SE Student Services Coordinator, vwaddick@education.wisc.edu, 608-263-4608.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field
placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## ADDITIONAL RESOURCES

Students interested in occupational and physical therapy may also want to consult the following resources about graduate programs:

- Center for Pre-Health Advising (https://prehealth.wisc.edu)
- Occupational Therapy at UW-Madison: Advising Video and Program Information (https://www.youtube.com/watch? v=TIdmMjPKWRI\&feature=youtu.be)
- Physical Therapy at UW-Madison (http://www.med.wisc.edu/ physical-therapy-program/main/48437)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Rehabilitation Psychology and Special Education can be found on the department's website. (http://rpse.education.wisc.edu)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## SPECIAL EDUCATION, BSE

The special education program is the academic home to many students who enjoy working with children, and especially children with disabilities. Special education graduates enter a high-need field with an almost 100\% job placement rate after graduation. Employment opportunities are available all across the country.

The special education teacher certification program prepares educators to serve as resources and advocates for persons with disabilities and their families. This includes being a leader, collaborating with others, and working creatively within and outside the schools to create inclusive educational experiences to improve the quality of life for individuals with disabilities and their families.

The special education program prepares students to work effectively across disability categories including intellectual and developmental disabilities, learning disabilities, and emotional/behavioral disabilities. The program emphasizes course work and experiences in elementary, middle, and high schools with students who have a wide range of abilities, including students with severe disabilities.

Graduates receive a Bachelor of Science degree with a major in Special Education and are eligible to apply for a Wisconsin cross-categorical Special Education license at the Middle Childhood through Early Adolescence level (ages 6-12/13), and also at the Early Adolescence through Adolescence level (ages 10-21).

The Special Education program emphasizes coursework in areas including:

- Assessing learning needs in all core academic areas
- Creating individualized education plans
- Implementing instructional strategies for helping students with a variety or abilities succeed
- Using assistive technology
- Understanding behavior and intervention strategies for social and academic success
- Diversity issues in special education
- Working collaboratively with teachers and other school professionals to create successful inclusive learning environments

Students learn about these topics through a four-semester sequence of coursework, practicum experiences, and student teaching experiences in elementary, middle, and high schools.

Visit the departmental website for more information about the undergraduate program options (http://rpse.education.wisc.edu/ rpse/programs/undergraduate-special-education-program) in Special Education.

## ELEMENTARY EDUCATION AND SPECIAL EDUCATION DUAL MAJOR CERTIFICATION PROGRAM

Students interested in Special Education may want to consider another program option that certifies students in both Elementary Education and Special Education. The job placement rate for students graduating from this program is almost $100 \%$. Employment opportunities are available all across the country.

The Elementary-Special Education teacher certification program prepares educators who foster high academic achievement in all children particularly students of color, students from minoritized racial, cultural, linguistic and socioeconomic backgrounds, as well as students with disabilities. The program helps students become leaders who collaborate and work creatively within and outside schools to foster inclusive educational experiences for all pupils, including those with disabilities. Program graduates understand the important role that families play in supporting students' development and achievement.

This program emphasizes collaboration, with training in both Elementary and Special Education methodologies. It focuses on inclusion and gaining a strong background in working with students across disability categories, including learning disabilities, emotional/behavioral disabilities, and other high incidence disabilities.

Graduates receive a Bachelor of Science degree and are eligible to apply for both a Wisconsin Elementary Education license at the Middle Childhood through Early Adolescence level (ages 6-12/13), and a crosscategorical Special Education license at the Middle Childhood through Early Adolescence level.

The Elementary Education-Special Education program emphasizes course work in areas including:

- Recognizing how our backgrounds and experiences shape thinking and actions; reflecting and adapting to best serve students
- Assessing learning needs in all core academic areas
- Creating individualized education plans
- Understanding behavior and intervention strategies for social and academic success
- Diversity and social justice in education
- Working collaboratively with teachers and other school professionals to create successful inclusive learning environments

Students learn about these topics through a four-semester sequence of course work, practicum experiences and student teaching experiences in elementary and middle schools. The sequence begins in the fall after program admission.

Information about requirements and application procedures for the Elementary-Special Education dual teacher certification program is available in the Elementary Education (p. 1457) section of the Guide. The RP \& SE departmental website can also provide for more information about the two undergraduate program options (http:// rpse.education.wisc.edu/rpse/programs/undergraduate-special-education-program) in Special Education.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

Undergraduate students generally apply to the professional part of the special education degree program in their sophomore year. Selection is made during the spring semester. Currently, students are admitted to the program once a year, effective for the summer following selection. Once admitted, students typically spend four semesters completing their remaining coursework.

Information about application procedures for the Elementary-Special Education dual teacher certification option is available in the Elementary Education (p. 1457) section of the Guide.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

New freshmen and transfer students interested in special education are admitted directly to the School of Education with a "preprofessional" classification. This classification indicates that a student is interested in a program offered by the school, but has not applied and been admitted to the professional program. Students interested in special education receive the "pre-professional" classification of PSR.

On-campus students wishing to be admitted to the school while working on eligibility requirements and application can apply for admission to the school by completing a Pre-Professional Application (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission). A minimum GPA of 2.5, based on UW-Madison coursework, is required to transfer into the school. This GPA may be modified by the Last 60 Credits rule (detailed below (p. )). It is not necessary to be a "pre-professional" student before applying to a professional program.

It is strongly recommended that students interested in a School of Education program meet with an academic advisor in Education Academic Services (EAS), 139 Education Building, 1000 Bascom Mall. Students may call 608-262-1651 to schedule an appointment with an advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the University to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UW-Madison Office of Admissions and Recruitment (http://admissions.wisc.edu) for application information. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or
a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

Certification to teach special education requires that a student be admitted into the professional part of the degree program. The School of Education admits students into the special education program one a year, effective for summer following selection. Resources limit the number of students who can be served by the UW-Madison Special Education Teacher Education Program. In recent years the program has been able to accommodate all qualified applicants; however, if the number of qualified applicants exceeds program resources, admission will become limited and competitive. If this happens, meeting or surpassing the minimum eligibility criteria will not guarantee admission.

## PROGRAM ADMISSION ELIGIBILITY REQUIREMENTS

Requirements and selection criteria may be modified from one application/admission period to the next. Any changes to these criteria may occur up until the application period begins. Potential applicants should consult the School of Education's Apply to a Program (http:// www.education.wisc.edu/soe/academics/undergraduate-students/ academic-program-admission) page for application deadlines and detailed information regarding current eligibility requirements and selection criteria prior to submitting an application.

## To be eligible for admission to the professional program, applicants must:

- complete at least 40 transferable college-level credits by the end of the fall semester before application.
- successfully complete RP \& SE 300 Individuals with Disabilities (3 cr) by the end of the summer semester of the application year.
- earn a minimum 2.5 grade point average (GPA) on a 4.0 scale on all transferable college-level coursework attempted. ${ }^{1}$
- submit completed program application form(s), transcripts, and all other related application materials by the application deadline specified on the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-program-admission) page.
- Note: In previous years, applicants to teacher education programs were required to submit scores from one of the following exams: ACT, SAT, Praxis I/PPST, Praxis Core, or GRE. Under emergency rules announced by the Wisconsin Department of Public Instruction, no applicants need to submit scores for any exam as a component of their application to this program. The exam requirement was officially removed by the School of Education on November 15, 2017.

1 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or
universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility for program consideration. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## PROGRAM SELECTION CRITERIA

The special education faculty will review all completed applications that meet eligibility criteria. When reviewing an application, special education faculty want to learn as much about the applicant as possible and will make every effort to take into account the whole person. Applicants are encouraged to provide, in writing, whatever they would want to share in a face-to-face interview.

The selection committee members will consider several factors when selecting students for the program. Although the grade point average (GPA) is considered an important indicator of success, it is not the only basis on which applicants will be selected for admission. Trends in the applicant's grades, difficulty of course load, and outside work load will be considered (see factors 1,2 , and 3 below).

## In addition to the GPA, faculty will consider the following factors:

- College grading and course selection pattern. Transcripts will be examined individually. Account will be taken whether an applicant has clearly followed an unusually easy or difficult pattern of courses or if the GPA reflects a poor grade in an exceptionally difficult subject area.
- Trends of college grades. An applicant who started very poorly or showed a decline in their early phases of college, but performed strongly in later college years, may be judged more favorably than another with the same GPA but level or declining record.
- Diversity of experience or background. Work/life experience, college activity, political activity, and other experiences or background that adds a diverse perspective to the special education student body may work in the applicant's favor. Volunteer or paid work with people with disabilities will be taken into account in the selection process. Volunteer or paid work with people from a background different than the applicant's may also be taken into account in the selection process.
- Writing sample (Statement of Purpose). Application materials must include an essay in which the applicant gives reasons for becoming a special education teacher. Writing is so important in the professional life of teachers and in the teacher education
program that the quality of the applicant's writing will be taken into account in making admissions decisions.
- Letters of recommendation. Recommendation letters will play an important role in helping the selection committee judge the applicant's prospects for academic success in the program. Careful, thoughtful letters from mentors, teachers, or employers will provide information about the applicant's intellect, imagination, or prospects for becoming a successful teacher. Working with people with disabilities will be taken into account in the selection process. Working with people from a background different than the applicant's may also be taken into account in the selection process.
Other factors. The program's quest for diversity leads the selection committee to take into account fully qualified applicants from under-represented groups. Race, ethnicity, cultural, geographic background, and economic disadvantage are among the factors that will be considered, taking into account the needs of the schools. A full-time or extra heavy part-time work load will be considered a factor in close cases.


## CRIMINAL BACKGROUND INVESTIGATION

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of inclassroom field work. Admitted applicants to any teacher education program who have a positive background check should confer with the Academic Dean's Office (Room 139 Education, 1000 Bascom Mall) about the potential impact of this on field placements and licensure.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The Special Education program has four primary components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Professional education coursework includes an examination of the schools' relationship to our society and the processes by which students grow and learn.
- Core Requirements offer an in-depth study of Special Education, including a four-semester professional sequence of teaching methods coursework and field experience in schools. This sequence is designed so that students can complete the program in four years.
- Elective coursework is taken to reach the required minimum of 120 credits.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p.1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives

Complete Liberal Studies Electives (p. 1389) to total 40 Credits.
PROFESSIONAL EDUCATION REQUIREMENTS
Individuals with Disabilities
This course is a prerequisite for admission to the Special Education program. It must be completed by the end of the summer of the application year.

| Code | Title | Credits |
| :---: | :---: | :---: |
| RP \& SE 300 | Individuals with Disabilities | 3 |
| Development (Minimum of 3 credits) |  |  |
| Code | Title | Credits |
| Select one of the following options: |  |  |
| Option 1 |  | 3 |
| ED PSYCH 331 | Human Development From Childhood Through Adolescence (Recommended for all certification levels) |  |
| Option 2 |  | 5-6 |
| ED PSYCH 320 | Human Development in Infancy and Childhood ${ }^{1}$ |  |
| or PSYCH 460 | Child Development |  |
| ED PSYCH 321 | Human Development in Adolescence |  |

1 Effective fall 2017, the course number of Child Psychology changed from Psych 560 to PSYCH 460.

## Learning (Minimum of 3 credits) <br> Code Title

Credits
ED PSYCH 301 How People Learn

| Foundations of the Profession (Minimum of 3 credits) |
| :--- |
| Code |
| Title |


| Select one of the following: | Credits |  |
| :--- | :--- | ---: |
| ED POL 300 | School and Society |  |
| ED POL/ | History of American Education |  |
| HISTORY 412 |  |  |

## CORE REQUIREMENTS (INCLUDES PROFESSIONAL SEQUENCE)

RP \& SE 300 Individuals with Disabilities is a prerequisite for admission to the Special Education program. This course must be completed by the end of the summer of the application year and is calculated into the major gpa required for graduation.

## SPECIAL EDUCATION PROFESSIONAL SEQUENCE

Students complete a four-semester sequence of professional courses after admission to the program. The professional methods courses and clinical (field) experiences must be followed sequentially and taken in consecutive semesters. Class schedules for the professional sequence courses are determined in advance.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| RP \& SE 330 | Behavior Analysis: Applications to Persons with Disabilities (may be taken prior to admission to the Special Education program) | 3 |
| RP \& SE 466 | Diversity in Special Education (may be taken prior to admission to the Special Education program) | 3 |
| RP \& SE/CURRIC 506 | Strategies for Inclusive Schooling | 3 |
| RP \& SE 464 | Diagnosis, Assessment, and Instructional Planning in Special Education | 4 |
| RP \& SE 402 | Methods in Teaching Functional Skills (recommended this semester) | 1 |
| Semester 2 |  |  |
| RP \& SE 465 | Language and Reading Instruction for Students with Disabilities (Meets Communication B requirement) | 4 |
| RP \& SE/CURRIC 365 | Teaching Mathematics in Inclusive Settings | 4 |
| CURRIC 374 | General Educ Practicum \& Instructional Planning for Diverse Learners | 2-5 |
| RP \& SE 473 | Management: Students with Learning and Behavioral Disabilities | 3 |
| RP \& SE 401 | Augmentative and Alternative Communication and Assistive Technology for Students with Disabilities (recommended this semester) | 1 |

## Semester 3

| RP \& SE 477 | Special Education Student <br> Teaching: Middle Childhood - Early <br> Adolescence (Full-day student <br> teaching following the school <br> district calendar) | 10 |
| :--- | :--- | ---: |
| RP \& SE 467 | Elementary Student Teaching <br> Seminar | 2 |
| RP \& SE 403 | Promoting Adolescent Literacy <br> for Students with Disabilities <br> (recommended this semester) | 1 |
| Semester 4 | Special Education Student |  |
| RP \& SE 478 | Teaching: Early Adolescence - <br> Adolescence (Full-day student <br> teaching following the school <br> district calendar) | 10 |
| RP \& SE 472 | Methods in Transition and <br> Vocational Education | 3 |
| RP \& SE 468 | Secondary Student Teaching <br> Seminar | 2 |
|  | 1 |  |

## RP \& SE MODULES

Students are required to complete all four of the following one-credit modules after admission to the program. Most students complete one or two modules during each semester of the professional program and a suggested sequence is listed above. Consult with the program advisor for information on when each of the modules will be offered. At least one will be offered each semester.

| Code | Title | Credits |
| :--- | :--- | ---: |
| RP \& SE 401 | Augmentative and Alternative <br> Communication and Assistive <br> Technology for Students with <br> Disabilities | 1 |
| RP \& SE 402 | Methods in Teaching Functional <br> Skills | 1 |
| RP \& SE 403 | Promoting Adolescent Literacy for <br> Students with Disabilities <br> RP \& SE 404 |  <br> Social Studies for Students with <br> Disabilities |
|  | Lis | 1 |
|  |  | 1 |

## ELECTIVE COURSEWORK

Complete additional coursework to reach the minimum of 120 credits.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty advisor(s) to receive certification through UW-Madison. The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate
application for this license. Requirements below are based on UWMadison coursework.

- 2.75 cumulative grade point average. This may be modified by the Last 60 Credits Rule (p. 1381).
- 2.75 cumulative grade point average across all professional education courses (excluding practicum and student teaching).
- 2.75 cumulative grade point average in the major.
- Minimum 120 credits (degree candidates only). Most students will need more than the minimum to complete all requirements.
- Major residency: Degree candidates must complete at least 15 credits of upper-level major coursework (numbered 300-699) in residence on the UW-Madison campus.
- Senior residency. Degree candidates must complete their last 30 credits in residence on the UW-Madison campus. Student teaching and practicum are considered part of the 30 credits.


## DEGREE AUDIT (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.
1 DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## ELEMENTARY EDUCATION AND SPECIAL EDUCATION DUAL MAJOR CERTIFICATION OPTION

- Special Education: Middle Childhood through Early Adolescence/ Elementary Education Dual Cert (p. 1651)


## ADDITIONAL CERTIFICATION REQUIREMENTS AND APPLYING FOR A LICENSE

In addition to completing UW-Madison's program requirements, students must also complete Wisconsin statutory requirements and certification requirements established by the Wisconsin Department of Public Instruction. Many of these requirements are embedded within the program's requirements and require no additional attention. The
endorsement of the program coordinator/faculty is also required to receive certification through UW-Madison.

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license.

Detailed information about certification requirements and applying for a license is available on the department's website (http:// rpse.education.wisc.edu/rpse/programs/undergraduate-programs/ special-education) and under Certification/Licensure. (p. 1647)

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. (Professionalism) Adhere to professional ethical standards and conduct her or himself in a courteous and professional manner.
2. (Collaboration and Communication) Collaborate and effectively communicate with students their families, other educators, related service providers and members of the community to address the needs of students with disabilities.
3. (Assessment) Collect information on student backgrounds, learning characteristics and achievement that can be used to determine students' present level of performance and guide instruction.
4. (Special Education Evaluation and Individualized Educational Planning) To the maximum possible the teacher candidate will participate in the Educational Evaluation and Individualized Educational Planning process.
5. (Instructional Planning) Plan instruction that meets the needs of students, is consistent with State and local standards and provides access to the general education curriculum.
6. (Instructional Presentations) Present lessons and units of instruction that gain and maintain student attention and are consistent with students' interests and IEP goals.
7. (Classroom Management) Create and maintain a safe, positive and supportive learning environment that is conducive to learning and the mental health of the students.

## ADVISING AND CAREERS

## SPECIAL EDUCATION PROGRAM ADVISING

Students not yet admitted to special education meet with their assigned advisor in Education Academic Services (EAS) and/or the Office of Undergraduate Recruitment and Retention (OURR), see below. Students are assigned an additional departmental advisor when admitted to the professional component of their degree program. For general information about the program and degree requirements, contact Virginia Waddick, RP \& SE Student Services Coordinator, vwaddick@education.wisc.edu, 608-263-4608.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case
of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## ADDITIONAL RESOURCES

Students interested in special education may also want to consult the following resources:

- Read about the work of Special Educators: What is Special Education?
- Read about the relationship between Special Education and regular education programs.
- Watch a Video describing the work of Special Educators.
- Read about why current students and alumni chose this major at UW-Madison: Teacher Tuesday
- Learn About Related Careers


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Rehabilitation Psychology and Special Education can be found on the department's website. (http://rpse.education.wisc.edu)

## CERTIFICATION/LICENSURE

## ADDITIONAL CERTIFICATION REQUIREMENTS

Students must complete all requirements and also obtain the endorsement of the program faculty to receive certification through UWMadison. These requirements include those required by UW-Madison, the Department of Public Instruction, and those mandated by state statutes. While most of these requirements are embedded in course content, some (e.g., the Wisconsin Foundations of Reading Test) are not related to course enrollment.

Students pursuing certification should be aware of the following requirements. See the school's website (http://www.education.wisc.edu/ soe/pk-12-education/pathways-to-licensure) for additional information/ requirements.

Certification requirements should be monitored carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Disclosure Statement and Criminal Background Investigation Disclosure Statement

Applicants to School of Education programs that involve a practicum, internship, or other field placement must complete a disclosure statement indicating (1) whether they have been admitted to, then withdrawn from, asked to withdraw from, or been dropped from a student teaching, clinical experience, or other intern/practicum program, and (2) if they have ever been placed on probation or disciplined by any college or university for academic dishonesty.

## Criminal Background Investigation (CBI)

The Department of Public Instruction (DPI) is required by law to conduct a background check on each applicant for a Wisconsin educator license. This check is intended to determine if the applicant has engaged in any behavior that endangers the health, welfare, safety, or education of PK12 pupils. Local school districts also will conduct criminal background checks routinely on teacher education students prior to the start of in-classroom field work.

Students should be aware that criminal background checks may be initiated by other agencies or organizations when they are seeking employment or a professional license. School administrators have the authority to determine the appropriateness of a student placement and may choose not to permit a placement based on a student's background check results.

An individual who is deemed ineligible to participate in field or clinical experiences based on the results of their background check may not be able to complete the requirements for their degree or certification. Students with questions about these processes should contact the academic dean in Education Academic Services.

## Environmental Education

This licensing requirement is mandatory for all Elementary Education, Secondary Science, Secondary Social Studies, and Agri-Science Education certification students. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Select one Environmental Studies (http://guide.wisc.edu/ courses/envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ATM OCN/ENVIR ST/ | Atmospheric Environment and | 2 |
| GEOG 121 | Society |  |
| ATM OCN/ | Earth's Water. Natural Science and | 3 |
| SOIL SCI 132 | Human Use |  |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ Introductory Biology <br> ZOOLOGY 152  <br> BOTANY 240 Plants and Humans |  |  |


| BOTANY/ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology | 3 |
| :---: | :---: | :---: |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ <br> ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

## Student Testing and Assessment

Students in teacher education programs are required to complete a significant performance assessment prior to certification and eventual licensure. Additional tests may be required, although this varies by certification area. Detailed information related to these requirements, along with fee and registration information can be found on the School of Education website under Academic Tests for Prospective Teachers (http://www.education.wisc.edu/soe/ pk-12-education/pathways-to-licensure/student-testing-and-assessment). A brief description of these tests and assessments is provided below.

## Teacher Performance Assessment (edTPA)

The edTPA is a subject area-specific, performance-based assessment for pre-service teacher candidates, which is centered on student learning. Evidence of candidate teaching proficiency in the areas of planning, engagement and instruction, and assessment is drawn from a subject-specific learning segment, 3-5 lessons from a unit of instruction. Assessment artifacts include video clips of instruction, lesson plans, student work samples, analysis of student learning, and reflective commentaries. These artifacts will be taken together and scored by trained evaluators using the standardized set of edTPA rubrics. After August 31, 2015, initial license candidates (i.e., students completing certification programs) must complete the edTPA as part of their student teaching and after August 31,

2016, initial license candidates will be required to pass the edTPA before they can be recommended for licensure.

## Content Test

Students completing professional education programs must demonstrate proficiency in their content area. This is accomplished a number of ways, varying by certification area. For example, Elementary Education students must have a major GPA of 3.0. World Language Education students must have a 3.0 in their major or minor area, meet an ACTFL Oral Proficiency Interview requirement, and also pass the ACTFL Writing Proficiency Test (WPT). A student may be required to take and pass an approved examination in their content area, usually the appropriate Praxis II: Subject Assessments/ Specialty Area Tests through the Educational Testing Service (ETS).

## Wisconsin Foundations of Reading Test

As of January 31, 2014, individuals seeking an initial Wisconsin license to teach in kindergarten through grade 5 or in special education, an initial Wisconsin license as a reading teacher, or an initial Wisconsin license as a reading specialist, must take and pass the Wisconsin Foundations Reading Foundations Test. Undergraduate programs impacted by this requirement are Elementary Education and Special Education.

This test is for Wisconsin licensing purposes only. Students who choose not to pursue Wisconsin educator licensing need not take and pass this test. This test is in addition to all other required tests and assessments for certification and licensure.

## Field Experiences

School-based field experiences are a critical part of students' professional preparation for teaching. Under Wisconsin State regulations, students seeking teaching certification from UWMadison are required to complete at least one pre-student teaching practicum and at least one full semester of student teaching. Most programs at UW-Madison require students to complete additional field experiences.

## Pre-Student Teaching Practicum

The pre-student teaching practicum gives students firsthand knowledge of the classroom environment and the teacher's role. For many students, the practicum is the initial encounter with the real world of teaching. Practicum students do not assume the degree of classroom responsibility they do during student teaching. Under the supervision of an experienced teacher, practicum students observe classroom activities, assist the teacher with day-to-day classroom management tasks, interact one-to-one with students, and instruct small groups. The cooperating teacher and university supervisor use the practicum to assess the student's readiness for the student teaching experience.

## Student Teaching Experience

Student teaching, the culminating field experience, is a fulltime, school district semester assignment that places a university student under the guidance of an experienced, qualified cooperating teacher. After an orientation period, the student teacher gradually assumes more responsibility for planning, instruction, and overall classroom management. Student teachers follow the daily schedule of the cooperating teacher and the building policies of the school, and function
as regular staff members in arrival and departure times and attendance at school events.

The student teaching experience follows the calendar of the local school district. A fall semester assignment will typically begin the latter part of August and end the latter part of January. A spring semester assignment will begin the latter part of January and end mid-June. Holiday breaks follow the school district calendar. Carrying other formal course work during the student teaching semester is strongly discouraged.

Find detailed policies and regulations regarding student teaching in the document, Teacher Education Field Experience Policies (July, 2017) (https://www.education.wisc.edu/ docs/WebDispenser/soe-documents/te-field-experience-policies-july-2017.pdf?sfvrsn=2). Students and staff are responsible for knowing and complying with the Field Experience policies. Many professional programs have their own separate handbooks and specific policies; students are also responsible for those policies and procedures.

## Withdrawing From/Failing Field Experience Assignments

Withdrawing from a field experience has serious implications for the student's progress in the program. Students who withdraw or receive an unsatisfactory grade (including a "D") from a field experience may not repeat such experiences without approval from the program coordinator. Students withdrawing from or receiving an unsatisfactory grade in field experiences in one major or program may not enroll in another major or program without written permission from the program coordinator. Because of the consequences that withdrawal from a confirmed assignment may have on a student's future progress in the teaching certification program, a student who contemplates such action is strongly urged to consult with the program coordinator to fully understand the implications of such action and the options available.

## Minority Group Relations and Conflict Resolution Minority Group Relations

Wisconsin State teacher education regulations require students to complete a section titled Minority Group Relations. The rules identify Minority Group Relations as

- The history, culture, and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
- The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
- The philosophical and psychological bases of attitude development and change.
- The psychological and social implications of discrimination, especially racism and sexism in the American society.
- Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
- Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

UW-Madison teacher education programs address these areas through course work and experiences in each professional education program. Students who successfully complete their professional program will have satisfied each of the areas of Minority Group Relations. For more detailed information about how required courses address Minority Group Relations for each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Conflict Resolution Requirement

Wisconsin State teacher education regulations require all individuals pursuing teacher certification to have formal training in conflict resolution. This includes

- Resolving conflicts between pupils and between pupils and school staff.
- Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
- Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.

All teacher certification programs include conflict resolution training in their required course work. For more detailed information about how conflict resolution is addressed in each program area, see the School of Education's PI 34 site (http://www.education.wisc.edu/pi34). Choose Certification Programs, select the program of interest, and click on Rules \& Statutes.

## Phonics

As of July 1, 1998, the State of Wisconsin requires that all persons seeking initial and renewal licenses to teach reading or language arts in grades Pre-Kindergarten to Grade 6 (PK6) must have successfully completed instruction in teaching reading and language arts using appropriate instructional methods, including phonics. "Phonics" means a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups and syllables.

The Phonics requirement applies to students completing Elementary Education and Special Education certification programs. UW-Madison students fulfill this requirement through the successful completion of courses that are already required, so no additional course work is needed to meet this statutory requirement.

## Cooperatives

This licensing requirement is mandatory for secondary Social Studies (and Agri-Science) Education certification. Students with previous degrees in their subjects must also monitor and complete this requirement for certification and licensure.

Students typically complete the cooperatives requirement after being admitted to the Secondary Social Studies program and should consult with the program coordinator, Professor

Alan Lockwood (lockwood@education.wisc.edu), regarding its completion.

## Teacher Standards

UW-Madison teacher education students must meet all state licensing requirements for initial teaching certification in Wisconsin. These requirements, sometimes referred to as administrative rules " PI 34 ," mandate that individuals demonstrate proficiency on state-approved teaching standards. Each teacher education institution in Wisconsin has adopted a set of teacher education standards that meet state guidelines. These standards must be met by all students completing a licensing program. The current standards of the University of Wisconsin-Madison School of Education can be found on the school's website (http:// careers.education.wisc.edu/pi34/docs/Standards.pdf).

## APPLYING FOR A TEACHING LICENSE

The State of Wisconsin requires that anyone wishing to teach in a public $\mathrm{K}-12$ setting hold a valid teaching license issued through the Department of Public Instruction. In addition to completing a certification program, students must submit a separate application for this license. Students intending to complete a teacher certification program should monitor program requirements carefully. The Wisconsin Department of Public Instruction (DPI) periodically implements regulations that affect all certification programs; teacher certification candidates are responsible for having up-to-date information about certification requirements.

## Licensing Levels

The following licensing options are offered at UW-Madison.

- The Elementary Education program currently offers two licensing levels: Early Childhood and also Middle Childhood through Early Adolescence.
- The Special Education program certifies students at both the Middle Childhood through Early Adolescence level and also at the Early Adolescence through Adolescence level. The Special Education/Elementary Education dual major option certifies students only at the Middle Childhood through Early Adolescence level.
- Secondary Education programs certify students to teach their subject area at the Early Adolescence through Adolescence level.
- Students completing Language Education programs will be licensed at the Early Childhood through Adolescence level.
- Students in special fields such as Art, Communication Sciences and Disorders, Music, and Physical Education will be licensed at the Early Childhood through Adolescence level.


## Wisconsin State Licensing

The State of Wisconsin issues an initial teaching license to certified teachers. The current fee is $\$ 125$. An online license application is available through the Department of Public Instruction (http://dpi.wi.gov/ tepdl/elo). A Criminal Background Investigation (CBI) will also be conducted by DPI. Information about fingerprint submission, when necessary, is available through the Department of Public Instruction (http://dpi.wi.gov/tepdl/licensing/fingerprint/electronic-submission).

Before applying for a license, DPI requires the electronic submission of "Endorsed Candidate for Licensure" (ECL) data by the certifying officer of the institution where the teacher preparation was completed. For UW-Madison teacher certification students, the endorsement will come from the School of Education, 139 Education Building, 1000 Bascom Mall.

Once this information has been submitted to DPI, students are notified by email that they may begin the application online.

Before endorsing a student, UW-Madison requires that (1) all certification requirements are met; (2) student teaching (following the school district calendar) is completed; (3) final grades are posted and reviewed; (4) the degree is "posted" by the registrar's office (four to five weeks after graduation); and (5) a recommendation for certification is received from the program faculty. The Wisconsin Department of Public Instruction may require an additional 6 to 12 weeks for license processing. See Educator Licensing (http://www.education.wisc.edu/soe/pk-12-education/ pathways-to-licensure/educator-licensing) for additional information about the licensing process.

## Licensing Outside of Wisconsin

To apply for a license in a state other than Wisconsin, first check out the application requirements of that state. The University of Kentucky has a website that provides links (http://2b.education.uky.edu/certification-requirements-by-state) to teacher licensing agencies in all 50 states, the District of Columbia, and Puerto Rico.

Many states have a verification form that needs to be signed by a UWMadison certification officer. This form verifies that a state-approved licensing program has been completed. These forms should be sent to Education Academic Services at 139 Education Building, 1000 Bascom Mall, or by email (mlpatton@wisc.edu) to be completed. If the form requests information about practicum and student teaching assignments (names of schools, grade levels, dates, etc.), this information must be completed before sending the form to EAS.

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## SPECIAL EDUCATION: MIDDLE CHILDHOOD THROUGH EARLY ADOLESCENCE/ELEMENTARY EDUCATION DUAL CERT

## REQUIREMENTS

The Middle Childhood-Early Adolescence/Dual Elementary and Special Education option prepares teachers to work in intermediate and middle school settings (approximately ages 6 through 12-13). Students are certified in both Special Education and Elementary Education at the Middle Childhood-Early Adolescence levels. Admitted students begin the four-semester professional sequence in the fall following admission.

The option coursework listed here is one component of the Elementary/ Special Education, BSE degree (p. 1459) requirements.
RP \& SE 300 Individuals with Disabilities-Admission Prerequisite This course must be completed prior to beginning the professional sequence.

Code
Title
Credits
RP \& SE 300
Individuals with Disabilities

## Environmental Education Requirement

Select one Environmental Studies (http://guide.wisc.edu/courses/ envir_st) course or from the following list. If appropriate, this course may also be applied toward the liberal studies requirements.

## Environmental Education courses

| Code | Title | Credits |
| :---: | :---: | :---: |
| ATM OCN/ENVIR ST/ GEOG 121 | Atmospheric Environment and Society | 2 |
| ATM OCN/ SOIL SCI 132 | Earth's Water. Natural Science and Human Use | 3 |
| BOTANY 100 | Survey of Botany | 3 |
| BOTANY/BIOLOGY/ ZOOLOGY 152 | Introductory Biology | 5 |
| BOTANY 240 | Plants and Humans | 3 |
| BOTANY/ENVIR ST/ <br> ZOOLOGY 260 | Introductory Ecology | 3 |
| ECON/A A E/ <br> ENVIR ST 343 | Environmental Economics | 3-4 |
| GEOG/ENVIR ST 120 | Introduction to the Earth System | 3 |
| GEOG/ATM OCN/ ENVIR ST 121 | Atmospheric Environment and Society | 2 |
| GEOG/ENVIR ST 127 | Physical Systems of the Environment | 5 |
| GEOG/ENVIR ST 139 | Living in the Global Environment: An Introduction to People-Environment Geography | 3-4 |
| GEOG/ENVIR ST 309 | People, Land and Food: Comparative Study of Agriculture Systems | 3 |
| GEOG/ENVIR ST 339 | Environmental Conservation | 4 |
| LAND ARC/ ENVIR ST 361 | Wetlands Ecology | 3 |
| MED HIST/ ENVIR ST/ HIST SCI 513 | Environment and Health in Global Perspective | 3 |
| PHYSICS 115 | Energy | 3 |
| POP HLTH/ <br> ENVIR ST 502 | Air Pollution and Human Health | 3 |
| SOC/C\&E SOC 140 | Introduction to Community and Environmental Sociology | 3 |
| SOC/C\&E SOC/ <br> F\&W ECOL 248 | Environment, Natural Resources, and Society | 3 |
| SOIL SCI 301 | General Soil Science | 4 |
| SOIL SCI/ <br> ENVIR ST 324 | Soils and Environmental Quality | 3 |

ENVIR ST 324

## Mathematics for Elementary Teachers

Code Title Credits

MATH 130 Mathematics for Teaching: 3
MATH 131 Mathematics for Teaching:
Geometry and Measurement

## MATH 132

Problem Solving in Algebra, Probability and Statistics

Students with college-level calculus coursework or advanced placement credit should see the exemption rules (http:// www.math.wisc.edu/~lempp/Exemptionsfor130-32.htm) for this coursework. More detailed information (http://www.math.wisc.edu/ ~lempp/educ.html) about these courses is available on the math department website.

## Education Coursework <br> Child and Adolescent Development

Code Title Credits

## Select one:

ED PSYCH 331

Human Development From Childhood Through Adolescence

| ED PSYCH 320 | Human Development in Infancy and |
| :--- | :--- |
| \& ED PSYCH 321 | Childhood |
|  | and Human Development in |
|  | Adolescence ${ }^{1}$ |

## Learning

ED PSYCH 301 How People Learn 3
Foundations of the Profession 3

Select one:

| ED POL 300 | School and Society |
| :--- | :--- |
| ED POL/ | History of American Education |
| HISTORY 412 |  |

1 With permission, PSYCH 460 Child Development (formerly 560) may be substituted for ED PSYCH 320 Human Development in Infancy and Childhood. Students are strongly encouraged to complete this requirement before program admission.

## Professional Sequence

Admitted students complete a four-semester sequence of professional courses beginning in the fall semester after program admission. Each semester of the sequence must be followed sequentially and taken in consecutive semesters.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Semester 1 |  |  |
| CURRIC 364 | Introduction to Education | 3 |
| CURRIC 368 | The Teaching of Reading | 3 |
| CURRIC 369 | The Teaching of Language Arts | 3 |
| CURRIC 367 | Elementary Teaching Practicum II | 3 |
| RP \& SE 466 | Diversity in Special Education | 3 |
| Semester 2 |  |  |
| RP \& SE 473 | Management: Students with Learning and Behavioral Disabilities | 3 |
| RP \& SE 465 | Language and Reading Instruction for Students with Disabilities | 4 |
| RP \& SE 475 | Special Education Practicum: Middle Childhood - Early Adolescence | 3-6 |
| RP \& SE/ CURRIC 506 | Strategies for Inclusive Schooling | 3 |


| RP \& SE 401 | Augmentative and Alternative Communication and Assistive Technology for Students with Disabilities | 1 |
| :---: | :---: | :---: |
| Semester 3 |  |  |
| RP \& SE 464 | Diagnosis, Assessment, and Instructional Planning in Special Education | 4 |
| CURRIC 372 | Teaching Science | 3 |
| CURRIC/ RP \& SE 365 | Teaching Mathematics in Inclusive Settings | 4 |
| CURRIC 371 | Teaching Social Studies | 3 |
| CURRIC 373 | Elementary Teaching Practicum III | 3 |
| Semester 4 |  |  |
| RP \& SE 477 | Special Education Student <br> Teaching: Middle Childhood - Early Adolescence | 7 |
| RP \& SE 457 | Elementary Student Teaching <br> Seminar - Elementary/Special <br> Education Dual Major | 1 |
| CURRIC 464 | Student Teaching in the Elementary School | 7 |
| CURRIC 463 | Seminar in Pre-Kindergarten Through Middle School Teaching | 1 |
| RP \& SE 402 | Methods in Teaching Functional Skills | 1 |

## THEATRE AND DRAMA

A degree in theatre and drama from the University of Wisconsin-Madison can open doors to a wide range of careers. Our alumni are successful in theatre, film, television, gaming, production management, development, design, education, and all aspects of the entertainment industry. Our faculty are active theatre professionals who bring current and practical knowledge into the classrooms and productions. Our department is well known for the individual attention, mentorship, and commitment we give our students.

Through mainstage, open-stage, and student produced works, the Department of Theatre and Drama provides students with excellent opportunities to apply skills and techniques learned in the classroom in fully staged productions.

New theatre and drama majors will complete a bachelor of science degree in theatre and drama (p. 1654) through the School of Education. Theatre and drama majors may informally select areas of emphasis such as design, stage management, directing, acting, or theatre technology. Students whose primary interest is acting may pursue the Acting Specialist option. An audition is required prior to acceptance to the option, and is held each spring semester. Students should see the department advisor for more information on the Acting Specialist option.

Nonmajors who wish to extend their familiarity with theatre in theory and practice are encouraged to enroll in department courses and participate in productions. The department has hosted students from many disciplines-such as law, business, medicine, art, dance, science and social work-who wish to develop effective communication skills, enhance problem-solving abilities, and cultivate visual acumen.

## DEGREES/MAJORS/CERTIFICATES

- Theatre and Drama, B.S. (p. 1653)


## PEOPLE

Information about faculty, staff, and other contributors to the Department of Theatre and Drama can be found on the department's website (http:// theatre.wisc.edu).

## THEATRE AND DRAMA, B.S.

A degree in theatre and drama from the University of Wisconsin-Madison can open doors to a wide range of careers. Our alumni are successful in theatre, film, television, gaming, production management, development, design, education, and all aspects of the entertainment industry. Our faculty are active theatre professionals who bring current and practical knowledge into the classrooms and productions. Our department is well known for the individual attention, mentoring, and commitment we give our students.

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Nonmajors who wish to extend their familiarity with theatre in theory and practice are encouraged to enroll in department courses and participate in productions. The department has hosted students from many disciplines-such as law, business, medicine, art, dance, science and social work-who wish to develop effective communication skills, enhance problem-solving abilities, and cultivate visual acumen.

## HOW TO GET IN

## PROGRAM ADMISSION OVERVIEW

New freshmen and off-campus transfers are admitted directly to the B.S.-Theatre and Drama degree program. The program currently admits on-campus students to begin in the fall, spring, and summer.

## ENTERING THE SCHOOL OF EDUCATION NEW AND CURRENT UW-MADISON STUDENTS

Incoming freshmen and transfer students enter directly into the B.S. - Theatre and Drama program upon admission to UWMadison. All other on-campus students should complete and submit an application, as well as transcripts from all other colleges or universities attended, to Education Academic Services, Room 139 Education Building, 1000 Bascom Mall, at any time during the academic year. Applications cannot be
processed without a complete academic record. (A transfer credit evaluation cannot be accepted in place of a transcript.) The program application must be signed by the Department of Theatre and Drama academic advisor.

## PROSPECTIVE TRANSFER STUDENTS

Applicants not already enrolled on the UW-Madison campus must be admissible to the university to enroll in a School of Education program. Admission to UW-Madison requires a separate application and admission process. See UWMadison Office of Admissions and Recruitment (http:// admissions.wisc.edu) for application information. Prospective transfer students are strongly encouraged to meet with the Department of Theatre and Drama academic advisor before coming to campus. Coursework taken at another institution may need to be evaluated by the department academic advisor or a faculty member in the Department of Theatre and Drama. Prospective transfer students are strongly advised to meet with an Education Academic Services advisor in advance of their application; to schedule, call 608-262-1651.

## STUDENTS WITH A PREVIOUS DEGREE

Prospective applicants who already hold an undergraduate degree are strongly encouraged to meet with an Education Academic Services advisor in advance of their application. Consultations with advisors are available in person or via telephone; to schedule, call 608-262-1651.

Applicants who already hold an undergraduate degree are admitted to the School of Education as either an Education Special student or a second degree student, depending on their interests and academic background. Admission as an Education Special student indicates that the student has an interest in pursuing certification in a subject area studied during the initial degree; another degree is not awarded for this "certification only" coursework. Second degree students are seeking a second, unrelated degree from the School of Education, which may, or may not, include teacher certification. Candidates for limited-enrollment programs must meet all admission eligibility requirements for the program and must compete with the eligible applicants for program admission. More information is available here (p. 1381).

## APPLICATION AND ADMISSION

While new freshmen and off-campus transfers are admitted directly to the B.S. - Theatre and Drama degree program, all other current UW-Madison students seeking to enter the B.S.-Theatre and Drama program must apply for admission to the program. Requirements and selection criteria may be modified from one application/admission period to the next. Potential applicants should consult the School of Education's Apply to a Program (http://www.education.wisc.edu/soe/ academics/undergraduate-students/academic-program-admission) page for updates to eligibility requirements prior to submitting an application.

## CRITERIA FOR ADMISSION

Eligibility for admission consideration to B.S.-Theatre and Drama:

- Cumulative grade-point average on all transferable college-level coursework of at least a 2.50 (on a 4.00 scale). ${ }^{1}$
- Cumulative grade point average of at least a 2.5 based on UW-Madison campus coursework, as modified by the Last 60 Credits Rule (detailed below).
- Filing of all required paperwork and other application materials, including program application and transcripts. Application must be signed by the Department of Theatre and Drama academic advisor.

1 A comprehensive cumulative GPA of all college-level, transferrable coursework attempted on both the UW-Madison campus coursework and coursework taken at any other colleges or universities may be calculated for the exclusive purpose of establishing an applicant's eligibility for consideration. Both the comprehensive cumulative GPA and the comprehensive cumulative GPA based on a student's last 60 credits may be calculated. See Last 60 Credits Rule (detailed below). If admitted, students must earn the minimum cumulative GPA for UW-Madison coursework established by their program and the School of Education each semester after admission.

## Last 60 Credits Rule

Two grade point averages will be calculated to determine candidates' eligibility to programs. GPAs will be calculated using

- all transferable college level coursework attempted, and
- the last 60 credits attempted.

The higher GPA of these two will be used for purposes of determining eligibility. If fewer than 60 credits have been attempted, all credits will be used to calculate the GPA. Graded graduate coursework will also be used in all GPA calculations. ("Attempted" coursework indicates coursework for which a grade has been earned.) More information on this rule is available here (p. 1381).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## PROGRAM STRUCTURE

The bachelor of science (B.S.) degree program in theatre and drama has three primary components:

- Liberal studies courses expose students to a broad range of academic disciplines. The university-wide General Education requirements also encourage this breadth of study.
- Major requirements permit in-depth studies of theatre and drama.
- Additional electives to reach the minimum of 120 degree credits. These credits allow students to pursue individual areas of interest, such as a second major or additional theatre and drama credits. Many B.S.-Theatre and Drama students complete an additional major from the College of Letters \& Science. Some use this major to complement their theatre preparation, while others select majors that reflect interests completely unrelated to theatre.


## SCHOOL OF EDUCATION LIBERAL STUDIES REQUIREMENTS

All students are required to complete a minimum of 40 credits of Liberal Studies (p. 1389) coursework. This requirement provides an opportunity to do some academic exploration beyond the scope of the major. Students take courses in areas of particular interest and also have an opportunity to sample the wide selection of courses offered across the university. Coursework is required in humanities, social studies, science, and cultural and historical studies. Some elective coursework is also needed to reach the required number of credits.

The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning Part A, and Quantitative Reasoning Part B through courses required by their degree program. If a student cannot complete a General Education Requirement within the curriculum of their chosen School of Education program, academic advisors can offer suggestions for courses that meet the requirement and augment the student's primary area of study.

A basic outline of the liberal studies is included below. Students must consult the detailed version of the requirements (p. 1389) for information about course selection and approved course options.

## Humanities, 9 credits

All students must complete a minimum of 9 credits to include:

- Literature
- Fine Arts
- Humanities Electives


## Social Studies (Social Science)

All students must complete a minimum of 9 credits. Teacher certification programs, Athletic Training, and Kinesiology; Exercise and Movement Science have unique requirements in this category.

## Science

All students must complete a minimum of 9 credits to include:

- Biological Science
- Physical Science
- Laboratory Science
- Science Electives


## Cultural and Historical Studies

All students must complete three requirements ( 9 credits) met by separate courses. Any of these courses can also be used to meet the Humanities or Social Studies (Social Sciences) requirements if it has the relevant breadth designation.

- Ethnic Studies
- U.S./European History
- Global Perspectives


## Complete Liberal Studies Electives (p. 1389) to total 40 Credits.

## MAJOR REQUIREMENTS

Effective Fall, 2018
Complete a minimum of 43 credits. At least 15 credits of upper-level major coursework (courses designated intermediate or advanced) must be taken in residence with a minimum 2.5 grade point average.

| Code | Title | Credits |
| :---: | :---: | :---: |
| THEATRE/ENGL 120 | Introduction to Theatre and Dramatic Literature ${ }^{1}$ | 3-4 |
| THEATRE 130 | Fundamentals of Theatrical Design | 3 |
| THEATRE 140 | Voice 1: Effective Communication | 3 |
| THEATRE 150 | Acting I: Introduction to Acting | 3 |
| THEATRE 160 | Technical Theatre Fundamentals | 3 |
| THEATRE 162 | Backstage Experience | 1 |
| THEATRE 619 | Special Topics in Theatre and Drama (Scenic Studio Practicum) ${ }^{2}$ | 1-3 |
| THEATRE 619 | Special Topics in Theatre and Drama (Costume Studio Practicum) 2 | 1-3 |
| THEATRE 619 | Special Topics in Theatre and Drama (Lighting \& Sound Studio Practicum) ${ }^{2}$ | 1-3 |
| THEATRE 234 | Collaborative Problem Solving | 3 |
| THEATRE 260 | Producing Theatre | 3 |
| THEATRE 357 | Introduction to Theatre for Cultural and Social Awareness ${ }^{3}$ | 3 |
| THEATRE 367 | Script Analysis | 3 |



## REQUIREMENTS FOR THE ACTING SPECIALIST OPTION

- Theatre and Drama: Undergraduate Specialist in Acting (p. 1658)


## HONORS IN THE MAJOR

Students may earn Honors in Theatre and Drama by satisfying both the requirements for the major and these additional requirements:

- Maintain a minimum GPA of 3.5 in major courses numbered 300 and above, and an overall GPA of at least 3.3 in all courses taken at UWMadison at the time of graduation.
- Complete elective credits in the theatre and drama major, distributed as follows: 3 credits of 300 level or above, 6 credits of 400 level or above, and 6 credits of 500 level or above.
- In addition, complete a two-semester senior honors thesis, THEATRE 681 Senior Honors Thesis (3 credits) and THEATRE 682 Senior Honors Thesis (3 credits), for a total of 6 credits.
- Complete 3 credits from the Integrated Liberal Studies (ILS) Program.

Students should be aware that course offerings are influenced by a number of factors, (e.g., current staffing, number of majors), and some courses are not offered on a regular basis. Students should consult with the department's academic advisor regarding course selection and other ways to maximize the Honors in the Major experience.

## GPA AND OTHER GRADUATION REQUIREMENTS

## GRADUATION REQUIREMENTS

Based on UW-Madison coursework.

[^51]- Major Residency: Students must complete at least 15 credits of upper-level (intermediate and advanced) major coursework in residence on the UW-Madison campus.
- Senior Residency: Degree candidates must complete their last 30 credits in residence on the UW-Madison campus, excluding retroactive credits and credits granted by examination.
- Total credits: A minimum of 120 credits are required for graduation in the B.S.-Theatre and Drama degree program.


## DEGREE AUDIT REPORTING SYSTEM (DARS)

At UW-Madison, a DARS report is used to document a student's progress toward the completion of their degree. This degree audit identifies the requirements that have already been completed, and also those that remain unsatisfied. A DARS report can offer suggestions about appropriate courses that may be taken to meet specific requirements and can assist in the academic planning process.

Students can access DARS reports through their Student Center in My UW-Madison. Go to the Academics tab and find DARS on the dropdown menu.

DARS also has a "what-if" function. This feature makes it possible to request a DARS report as if pursuing another program or major on campus. It is an excellent tool if considering a new or additional area of study. School of Education students in a pre-professional classification such as Pre-Elementary (PRE) should request a "what if" DARS report of their professional program of interest.

DARS is not intended to replace student contact with academic advisers. It creates more time in an advising appointment to discuss course options, research opportunities, graduate school, or issues of personal interest or concern to students.

DARS is the document of record, i.e., certifying document of degree completion, for program areas in the School of Education.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  |
| Quality of | Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or |
| academic program to remain in good academic standing. |  |
| Students whose academic performance drops below |  |
| these minimum thresholds will be placed on academic |  |

## LEARNING OUTCOMES

1. Demonstrate the ability to evaluate the art and craft of theatre both critically and conceptually.
2. Demonstrate the ability to analyze a script for the basic elements of plot, character, theme, language, rhythm, mood and elements of production.
3. Demonstrate through research and practice, knowledge of theatrical history and literature from ancient Greek to present.
4. Demonstrate competency in one or more areas of theatre specialization.
5. Demonstrate the practical knowledge and the professional skills required to pursue entry-level professional work and/or advanced studies in theatre.
6. Demonstrate the ability to creatively and generously collaborate as theatre artists.

## ADVISING AND CAREERS

## THEATRE AND DRAMA DEPARTMENTAL ADVISING

Prospective off-campus and on-campus B.S.-Theatre and Drama students will meet with department academic advisor Jim Stauffer, Department of Theatre and Drama, 6004 Vilas Communications Hall, 821 University Ave, (main office) 608-263-2329, jbstauffer@wisc.edu. Students are also strongly encouraged to confer with an Education Academic Services advisor on a regular basis, see below.

## GENERAL SCHOOL OF EDUCATION ADVISING

All undergraduate students in the School of Education are served by three offices devoted to academic and/or career advising. Each student in the School of Education is assigned at least one advisor and is encouraged to meet with the advisor on a regular basis. Students will also be assigned a faculty or staff advisor when admitted to the professional component of their degree program. Departmental advisors provide more in-depth knowledge of the major and of courses offered by the department.

## UNDERGRADUATE ADVISING AND ACADEMIC DEAN'S OFFICE-EDUCATION ACADEMIC SERVICES (EAS)

139 Education Building, 1000 Bascom Mall; 608-262-1651 www.education.wisc.edu/soe/academics/undergraduate-students/ academic-advising (http://www.education.wisc.edu/soe/academics/ undergraduate-students/academic-advising)

Education Academic Services (EAS) is the undergraduate dean's office for students in the School of Education. Staff members interpret school regulations, policies, and program requirements; take exceptions around requirements and deadlines; advise current and prospective students; monitor students having academic difficulties; coordinate field placements; facilitate the program admissions process; and maintain the official files of students in the school.

Students should meet with an advisor during their first semester on campus (if not before) and are encouraged to meet with an advisor at least once a semester. This is particularly important during the freshman and sophomore years. Appointments may be arranged by calling or visiting the office.

EAS advisors answer questions and provide guidance to current and prospective students. They consult with and refer students to faculty members and departmental advisors. Once a student is admitted to a professional program within the School of Education, he or she will also be assigned a faculty or staff advisor. Advising then becomes a partnership, with EAS and OURR advisors continuing to help students with course selection, degree progress monitoring, academic difficulties, and interpretation of policies and procedures.

Program advisors help students select and plan a program of study in the major, negotiate issues within the department, and, in the case of certification programs, follow the students' progress through their professional courses. These divisions are flexible, and students are encouraged to consult with all advisors who can help with a situation or answer a question.

## OURR: OFFICE OF UNDERGRADUATE RECRUITMENT AND RETENTION (STUDENT DIVERSITY PROGRAMS)

105 Education Building, 1000 Bascom Mall, 608-262-8427 or 608-262-1651
www.education.wisc.edu/sdp (http://www.education.wisc.edu/sdp)
The UW-Madison School of Education is committed to promoting equity and increasing diversity in its programs. OURR staff work collaboratively with Education Academic Services and campus and community partners to support underrepresented students interested in majors in the School of Education.

OURR staff perform outreach, recruitment, and advising on behalf of the School. OURR staff also support current students with their personal and professional growth, their transition from high school to college, financial aid, and career exploration.

OURR works to build a network of students and graduates who may strengthen, transform, and lead their communities through education, service, and other contributions. Students are invited to visit OURR staff at 105 Education Building-stop in, or call one of the numbers listed above to set up an appointment.

## SCHOOL OF EDUCATION CAREER CENTER

L107 Education Building, 1000 Bascom Mall, 608-262-1755
http://careercenter.education.wisc.edu/
Need assistance with any of the following?

- Exploring career options linked to School of Education majors
- Seeking a major that incorporates individual passions, interests, and values that will help one reach specific career goals
- Researching graduate schools and preparing application materials
- Beginning a job search and learning where to start and what to do
- Seeking assistance with developing a résumé, a cover letter, or interviewing skills
- Networking and connecting with potential employers

The Career Center provides resources and individual consultations to assist students in reaching their career goals. A plethora of resources can be found on the Career Center website (http:// careercenter.education.wisc.edu):

- Explore career possibilities for specific majors in Investigate Career Options. This section of the website provides tools for clarifying a student's personal criteria for success, linking specific career options to majors, and identifying steps for career/major selection. It includes strategies for making the most of a student's academic and student experience.
- Confirm major and career decisions. Gain hands-on experience in the career field of study. Assess the perceptions of selected career and major options for accuracy. Develop professional and soft skills. The Test Drive and Confirm Career Choice section provides strategies for acquiring real-world experience.
- Preparation is critical for entering one's next career phase. Learn about graduate school requirements and the application process. Develop promotional materials for employers and/ or graduate schools and obtain feedback and suggestions for enhancing them. Acquire materials that support one's applications. The Prepare and Connect section provides offers additional details.
- Implement helps students plan for the future. Attend recruiting events. Apply for graduate school or for job opportunities. Practice interviewing skills. Interview. Negotiate job and graduate school offers.

Personalized career assistance is available through individual appointments with consultants in the Career Center. To schedule an appointment visit, http://bit.ly/CCAppt.

Informational workshops and career-related events are conducted each semester. The schedule of these events can be found on the center's website (http://careercenter.education.wisc.edu/workshops).

The Career Center coordinates teacher recruitment fairs each fall and spring semester and collaborates with career centers across campus to provide campus-wide career fairs at the beginning of each semester.

## PEOPLE

Information about faculty, staff, and other contributors to the Department of Theatre and Drama can be found on the department's website. (http:// theatre.wisc.edu)

## RESOURCES AND SCHOLARSHIPS

Information about scholarships, academic and career advising, study abroad opportunities, student diversity services, and other resources for students in the School of Education can be found on the school's Resources (p. 1402) page.

## ACCREDITATION

## ACCREDITATION

National Association of Schools of Theatre (https://nast.artsaccredit.org)

# THEATRE AND DRAMA: UNDERGRADUATE SPECIALIST IN ACTING 

## REQUIREMENTS

Theatre and drama majors with a primary interest in acting may audition for the Acting Specialist option. This is a highly structured program of study, best begun as early as possible in the student's career. Specific courses are required in acting, voice, movement, directing, technical production, and dramatic literature and theatre history. Admission is by audition only; auditions are held at the midpoint of each spring semester prior to enrollment for fall classes. Students must be enrolled in or have successfully completed THEATRE 250 Fundamentals of Acting before admission to the program. Students who qualify for the Acting Specialist option are expected to audition for University Theatre productions.

The option coursework listed here is one component of the B.S. Theatre and Drama (p. 1654) degree requirements

| Production, 7 credits |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| THEATRE 160 | Technical Theatre Fundamentals | 3 |
| THEATRE 161 | Backstage Laboratory I | 2 |
| THEATRE 162 | Backstage Experience | 1 |
| Select one of the following: |  | 1-6 |
| THEATRE 361 | Backstage Laboratory II |  |
| THEATRE 561 | Backstage Laboratory III |  |
| THEATRE/ CURRIC 462 | Theatre for Young Audiences: Production |  |
| Theatre History, 12 credits |  |  |
| Code | Title | Credits |
| THEATRE/ENGL 120 | Introduction to Theatre and Dramatic Literature ${ }^{1}$ | 3-4 |
| THEATRE 224 | History of Theatrical Production | 3 |
| THEATRE 324 | Traditions in Dramatic Literature | 3 |
| THEATRE 424 | Contemporary World Theatre and Dramatic Literature | 3 |

1 The 4-credit option of THEATRE/ENGL 120 Introduction to Theatre and Dramatic Literature satisfies the General Education Communication Part B requirement.

| Voice, Movement and Acting, 18 credits |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| THEATRE 140 | Voice 1: Effective Communication | 3 |
| THEATRE 240 | Intermediate Voice Training | 3 |
| THEATRE 250 | Fundamentals of Acting | 3 |
| THEATRE 350 | Acting Realism | 3 |
| Select one of the following Movement courses: | 3 |  |

THEATRE 342 Fundamentals of Movement for the Stage

| THEATRE 351 | Fundamentals of Asian Stage <br> Discipline |
| :--- | :--- |
| Select one of the following Styles courses: |  |
| THEATRE 440 | Musical Performance for the Actor |
| THEATRE 450 | Acting Styles |
| THEATRE 541 | Acting Shakespeare |
| THEATRE 550 | Advanced Scene Study |
| THEATRE 557 | Advanced Theatre for Cultural and <br> Social Awareness |

## Directing and Education, 3 credits

Code Title Credits
Select one of the following: 3
THEATRE 357 Introduction to Theatre for Cultural and Social Awareness

THEATRE/ Drama for Teaching and Learning
CURRIC/
SLAVIC 362
THEATRE 368 Fundamentals of Directing
THEATRE 379 Introduction to Stage Management

## SCHOOL OF HUMAN ECOLOGY

The School of Human Ecology (SoHE) at UW-Madison is a place where faculty and advisors work closely with students to prepare them for careers that improve the quality of people's lives. Our majors are: community and nonprofit leadership, human development and family studies, interior architecture, personal finance, retailing and consumer behavior, and textiles and fashion design. Each program provides a solid curriculum of practical skills that lead students to exciting professions, a better understanding of people and our world, and a bachelor of science undergraduate degree.

SoHE is located in Nancy Nicholas Hall, a beautiful and newly renovated building that provides first-class, cutting-edge classrooms and studio spaces. Within these walls we connect students to their passions, helping them discover exciting careers and opportunities to make a meaningful impact on individuals, families, and communities. Faculty, students, and staff are dedicated to providing students with solid and meaningful education through coursework, internships, travel, student organizations, community involvement, research, and scholarship.

Learn more about SoHE and its majors at sohe.wisc.edu (https:// sohe.wisc.edu).

## DEGREES/MAJORS/CERTIFICATES

- Community and Nonprofit Leadership, B.S. (p. 1665)
- Human Development and Family Studies, B.S. (p. 1684)
- Individual Major, B.S. (p. 1687)
- Interior Architecture, B.S. (p. 1676)
- Personal Finance, B.S. (p. 1668)
- Retailing and Consumer Behavior, B.S. (p. 1672)
- Textiles and Design, Certificate (http://guide.wisc.edu/ undergraduate/human-ecology/design-studies/textiles-designcertificate)
- Textiles and Fashion Design, B.S. (p. 1679)


## PEOPLE

Visit the School of Human Ecology faculty and staff directory (https:// sohe.wisc.edu/connect/faculty-staff).

## ENTERING THE SCHOOL

## APPLYING TO UW-MADISON

All prospective UW-Madison students must apply through the central Office of Admissions and Recruitment (https:// www.admissions.wisc.edu).

Students who indicate interest in a SoHE major on their UW-Madison application will be admitted to the SoHE program or pre-program of choice upon admittance to the university. In addition, students may indicate interest in a SoHE major when registering for Student Orientation, Advising, and Registration (SOAR).

## VISITING CAMPUS AND SOHE

SoHE holds monthly visit events for prospective students and their families and guests.

View and register (https://www.admissions.wisc.edu/visitbucky/ events.php?etypeid=22) for an upcoming visit event.

If you are unable to attend one of these dates, please contact the SoHE Student Academic Affairs and Career Development Office at 608-262-2608 or advising@sohe.wisc.edu to schedule an appointment.

## CURRENT UW-MADISON STUDENTS

First-year students in good academic standing and first-semester transfer students may declare SoHE majors upon request. All other students must apply through a competitive application process.

The best way for interested students to receive advising or additional information is by attending a Becoming a SoHE Student Workshop (https://sohe.wisc.edu/prospective-students/prospective-students/ becoming-sohe-student-workshops).

Visit On-campus Student Application (https://sohe.wisc.edu/prospective-students/prospective-students/applying-human-ecology) for application information and deadlines.

## REENTERING STUDENTS

Students previously enrolled at the university who have not attended for a semester or more must complete a reentry application as outlined by the UW-Madison Office of Admissions and Recruitment (http:// www.admissions.wisc.edu). Students who were enrolled in a School of Human Ecology program before their absence from UW-Madison will be readmitted to that program, provided they were in good academic standing when they left (i.e., not on probation, strict probation, or dropped by the university). Reentry applicants who were dropped by the university are asked to submit supplemental application materials. Instructions for the supplemental application are sent after the student has submitted the online reentry application.

Students who were previously enrolled in another UW-Madison school or college will not be admitted directly to a School of Human Ecology
program. They must apply for reentry to the university with another school or college-usually the school or college in which they were previously enrolled. Once readmitted to the university, students may apply to the desired SoHE program through the application process for that program. For information about the school's programs and application processes, see Applying to Human Ecology as an On-Campus Student (https://sohe.wisc.edu/prospective-students/prospective-students/ applying-human-ecology).

It is recommended that students who have been readmitted to a School of Human Ecology program schedule an appointment with an academic advisor in the Student Academic Affairs \& Career Development Office.

## WISCONSIN EXPERIENCE

## INTERNSHIPS

Internships are a vital part of student career development and a highly valued component of the undergraduate curriculum in the School of Human Ecology. High-quality internships foster student development by bringing theories and classroom-based learning to life in real-world settings. In addition, internships give students the opportunity to explore careers related to their major, gain relevant experience in their field(s) of interest, and develop a better understanding of what is expected in a workplace by performing the tasks of a professional in that field.

For SoHE majors, internships are a requirement of our undergraduate curriculum. Students must have at least a junior standing (54+ credits) in order to pursue a 3 -credit internship and must complete a minimum of 150 hours at the internship site. To be eligible, an internship must be educational in nature, directly relate to a student's major and career goals, and be approved by the Student Academic Affairs \& Career Development Office (https://sohe.wisc.edu/prospective-students/ contact-us).

For more information, visit SoHE Internships (https://sohe.wisc.edu/ prospective-students/career-preparation/internships).

## STUDENT ORGANIZATIONS

School of Human Ecology student organizations include:
American Society of Interior Designers-Student Chapter (IDO) Apparel and Textile Association (ATA)
Association of Fundraising Professionals-UW-Madison Chapter Community and Nonprofit Leaders (CNLUW)
Financial Occupations Club for University Students (FOCUS)
Phi Upsilon Omicron (National Honor Society in Family and
Consumer Sciences)
Students for Families and Children (SFC)
Student Retail Association (SRA)

## POLICIES AND REGULATIONS

## SCHOLASTIC ACTIONS

FAILURES AND INCOMPLETES
Failures. Every course grade of $F$ counts as 0 grade points, and as any other grade, remains permanently on the transcript. A student who fails a required course must repeat the course and secure a passing grade
as soon as possible. The failure may not be addressed by repeating the course at another college or university.

Incompletes. An Incomplete may be granted when a documented illness or other substantiated hardship causes the student to be unable to take final examination or complete a limited portion of the course assignments. Under these conditions, a student who has carried a passing grade until near the end of the semester may request a grade of Incomplete. It is up to the instructor to decide whether an Incomplete is warranted. If granted a grade of Incomplete (I), the work must be completed and graded no later than the close of the next semester of residence at UW-Madison (exclusive of summer term). If not completed and graded by the last class day, the grade will lapse into a Failure (F). Instructors have the authority to set an earlier deadline for finishing up an incomplete. With documentation of extenuating circumstances, the student may seek permission to extend an Incomplete beyond the semester in which the course was scheduled to be completed. An extended Incomplete must be removed within the next semester in residence or the grade will lapse into Failure (F). Incompletes incurred during the summer session must also be completed no later than the close of the next semester in residence under the same rules. Students are ineligible for the dean's list for the semester in which a grade of Incomplete is submitted.

## PROBATION AND DROPPED STATUS

Failure to earn at least a 2.0 GPA will result in the status of Probation, Continued Probation, Strict Probation, Continued Strict Probation, or Dropped from the university. Such actions are based on

1. the status of the student as a result of any previous academic action,
2. the cumulative GPA including the current semester, and
3. the GPA for the semester just completed.

Academic Actions will appear on the memoranda section of the student transcript.

## DEFINITIONS OF SCHOLASTIC ACTIONS

Probation. A student with no previous action who earns a semester or summer term GPA less than 2.0 but 1.0 or more will be placed on probation.

Continued Probation. A student on probation whose cumulative GPA remains below 2.0 and whose semester or summer term GPA is 2.0 or above will be placed on continued probation. A student on continued probation whose cumulative GPA remains below 2.0 and whose semester or summer term GPA is 2.0 or above will be placed again on continued probation.

Strict Probation. A student with no previous action but with a current semester or summer term GPA below 1.0 will be placed on strict probation. A student on probation whose semester or summer term GPA is less than 2.0 but 1.5 or above will be placed on strict probation.

Continued Strict Probation. A student on strict probation or continued strict probation who earns a semester or summer term GPA of 2.0 or above but whose cumulative GPA remains below 2.0 will be placed on continued strict probation.

Dropped from the University. A student on probation whose semester or summer term GPA is less than 1.5 will be dropped for one year.

A student on strict probation whose semester or summer term GPA is less than 2.0 will be dropped for at least one year.

Removal from Probation. Students on probation or strict probation will be automatically removed from probation when their cumulative GPA reaches 2.0 or more.

## READMISSION AFTER DROPPED STATUS

Students who were dropped from the university based on academic performance are eligible for readmission consideration after one full calendar year. Students dropped for a third time will not be readmitted.

In order to reenter the university after one full year, a student must apply for readmission to the School of Human Ecology and for reentry to the university. (Please note that a student is never guaranteed readmission after being dropped. Readmission is most likely if the student has addressed the issues that contributed to being dropped from the university and has been proactive in preparing for a successful return.)

To apply for readmission to SoHE and the University of WisconsinMadison after being dropped, a student must:

1. Complete the SoHE Readmission Request Form (https:// uwmadison.qualtrics.com/SE/?SID=SV_5hhKaOxEel9ATxb).

To ensure readmission consideration, follow these deadlines: Summer or Fall Term-Apply by February 1 Spring Term-Apply by October 1
2. Complete the university reentry application (http://
www.admissions.wisc.edu/reentry.php).
3. Schedule an appointment with a SoHE academic advisor by calling 608-262-2608.

- Bring a copy of the completed SoHE Readmission Request Form and other supporting documentation (e.g. transcripts from other universities, other documents which support personal, academic, or health progress made during the time away) to the appointment.
- Use this advising appointment to: (re)establish a relationship with your academic advisor, review your enrollment plan for the term you intend to return, and review your degree completion plan.

4. The SoHE academic advisor will forward the Readmission Form, supporting documentation, and enrollment plan to the Assistant Dean for Academic Affairs for review. The dean may choose to consult with the student's previous academic department, Undergraduate Program Council and/or the student to make a decision. When a readmission decision has been made, the assistant dean will contact the student in writing. Students who are granted permission for re-entry will be readmitted on strict academic probation to the School of Human Ecology.

## DECLARING ADDITIONAL MAJORS

School of Human Ecology undergraduates can declare an additional undergraduate major in the College of Letters \& Science. This is not a second degree. The additional major is noted on the student's transcript if all requirements of the Letters \& Science major are completed.

School of Human Ecology students must plan to finish all additional academic programs concurrently with their SoHE degree. The School of Human Ecology will graduate a student at the end of the semester (spring, summer, or fall) in which all SoHE degree requirements are complete. Graduation will not be postponed for incomplete additional
major(s), certificate program(s), specialization(s), study abroad, or honors program(s).

## EARNING TWO UNDERGRADUATE DEGREES SIMULTANEOUSLY

School of Human Ecology students interested in completing two degrees simultaneously (as opposed to two majors) should consult with their academic advisor early in their academic career to discuss the feasibility of completing requirements for both degrees. Degree combinations may come from two Human Ecology programs or from a Human Ecology program and a degree program in another school or college. Students must complete all of the requirements for both degrees, which include general education requirements, major coursework, and related disciplinary work.

It is the student's responsibility to be aware of any rules or regulations that could potentially impose additional financial responsibilities as a result of attempting to complete two degrees simultaneously. Please note that some campus schools and colleges do not permit dual degrees for their students, thus preventing Human Ecology degree combinations with degrees in these schools and colleges. Students wishing to earn two undergraduate degrees must follow these academic policies:

If the two degrees to be earned are within the School of Human Ecology, at least 30 additional credits and all course and grade point requirements must be completed for the second degree. Thus, a minimum of 150 credits would be required. The two degree programs must differ sufficiently to permit the total credits to be accumulated (for instance, personal finance and retailing \& consumer behavior do not differ to the extent that it would take an additional 30 credits to complete the second degree; therefore, earning both degrees simultaneously will not be allowed). Before the start of the senior year in residence, students must meet the criteria for admission to both programs, must be certified to enroll in both programs, and must obtain academic dean's approval. The two degrees must be completed simultaneously. Some courses may satisfy requirements for both degrees, but course substitutions or curriculum exceptions between programs will be prohibited.

If the two degrees to be earned are from two different schools/colleges at UW-Madison, the two degree programs must differ sufficiently so that the combined total requirements for the two degrees are at least 150 credits. Admission into the other school/college shall be based on the admission criteria for that particular school/college. The student must be certified to enroll in both programs/schools/colleges and written permission to complete the two degrees must be obtained from academic deans in both schools/colleges before the start of the student's senior year in residence. The two degrees must be completed simultaneously. Some courses may satisfy requirements for both degrees, but course substitutions or curriculum exceptions between programs will be prohibited for the Human Ecology program.

## RESIDENCY REQUIREMENT

The university requires that the last 30 credits be earned in residence at UW-Madison for students to be recommended for a degree, unless the student's major program requires completion of the degree at a cooperative institution. Permission of the assistant dean of academic affairs must be secured in advance to take any portion of the senior year at another institution or by correspondence. Students should initiate permission through their SoHE academic advisor.

## CREDIT OVERLOAD

A full-time student carries a minimum of 12 credits to a maximum of 18 credits, with the usual or average credit load being 15-16 credits per semester. A student requesting more than 18 credits in a semester needs a signed request with approval from the School of Human Ecology academic dean. Students should initiate permission through their SoHE academic advisor. Students requesting this credit load must have earned a grade point average of at least 3.0 during the preceding semester on a program of at least 12 graded credits. "Graded credit" does not include courses taken on the Pass/Fail basis or Incompletes. Requests will be considered on an individual basis.

## PASS/FAIL

The privilege of electing courses on a pass/fail basis is extended to undergraduate students in the school. Students who are in good standing academically (not on probation) may elect one course on the pass/fail basis per term. The summer sessions collectively count as one term. A course taken pass/fail must be an elective. A student may not take a required course or a prerequisite to a required course under this privilege. A maximum of 16 pass/fail credits may be counted toward a B.S. degree from the School of Human Ecology. Courses taken pass/fail will count toward degree credits but will be excluded in the computation of grade point average and honors.

Requests to take a course under the pass/fail privilege are initiated through the Course Change Request in the MyUW (http://my.wisc.edu) Student Center. Instructions for making a course change request can be found on the Registrar's website (http://registrar.wisc.edu). After making the request in MyUW, the request is routed to the Student Academic Affairs \& Career Development Office for approval or further communication.

The registrar will convert final grades submitted by the instructor, who is not informed of the student's pass/fail status, to an S (pass) for grades A , $A B, B, B C$ or $C$, and to a $U$ (fail) for a grade of $D$ or $F$. The grade is excluded from the GPA.

## APPEALS

## APPEAL OF A SOHE GRADE

This appeal process is for a student who is dissatisfied with a grade received in a SoHE course.

1. The student will first discuss the grade appeal with the instructor of the course.
2. If the student and instructor cannot come to an agreement, the student will provide a formal written grade appeal to the assistant dean in SoHE. The written appeal must include: the class, instructor, grade received, date and conclusion of meeting with instructor, the specific reason(s) for appealing the grade and email address and telephone number where they can be reached for follow-up. Send to saadean@mail.sohe.wisc.edu.
3. The assistant dean will forward the appeal to the appropriate department chair. The department chair will perform the due diligence necessary (including, but not limited to, meeting with the instructor and student) to assess the merits of the appeal request and will provide a decision in writing to the assistant dean.
4. The assistant dean will communicate the decision to both the student and instructor in writing.
5. Should the student wish to appeal the decision further, the assistant dean will forward the appeal to the SoHE Undergraduate Program Council. The committee will perform the due diligence necessary (which may include, but not limited to, meeting with the instructor and department chair and/or student) to assess the merits of the appeal request and will provide a decision in writing to the assistant dean.
6. The assistant dean will communicate the decision to the student, the instructor, and the department chair in writing.

## APPEAL OF DENIAL OF ADMISSION TO A SOHE UNDERGRADUATE PROGRAM

This appeal process is for a student who was denied admission to a SoHE undergraduate program.

Students who feel they have a compelling reason to appeal their admissions decision may do so in writing by the deadline indicated in the admission letter. Appeals must satisfy one of the following factors in order to be considered:

- The student believes a factual error was self-reported on the application or made by the admissions committee during review of the application.
- There is new information regarding academic or non-academic extenuating circumstances.

While admission appeals satisfying the above conditions will be reviewed by the admissions committee, it is important to understand that simply meeting these criteria in no way guarantees acceptance into the program.

## Filing an Appeal

1. The student will file a letter of program admission appeal to the assistant dean in SoHE at saadean@mail.sohe.wisc.edu, stating the facts of the situation based on one or both of the conditions listed above and the student's email address and telephone number where they can be reached for follow-up. Any additional documentation or supporting evidence should be titled and attached to the letter of appeal. The deadline by which a student must file an appeal will be written in the denial letter for the undergraduate program in question. For a situation where grades/credits were not posted to a student's record prior to applying to the program, the student record must be complete with grades and credits on the official UW-Madison record by the time the appeal is filed in order to be considered.
2. The assistant dean will forward the appeal to the appropriate departmental admissions committee. The admissions committee will perform the due diligence necessary to assess the merits of the new information for the appeal and will provide a decision in writing to the assistant dean.
3. The assistant dean will communicate the decision to both the student and departmental admissions committee in writing.
4. Should the student wish to appeal the decision further in the case of extenuating circumstances, the assistant dean will forward the appeal to the SoHE Undergraduate Program Council (UPC). The UPC will perform the due diligence necessary (which may include, but not limited to, meeting with the admissions committee, department chair, and/or student) to assess the merits of the appeal and will provide a decision in writing to the assistant dean.
5. The assistant dean will communicate the decision to the student and the admissions committee in writing.

## APPEAL OF BEING DROPPED BY UW-MADISON FOR ONE YEAR

SoHE students who are dropped from the university based on academic performance are permitted to appeal for readmission consideration immediately after being dropped. Students with documentation of special circumstances outside their control, evidence that these circumstances have changed, and realistic strategies in place to improve their academic performance have the greatest likelihood of a successful appeal.

## Filing An Appeal

1. Students wishing to appeal their dropped status must do so prior to the deadline outlined in their dropped status notification. Students who do not appeal before the deadline must wait at least one full calendar year before being eligible for readmission consideration. The appeals process is initiated when students complete the online Dropped Status Appeal Form (https://uwmadison.qualtrics.com/SE/? SID=SV_6Lv7QPa3P6Ay7mR).
2. The Assistant Dean for Student Academic Affairs will submit the appeal information to the SoHE Undergraduate Program Council (UPC) for review. UPC will make a decision regarding the appeal before the beginning of the next term.
3. The assistant dean will communicate the appeal decision to the student in writing. If the appeal is granted, the student will be readmitted to the university on strict probation. If the appeal is not granted, the dropped status is sustained and the student is eligible for readmission consideration one full calendar year after the dropped date.

## LATE DROP PETITION

SoHE requires that students follow drop deadlines outlined by the Office of the Registrar (https://registrar.wisc.edu). Under certain special situations students may request an exception to drop one or more courses after the drop deadline through a petition.

Late Drop Petitions are only considered when students face significant, unforeseeable circumstances outside of their control that negatively impact their ability to successfully complete a course(s).

Students who believe they meet the requirements to petition must meet with their SoHE academic advisor and complete the online petition form (https://uwmadison.co1.qualtrics.com/jfe/form/SV_79ThOCKAFMkwGix).

## CREDIT BY EXAMINATION

## INTERIOR ARCHITECTURE CREDIT BY EXAMINATION

The design studies eepartment offers exams to qualifying students who seek to earn credit for the following courses:

DS 120 Design: Fundamentals I
DS 130 Introduction to Interior Architecture
DS 220 Design: Fundamentals II
DS 222 Interior Design I
DS 224 Interior Materials and Finishes
DS 241 Visual Communication I
DS 242 Visual Communication II
DS 322 Interior Design II
DS 421 History of Architecture and Interiors I: Antiquity through 18th Century

These exams are intended primarily for transfer and second-degree students who have acquired the equivalent information in courses
completed at another institution, but did not receive transfer credit. Students will be charged by the UW Bursar's Office for each exam.

Credit by examination may be requested by the qualifying student at any time. Students who are eligible for the credit exam are strongly encouraged to take it no later than the start of their first semester at UWMadison.

For more information:
Lesley Sager (Ihsager@wisc.edu), Interior Architecture Program Coordinator

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SOHE GENERAL EDUCATION REQUIREMENTS

Seven undergraduate majors are available in the school. There are common general education requirements for all SoHE majors, but these are reflected differently in each program. Please review each major requirement page for the specific general education courses needed for the degree.

| Code $\quad$ Title | Credits |
| :--- | ---: |
| Literature | 3 |
| $\quad$ Select 3 credits designated Literature breadth |  |
| Humanities ${ }^{1}$ | 6 |
| Social Science | 9 |
| Select 9 credits designated Social Science breadth |  |
| Physical, Biological, and Natural Science | 9 |

Select 9 credits designated Physical, Biological, and/or Natural Science breadth

## Human Ecology Breadth

Select 3 credits in the School of Human Ecology taken outside the major

## Major Requirements and Electives

Minimum total for graduation: 120 credits with no fewer than 25 credits taken within the School of Human Ecology.

1 SoHE will accept as humanities credit courses from designated humanities breadth courses as well as the following areas or departments: art, art history, classics, English, foreign languages (including beginning languages), cultural history, history of science, integrated liberal studies, literature (including comparative literature), music (including applied music), philosophy, communication arts, studies of cultures-e.g., African studies, East Asian studies, Hebrew and Semitic studies, South Asian studies, Scandinavian studies.

## REQUIREMENTS FOR GRADUATION

The bachelor of science (B.S.) degrees granted by the School of Human Ecology require a minimum total of 120 credits, with a minimum of 25 credits in the school. To remain in good academic standing, students must maintain a minimum GPA of 2.0. A 2.0 cumulative GPA must be earned by the end of the senior year in order to be recommended for a B.S. degree.

The School of Human Ecology will graduate a student at the end of the semester (spring, summer, or fall) in which all SoHE major requirements are complete. Graduation will not be postponed for incomplete additional major(s), certificate program (s), specialization(s), study abroad, or honors program(s). It is the student's responsibility to prepare for graduation and to ensure that all graduation requirements have been met. Students expecting to graduate and/or participate in commencement exercises should declare their intent through the My UW Student Center in accordance with campus deadlines.

## RESOURCES

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

The Student Academic Affairs \& Career Development Office (SAA) fosters undergraduate students' personal, academic, and professional development. Through advising, academic planning, and career education we support students as they navigate the college experience - from exploring our majors as prospective students to becoming SoHE alumni.

## ACADEMIC ADVISING

Each SoHE student is assigned to an academic advisor in the Student Academic Affairs \& Career Development Office. SoHE academic advisors support academic and personal success by partnering with current and prospective SoHE students as they identify and clarify their educational goals, develop meaningful academic plans, and pursue their own Wisconsin Experience.

To explore academic advising resources or schedule an appointment with a SoHE academic advisor, visit Advising in SoHE (https://sohe.wisc.edu/ prospective-students/advising).

## CAREER DEVELOPMENT

Active engagement in the career development process is a vital component of a student's personal growth in college and future success as a life-long learner, professional, and global citizen. SoHE career advisors help prepare students for life post-graduation through individual and group advising and integration of career readiness throughout our curriculum.

To explore career development resources or schedule an appointment with a SoHE career advisor, visit Internship and Career Preparation (https://sohe.wisc.edu/prospective-students/career-preparation).

## SCHOLARSHIPS AND OTHER FINANCIAL RESOURCES

The School of Human Ecology awards many merit and need-based scholarships each year. The deadline to apply for scholarships is typically late in the fall semester. To be eligible for these awards, scholarship recipients must be registered as full-time SoHE students.

Students who experience emergency financial situations may inquire about the availability of short-term loans through the SoHE Student Academic Affairs \& Career Development Office. In addition, university scholarships, loans, and employment are available through the Office of Student Financial Aid (https://financialaid.wisc.edu) (333 East Campus Mall; 608-262-3060).

## HONORS

## DEAN'S HONOR LIST

At the end of each semester the names of all students with a grade point average of 3.75 or higher in at least 12 graded credits for that semester will be included on the Dean's Honor List. A notation of "Dean's Honor List" will be entered on the student's transcript.

## GRADUATION WITH DISTINCTION

"Graduation with Distinction" will appear on the transcripts of students who have earned a cumulative grade point average that places them within the top 20 percent of students graduating that term in their school or college with 60 credits or more at the University of WisconsinMadison.

Students in the top 5 percent will receive the designation "Graduation with Highest Distinction." The Office of the Registrar determines whether students have met these criteria. Notations citing graduation distinction will be made on the transcript.

## HONORS PROGRAM

The School of Human Ecology Honors Program provides an opportunity for students to pursue coursework in greater depth than is possible in regular courses. The honors program is a school-wide program open to students regardless of major. Honors program members are eligible to enroll in courses offered for honors-only credit, to participate in campuswide activities for honors program students, and to apply for special research-funding opportunities. Upon completion of the honors program requirements and degree requirements, the student will receive an honors degree from the School of Human Ecology. The transcript for a SoHE honors student who does not complete all honors degree
requirements will have the honors designation next to honors courses completed.

For additional information about the Honors Program including admission, requirements, credits, and honors thesis, contact the Student Academic Affairs \& Career Development Office (https://sohe.wisc.edu/ prospective-students/contact-us).

## CIVIL SOCIETY AND COMMUNITY STUDIES

The Department of Civil Society and Community Studies offers a bachelor of science degree in community and nonprofit leadership and a Ph.D. in human ecology: civil society and community research. The community and nonprofit leadership major prepares its graduates for careers in community and nonprofit settings, graduate school, and post-baccalaureate service-oriented programs. Academic requirements include specialized emphases in human ecology; general studies in humanities, social sciences and natural sciences; and coursework focused on community impact and social change processes. Students may also engage in complementary coursework, undergraduate certificates, or additional undergraduate majors.

## DEGREES/MAJORS/CERTIFICATES

- Community and Nonprofit Leadership, B.S. (p. 1665)


## PEOPLE

Professors Bakken, Flanagan, Jasper; Assistant Professors Alexander, Gaddis, Horowitz, Sarmiento, Sparks; Faculty Associate Maguire

For more information, visit the School of Human Ecology faculty and staff directory (https://sohe.wisc.edu/connect/faculty-staff).

## RESOURCES AND SCHOLARSHIPS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

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To explore academic advising resources or schedule an appointment with a SoHE academic advisor, visit Advising in SoHE (https://sohe.wisc.edu/ prospective-students/advising).

## CAREER DEVELOPMENT

Active engagement in the career development process is a vital component of a student's personal growth in college and future success as a life-long learner, professional, and global citizen. SoHE career advisors help prepare students for life post-graduation through individual and group advising and integration of career readiness throughout our curriculum.

To explore career development resources or schedule an appointment with a SoHE career advisor, visit Internship and Career Preparation (https://sohe.wisc.edu/prospective-students/career-preparation).

## SCHOLARSHIPS AND OTHER FINANCIAL RESOURCES

The School of Human Ecology awards many merit and need-based scholarships each year. The deadline to apply for scholarships is typically late in the fall semester. To be eligible for these awards, scholarship recipients must be registered as full-time SoHE students.

Students who experience emergency financial situations may inquire about the availability of short-term loans through the SoHE Student Academic Affairs \& Career Development Office. In addition, university scholarships, loans, and employment are available through the Office of Student Financial Aid (https://financialaid.wisc.edu) (333 East Campus Mall; 608-262-3060).

## COMMUNITY AND NONPROFIT LEADERSHIP, B.S.

Through academic study, community engagement, and applied research, Community and Nonprofit Leadership (CNPL) undergraduate students develop into competent, caring professionals interested in communitybased change and the expanding nonprofit sector. In smaller, inclusive, project-based courses, CNPL students collaborate with each other and community partners, gaining practical experience and making a difference through their coursework. The CNPL bachelor of science degree prepares its graduates for careers in community and nonprofit settings, graduate school (in law, policy, community health, etc.), and post-baccalaureate service-oriented programs (such as Peace Corps, AmeriCorps, City Year, etc.), enabling them to create, lead, and support innovative community-based initiatives that change lives and make the world a better place. Their work and advanced study address human, family, and civil society issues such as: food and environmental justice, homelessness and rights to housing, health equity, gender equality, racial justice, community and leadership development, community organizing, advocacy, and more.

CNPL majors complete a required internship before graduating, allowing them to pursue their own personal interests and to develop a strong portfolio of skills and references that will propel them to launch successful careers.

## HOW TO GET IN

## PROSPECTIVE UW-MADISON STUDENTS

All prospective UW-Madison students must apply through the central Office of Admissions and Recruitment (https:// www.admissions.wisc.edu).

Students who indicate interest in the community and nonprofit leadership (CNPL) major on their UW-Madison application will be admitted to the CNPL major upon admittance to the university. In addition, students may indicate interest in CNPL when registering for Student Orientation, Advising, and Registration (SOAR).

## CURRENT UW-MADISON STUDENTS

First-year students in good academic standing and first-semester transfer students may declare the CNPL major upon request. All other students must apply through a competitive application process.

The best way for interested students to receive advising or additional information is by attending a Becoming a SoHE Student Workshop (https://sohe.wisc.edu/prospective-students/prospective-students/ becoming-sohe-student-workshops).

Visit On-campus Student Application (https://sohe.wisc.edu/prospective-students/prospective-students/applying-human-ecology) for application information and the October and February deadlines.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of |
|  | one 4- or 5-credit course with a laboratory component; |
|  | or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF HUMAN ECOLOGY REQUIREMENTS



Select six credits of Human Ecology courses from CNSR SCI, DS, HDFS, or INTER-HE

Total Credits

## COMMUNITY AND NONPROFIT LEADERSHIP REQUIREMENTS

A complete list of requirements is below. Students should follow the curriculum requirements in place at the time they entered the major. Curriculum checksheets from previous academic years are available online (https://sohe.wisc.edu/prospective-students/advising/curriculumchecksheets). This requirement list should be used in combination with a DARS report

| Code | Title | Credits |
| :---: | :---: | :---: |
| Community and Nonprofit Leadership Core Courses |  |  |
| CSCS 125 | Community and Social Change | 3 |
| CSCS 300 | Nonprofit Sector: Overview and Foundations | 3 |
| CSCS 345 | Evaluation and Planning for Community and Nonprofit Organizations | 3 |
| CSCS 460 | Civil Society and Community Leadership | 3 |
| CSCS 570 | Community Based Research and Evaluation | 3 |
| CSCS 600 | Community Issues and Action Capstone | 3 |
| Community and Nonprofit Leadership Depth Courses |  |  |
| Complete 9 credits from any other Civil Society \& Community Studies courses |  | 9 |
| CSCS courses (http://guide.wisc.edu/courses/cscs) |  |  |
| Professional Development |  |  |


| CSCS 254 | Community \& Nonprofit Leadership <br> Symposium | 1 |
| :--- | :--- | :---: |
| INTER-HE 202 | SoHE Career \& Leadership <br> Development | 1 |
| CSCS 601 | Internship | 3 |
| Electives <br> Select electives to fulfill degree requirement of 120 <br> credits |  |  |

Total Credits

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| Undergraduate students must maintain the minimum |  |
| Wrade point average specified by the school, college, or |  |
| academic program to remain in good academic standing. |  |

## LEARNING OUTCOMES

1. (Ecological perspectives on community and society) Articulate and apply an ecological perspective at discrete levels of analysis (individual, group, community, and society).
2. (Civic literacy and the public sphere) Assess the major trends in civil society recognizing the influence and interconnectedness across the major sectors of society and exhibit strong capacity for sustained, high impact participation in civic life.
3. (Identity, diversity, and social justice) Recognize well-being and social justice as relational and position, applying these principles in community organizing and empowerment.
4. (Organizational management and professional development) Demonstrate entry-level knowledge and skills relevant to nonprofit and community organizations and exhibit the practices of a lifelong learner.
5. (Research, analysis, and communication) Vet and/or generate high quality data, perform relevant analyses, and share results with target audiences using oral, written, and visual communication techniques.
6. (Leadership, ethics, and well-being) Recognize the value of being a reflective, ethical leader who cultivates others' strengths and leadership capabilities, while exhibiting self-care and care for others.

## ADVISING AND CAREERS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

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## ACADEMIC ADVISING

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## PEOPLE

Professors Bakken, Flanagan, Jasper; Assistant Professors Alexander, Gaddis, Horowitz, Sarmiento, Sparks; Faculty Associate Maguire

For more information, visit the School of Human Ecology faculty and staff directory (https://sohe.wisc.edu/connect/faculty-staff).

## WISCONSIN EXPERIENCE

## INTERNSHIPS

Internships are a vital part of student career development and a highly valued component of the undergraduate curriculum in the School of Human Ecology. High-quality internships foster student development by bringing theories and classroom-based learning to life in real-world settings. In addition, internships give students the opportunity to explore careers related to their major, gain relevant experience in their field(s) of interest, and develop a better understanding of what is expected in a workplace by performing the tasks of a professional in that field.

For SoHE majors, internships are a requirement of our undergraduate curriculum. Students must have at least a junior standing ( $54+$ credits) in order to pursue a 3-credit internship and must complete a minimum
of 150 hours at the internship site. To be eligible, an internship must be educational in nature, directly relate to a student's major and career goals, and be approved by the Student Academic Affairs \& Career Development Office (https://sohe.wisc.edu/prospective-students/ contact-us).

For more information, visit SoHE Internships (https://sohe.wisc.edu/ prospective-students/career-preparation/internships).

## STUDENT ORGANIZATIONS

School of Human Ecology student organizations include:
American Society of Interior Designers-Student Chapter (IDO) Apparel and Textile Association (ATA)
Association of Fundraising Professionals-UW-Madison Chapter Community and Nonprofit Leaders (CNLUW)
Financial Occupations Club for University Students (FOCUS) Phi Upsilon Omicron (National Honor Society in Family and Consumer Sciences)
Students for Families and Children (SFC)
Student Retail Association (SRA)

## RESOURCES AND SCHOLARSHIPS

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## SCHOLARSHIPS AND OTHER FINANCIAL RESOURCES

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## CONSUMER SCIENCE

The Department of Consumer Science studies interactions among consumers, business, and government in order to advance the wellbeing of consumers, families, and communities. The department is multi-disciplinary, including study in economics, finance, sociology, psychology, marketing, and public affairs. The Department of Consumer Science offers two undergraduate degree programs: personal finance, and retailing and consumer behavior. Both courses of study focus broadly on the economic well-being of consumers and society. The department also offers M.S. and Ph.D. degrees in human ecology: consumer behavior and family economics.

## DEGREES/MAJORS/CERTIFICATES

- Personal Finance, B.S. (p. 1668)
- Retailing and Consumer Behavior, B.S. (p. 1672)


## PEOPLE

Professors Bartfeld, Shim, Wong; Associate Professors Collins, Robb; Assistant Professors Addo, Ashton, Warmath; Faculty Associates Lepe, Murray, O'Brien, Olive, Whelan

For more information, visit the School of Human Ecology faculty and staff directory (https://sohe.wisc.edu/connect/faculty-staff).

## RESOURCES AND SCHOLARSHIPS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

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## PERSONAL FINANCE, B.S.

The bachelor of science in personal finance looks at economics from a people perspective, developing financial experts who can help individuals and families live more secure lives. Graduates of personal finance are prepared to work in financial product development, financial technology, and consumer behavior.

Within the personal finance program, students may choose to complete the financial planning option. This financial planning option is registered with the Certified Financial Planner® Board of Standards. The coursework is interdisciplinary with an emphasis on financial management and the economic well-being of individuals and families. The financial planning option is the more traditional personal finance program leading to careers in counseling, coaching, and wealth management. Graduates of the financial planning option leave fully prepared to sit for the prestigious Certified Financial Planner® exam, which SoHE students pass well above the national average.

All personal finance majors complete a required internship before graduating, allowing them to pursue their own personal interests and to develop a strong portfolio of skills and references that will propel them to launch successful careers.

## HOW TO GET IN

## PROSPECTIVE UW-MADISON STUDENTS

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## CURRENT UW-MADISON STUDENTS

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## REQUIREMENTS

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* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF HUMAN ECOLOGY

 REQUIREMENTS| Code | Title | Credits |
| :---: | :---: | :---: |
| Math |  |  |
| MATH 112 | Algebra | 3 |
| Or higher (not MATH 130 or 141) unless exempt through placement exam |  |  |
| Statistics |  | 3-4 |
| STAT 301 | Introduction to Statistical Methods |  |
| $\begin{aligned} & \text { SOC/ } \\ & \text { C\&E SOC } 360 \end{aligned}$ | Statistics for Sociologists I |  |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  |
| PSYCH 210 | Basic Statistics for Psychology |  |
| ECON 310 | Statistics: Measurement in Economics |  |
| GEOG 360 | Quantitative Methods in Geographical Analysis |  |
| Arts and Humanities |  |  |
| Literature |  | 3 |
| Humanities |  | 6 |
| Social Science |  |  |
| ECON 101 | Principles of Microeconomics | 4 |
| ECON 102 | Principles of Macroeconomics | 3-4 |
| Choose any designated Social Science breadth courses to bring total credits to 9 |  | 3 |
| Physical, Biological or Natural Science |  | 9 |
| Human Ecology Breadth |  | 3 |
| Select one Hum HDFS, or INTER | Ecology course from CSCS, DS, |  |

Total Credits
37-39

## PERSONAL FINANCE REQUIREMENTS

A complete list of requirements is below. Students should follow the curriculum requirements in place at the time they entered the major. Curriculum checksheets from previous academic years are available online (https://sohe.wisc.edu/prospective-students/advising/ curriculum-checksheets). This requirement list should be used in combination with a DARS report.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Personal Finance Core |  |  |
| CNSR SCI 201 | Consumer Research \& Analysis | 3 |
| CNSR SCI 275 | Consumer Finance | 3 |
| CNSR SCI 355 | Financial Coaching |  |
| or CNSR SCI 301 | Advanced Consumer Analytics | 3 |
| ACCT I S 100 | Introductory Financial Accounting |  |
| or ACCT I S 300 Accounting Principles <br> Consumer Science Courses 3 <br> CNSR SCI 477 The Consumer and the Market <br> CNSR SCI 555 Consumer Strategy \& Evaluation <br> CNSR SCI 657 Consumer Behavior |  |  |

Consumer Science Depth

| Select 6 credits from the course list below. |  | 6 |
| :---: | :---: | :---: |
| (Not also used in the Personal Finance Core category) |  |  |
| CNSR SCI/ RELIG ST 173 | Consuming Happiness |  |
| CNSR SCI 255 | Consumer Financial Services Innovation |  |
| CNSR SCI 273 | Finances \& Families |  |
| CNSR SCI 301 | Advanced Consumer Analytics |  |
| CNSR SCI 340 | Building Financial Assets and Capability for Vulnerable Families |  |
| CNSR SCI 355 | Financial Coaching |  |
| CNSR SCI 360 | Sustainable and Socially Just Consumption |  |
| CNSR SCI/ <br> HDFS 465 | Families \& Poverty |  |
| CNSR SCI 527 | Consumer Spending and Saving Over the Lifecycle |  |
| CNSR SCI 575 | Family Economics and Public Policy |  |
| CNSR SCI 579 | Consumer Policy Analysis |  |
| Professional Development |  |  |
| CNSR SCI 251 | Financial Services Leadership Symposium ${ }^{1}$ | 1 |
| INTER-HE 202 | SoHE Career \& Leadership Development | 1 |
| CNSR SCI 601 | Consumer Science Internship | 3 |
| Electives |  |  |
| Select electives to bring degree credit total to 120 |  |  |

## Total Credits

1 CNSR SCI 251 Financial Services Leadership Symposium may be repeated for up to 2 credits. The additional credit will be counted as an elective.

## PERSONAL FINANCE: FINANCIAL PLANNING OPTION

- Personal Finance: Financial Planning, B.S. (p. 1671)


## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 |
| degree credits. Students should consult with their college |  |
| or department advisor for information on specific credit |  |
| requirements. |  |

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Invoke interdisciplinary and collaborative approaches to understand the interactions between individuals and their social and environmental contexts.
2. Demonstrate the ability to harness, analyze and interpret relevant data for making real world decisions.
3. Acquire professional and life skills related to workplace communication, teamwork, active listening and adapting to technology.
4. Demonstrate an understanding of consumer financial behavior and the role of income, savings, credit, planning and benefits.

## ADVISING AND CAREERS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

The Student Academic Affairs \& Career Development Office (SAA) fosters undergraduate students' personal, academic, and professional development. Through advising, academic planning, and career education we support students as they navigate the college experience-from exploring our majors as prospective students to becoming SoHE alumni.

## ACADEMIC ADVISING

Each SoHE student is assigned to an academic advisor in the Student Academic Affairs \& Career Development Office. SoHE academic advisors support academic and personal success by partnering with current and prospective SoHE students as they identify and clarify their educational goals, develop meaningful academic plans, and pursue their own Wisconsin Experience.

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## CAREER DEVELOPMENT

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## PEOPLE

Professors Bartfeld, Shim, Wong; Associate Professors Collins, Robb; Assistant Professors Addo, Ashton, Warmath; Faculty Associates Lepe, Murray, O'Brien, Olive, Whelan

For more information, visit the School of Human Ecology faculty and staff directory (https://sohe.wisc.edu/connect/faculty-staff).

## WISCONSIN EXPERIENCE

## INTERNSHIPS

Internships are a vital part of student career development and a highly valued component of the undergraduate curriculum in the School of Human Ecology. High-quality internships foster student development by bringing theories and classroom-based learning to life in real-world settings. In addition, internships give students the opportunity to explore careers related to their major, gain relevant experience in their field(s) of interest, and develop a better understanding of what is expected in a workplace by performing the tasks of a professional in that field.

For SoHE majors, internships are a requirement of our undergraduate curriculum. Students must have at least a junior standing ( $54+$ credits) in order to pursue a 3-credit internship and must complete a minimum of 150 hours at the internship site. To be eligible, an internship must be educational in nature, directly relate to a student's major and career goals, and be approved by the Student Academic Affairs \& Career Development Office (https://sohe.wisc.edu/prospective-students/ contact-us).

For more information, visit SoHE Internships (https://sohe.wisc.edu/ prospective-students/career-preparation/internships).

## STUDENT ORGANIZATIONS

School of Human Ecology student organizations include:
American Society of Interior Designers-Student Chapter (IDO) Apparel and Textile Association (ATA)
Association of Fundraising Professionals-UW-Madison Chapter Community and Nonprofit Leaders (CNLUW)
Financial Occupations Club for University Students (FOCUS) Phi Upsilon Omicron (National Honor Society in Family and Consumer Sciences)
Students for Families and Children (SFC)
Student Retail Association (SRA)

## RESOURCES AND SCHOLARSHIPS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

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## SCHOLARSHIPS AND OTHER FINANCIAL RESOURCES

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Students who experience emergency financial situations may inquire about the availability of short-term loans through the SoHE Student Academic Affairs \& Career Development Office. In addition, university scholarships, loans, and employment are available through the Office of Student Financial Aid (https://financialaid.wisc.edu) (333 East Campus Mall; 608-262-3060).

> PERSONAL FINANCE: FINANCIAL PLANNING, B.S.

Within the personal finance program, students may choose to complete the financial planning option. This financial planning option is registered with the Certified Financial Planner® Board of Standards. The coursework is interdisciplinary with an emphasis on financial management and the economic well-being of individuals and families. The financial planning option is the more traditional personal finance program leading to careers in counseling, coaching, and wealth management. Graduates of the financial planning option leave fully prepared to sit for the prestigious Certified Financial Planner® exam, which SoHE students pass well above the national average.

## REQUIREMENTS

## PERSONAL FINANCE: FINANCIAL PLANNING

A complete list of requirements is below. Students should follow the curriculum requirements in place at the time they entered the major. Curriculum checksheets from previous academic years are available online (https://sohe.wisc.edu/prospective-students/advising/ curriculum-checksheets). This requirement list should be used in combination with a DARS report.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Personal Finance Core |  |  |
| CNSR SCI 201 | Consumer Research \& Analysis | 3 |
| CNSR SCI 275 | Consumer Finance | 3 |
| CNSR SCI 355 <br> or CNSR SCI 301 | Financial Coaching <br> Advanced Consumer Analytics | 3 |
| ACCT IS 100 or ACCT IS 300 | Introductory Financial Accounting Accounting Principles | 3 |
| Financial Planning Courses |  |  |
| CNSR SCI 627 | Advanced Consumer Finance | 3 |
| CNSR SCI 635 | Estate Planning for Financial Planners | 3 |
| CNSR SCI 675 | Family Financial Counseling | 3 |
| ACCTIS/LAW 329 | Taxation: Concepts for Business and Personal Planning | 3 |
| Select CNSR SCI 665 or 6 credits): | or R M I 300 \& R M I 620 sequence (3 | 3-6 |
| CNSR SCI 665 | Household Risk Management |  |
| OR |  |  |
| $\begin{aligned} & \text { R M I } 300 \\ & \& R M I 620 \end{aligned}$ | Principles of Risk Management and Employee Benefits Management |  |

Professional Development

| CNSR SCI 251 | Financial Services Leadership <br> Symposium ${ }^{1}$ | 1 |
| :--- | :--- | ---: |
| INTER-HE 202 | SoHE Career \& Leadership <br> Development | 1 |
| CNSR SCI 601 | Consumer Science Internship | 3 |
| Electives |  |  |
| Select electives to bring degree credit total to 120 |  |  |
| Total Credits |  | $32-35$ |

1 CNSR SCI 251 Financial Services Leadership Symposium may be repeated for up to 2 credits. The additional credit will be counted as an elective.

## RETAILING AND CONSUMER BEHAVIOR, B.S.

Retailing and consumer behavior (RCB) leverages technology and research to understand and improve the global customer experience. This bachelor of science degree blends business and analytics
with creativity, trend tracking, and technology. Students develop the skills to work in an industry that powers economies and offers ample employment opportunities, including online retailing and social commerce professions. Our experienced faculty guide RCB students through an inspiring and flexible curriculum that prepares them for careers in a dynamic and globally-focused industry.

Explore the world of commerce and technology from a people-first perspective. As a RCB major you'll learn to research, improve, and better understand the global customer experience with the support and guidance of SoHE faculty, a team of industry experts and researchers. Coursework integrates analytics and statistics with retailing, consumer science, and business courses.

SoHE's RCB graduates work for diverse and rapidly growing retailing companies around the globe. Technology and management jobs have been in high demand for several years and are only expected to continue their rapid growth.

RCB majors complete a required internship before graduating, allowing them to pursue their own personal interests and to develop a strong portfolio of skills and references that will propel them to launch successful careers.

## HOW TO GET IN

## PROSPECTIVE UW-MADISON STUDENTS

All prospective UW-Madison students must apply through the central Office of Admissions and Recruitment (https:// www.admissions.wisc.edu).

Students who indicate interest in the retailing and consumer behavior major on their UW-Madison application will be admitted to the retailing and consumer behavior major upon admittance to the university. In addition, students may indicate interest in retailing and consumer behavior when registering for Student Orientation, Advising, and Registration (SOAR).

## CURRENT UW-MADISON STUDENTS

First-year students in good academic standing and first-semester transfer students may declare the retailing and consumer behavior major upon request. All other students must apply through a competitive application process.

> The best way for interested students to receive advising or additional information is by attending a Becoming a SoHE Student Workshop (https://sohe.wisc.edu/prospective-students/prospective-students/ becoming-sohe-student-workshops).

Visit On-campus Student Application (https://sohe.wisc.edu/prospective-students/prospective-students/applying-human-ecology) for application information and the October and February deadlines.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core
of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF HUMAN ECOLOGY REQUIREMENTS

| SCHOOL | LOGY |  | ACCT I S 300 | Accounting Principles |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q |  |  | ACCT I S 100 | Introductory Financial Accounting |  |
| Code | Title | Credits | GEN BUS 310 | Fundamentals of Accounting and Finance for Non-Business Majors |  |
| Math |  |  | Retailing and Con | mer Behavior Depth |  |
| MATH 112 | Algebra | 3 | Select one course | m the following: | 3 |
| Or higher (not through place | H 130 or 141) unless exempt exam |  | CNSR SCI 561 | Retail Channel Strategy \& OmniChannel Retailing |  |
| Statistics |  | 3-4 | CNSR SCI 562 | The Global Consumer |  |
| Select one of the | wing: |  | CNSR SCI 567 | Product Development Strategies in |  |
| STAT 301 | Introduction to Statistical Methods |  |  | Retailing |  |
| SOC/ | Statistics for Sociologists I |  | Consumer Science | epth |  |
| C\&E SOC 360 |  |  | Select 6 credits from | the course list below. | 6 |
| STAT 371 | Introductory Applied Statistics for the Life Sciences |  | (Not also used in Depth category) | Retailing \& Consumer Behavior |  |
| PSYCH 210 | Basic Statistics for Psychology |  | CNSR SCI/ | Consuming Happiness |  |
| ECON 310 | Statistics: Measurement in |  | RELIG ST 173 |  |  |
|  | Economics |  | CNSR SCI 255 | Consumer Financial Services |  |
| GEOG 360 | Quantitative Methods in |  |  | Innovation |  |
|  | Geographical Analysis |  | CNSR SCI 273 | Finances \& Families |  |
| Arts and Humanit |  |  | CNSR SCI 301 | Advanced Consumer Analytics |  |
| Literature |  | 3 | CNSR SCI 340 | Building Financial Assets and |  |
| Humanities |  | 6 |  | Capability for Vulnerable Families |  |
| Social Science |  |  | CNSR SCI 360 | Sustainable and Socially Just |  |
| ECON 101 | Principles of Microeconomics | 4 |  | Consumption |  |
| Select 6 credits d | nated Social Science breadth | 6 | CNSR SCI/ | Families \& Poverty |  |
| Physical, Biologic | d Natural Science | 9 | HDFS 465 |  |  |
| Human Ecology B |  | 3 | CNSR SCI 477 | The Consumer and the Market |  |
| Select one Hu HDFS, or INTE | Ecology course from CSCS, DS, |  | CNSR SCI 527 | Consumer Spending and Saving Over the Lifecycle |  |
| Total Credits |  | 37-38 | CNSR SCI 562 | The Global Consumer |  |
| Total Credits |  |  | CNSR SCI 567 | Product Development Strategies in Retailing |  |
|  |  |  | CNSR SCI 575 | Family Economics and Public Policy |  |
|  |  |  | CNSR SCI 579 | Consumer Policy Analysis |  |

## RETAILING \& CONSUMER BEHAVIOR REQUIREMENTS

A complete list of requirements is below. Students should follow the curriculum requirements in place at the time they entered the major. Curriculum checksheets from previous academic years are available online (https://sohe.wisc.edu/prospective-students/advising/ curriculum-checksheets). This requirement list should be used in combination with a DARS report.

| Code | Title | Credits |
| :--- | :--- | :--- |
| Consumer Science Courses |  |  |
| CNSR SCI 257 | Introduction to Retailing | 2 |
| CNSR SCI 201 | Consumer Research \& Analysis | 3 |
| CNSR SCI 275 | Consumer Finance | 3 |
| CNSR SCI 657 | Consumer Behavior | 3 |
| CNSR SCI 564 | Retail Financial Analysis | 3 |
| CNSR SCI 555 | Consumer Strategy \& Evaluation | 3 |

Accounting Course
Select one course from the following: 3

| Professional Development |  |  |
| :---: | :---: | :---: |
| CNSR SCI 250 | Retail Leadership Symposium | 1 |
| INTER-HE 202 | SoHE Career \& Leadership Development | 1 |
| CNSR SCI 603 | Retailing Internship | 3 |
| Electives |  |  |
| Select electives to bring degree credit total to 120 |  |  |
| Total Credits |  | 34 |
| CNSR SCI 250 Retail Leadership Symposium m to three credits. Credits in addition to the one $r$ counted as elective credits. |  |  |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes |
|  | UW-Madison courses offered in distance or online <br> formats and credits earned in UW-Madison Study |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic |
| probation. |  |

## LEARNING OUTCOMES

1. Invoke interdisciplinary and collaborative approaches to understand the interactions between individuals and their social and environmental contexts.
2. Demonstrate the ability to harness, analyze and interpret relevant data for making real world decisions.
3. Acquire professional and life skills related to workplace communication, teamwork, active listening and adapting to technology.
4. Demonstrate an understanding of the global retail industry and how retailers can enhance consumer well-being.

ADVISING AND CAREERS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

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Professors Bartfeld, Shim, Wong; Associate Professors Collins, Robb; Assistant Professors Addo, Ashton, Warmath; Faculty Associates Lepe, Murray, O'Brien, Olive, Whelan

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## WISCONSIN EXPERIENCE

## INTERNSHIPS

Internships are a vital part of student career development and a highly valued component of the undergraduate curriculum in the School of Human Ecology. High-quality internships foster student development by bringing theories and classroom-based learning to life in real-world settings. In addition, internships give students the opportunity to explore careers related to their major, gain relevant experience in their field(s) of interest, and develop a better understanding of what is expected in a workplace by performing the tasks of a professional in that field.

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Students for Families and Children (SFC)
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## RESOURCES AND SCHOLARSHIPS

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## DESIGN STUDIES

Design Studies offers multidisciplinary education in design and research of interior design environments and textiles and apparel design, through participation in formal classroom instruction and ongoing research and scholarly endeavors. Students benefit from a broad-based program and faculty specializing in areas such as design visualization, environment and behavior studies, history of interiors and textiles, interior architecture, material culture, textile and apparel design, and textile science.

Two undergraduate degree majors are offered: interior architecture, and textiles and fashion design. There is also a human ecology: design studies graduate program, offering M.S., MFA, and Ph.D. degrees.

Student internships in both undergraduate majors augment campus course offerings, providing students with unique learning opportunities in their chosen fields. Design studies majors have access to design resources: studios, a computer laboratory equipped to support design work; textile laboratories including a testing room; an interior architecture resource room, the Design Gallery, the Helen Louise Allen Textile Collection, and the Ruth Ketterer Harris Library. In addition, a strong collaborative environment exists for students and faculty interaction with other departments, institutes, and museums on the campus and other design programs within the state and country.

## DEGREES/MAJORS/CERTIFICATES

- Interior Architecture, B.S. (p. 1676)
- Textiles and Design, Certificate (http://guide.wisc.edu/ undergraduate/human-ecology/design-studies/textiles-designcertificate)
- Textiles and Fashion Design, B.S. (p. 1679)


## PEOPLE

Professors Angus, Dong, Moskowitz, Nelson, Rengel, Sarmadi; Associate Professors Hark, Kallenborn, Shin; Assistant Professors Fairbanks, Ponto, Thorleifsdottir; Faculty Associates Godrey, Kurutz, Sager

For more information, visit the School of Human Ecology faculty and staff directory (https://sohe.wisc.edu/connect/faculty-staff).

## RESOURCES AND SCHOLARSHIPS

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## INTERIOR ARCHITECTURE, B.S.

The undergraduate major in interior architecture is a four-year professional program accredited by the Council for Interior Design Accreditation (CIDA) and leading to the Bachelor of Science degree in Interior Architecture. The program develops students' creativity in the design and planning of interior spaces by emphasizing the process and communication of design. Students learn to integrate the art of design with the social sciences concerning the interaction of people and their environment, the history of design, and the physical sciences relating to the effects of materials on the physical health and comfort of inhabitants. Insight into professional practice is enhanced through internship experiences.

Faculty maintain scholarly programs of study in design and research that form the basis of the graduate program and enrich the undergraduate program through course work, design review, and student mentoring.

Course content helps students develop verbal and visual communication skills with exposure to both residential and commercial interiors. In addition, courses in art history, history of interiors, engineering, and art
are required. A final portfolio is required before graduation. Studio spaces for student use, a resource center containing catalogs and samples, plus a lighting demonstration area and computer laboratory provide physical support for the interior architecture curriculum.

## HOW TO GET IN

## PROSPECTIVE UW-MADISON STUDENTS

All prospective UW-Madison students must apply through the central Office of Admissions and Recruitment (https:// www.admissions.wisc.edu).

Freshmen should declare their intention to pursue the interior architecture (IA) major when they apply for admission to UW-Madison. In addition, students may indicate interest in the IA major when registering for Student Orientation, Advising, and Registration (SOAR).

## CURRENT UW-MADISON STUDENTS <br> PHASE ONE: DESIGN CORE

A 2.75 minimum cumulative GPA is required for declaring the pre-interior architecture major (Phase One). Eligible students should meet with an advisor to declare as early in their academic career as possible.

Before applying to Phase Two, students must complete the following courses in the Design Core: DS 120, DS 220, DS 130, DS 501 (Intro to Visual Communication), and DS 252.

Transfer students may take longer to complete their degree than students entering the program as freshmen, as they too must complete both Phase One and Phase Two, which contain specialized courses that must be taken sequentially.

## PHASE TWO: PROFESSIONAL COURSE SEQUENCE

Advancement into Phase Two is competitive and involves a holistic application process that occurs each spring semester.

After completing Phase One of the program and upon acceptance into Phase Two, all IA students must purchase a laptop computer based on minimum hardware specification and software licenses determined by the department and updated regularly. Students also have the option, but are not required, to purchase a laptop computer before completion of Phase One of the program.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p.22) section of the Guide.


Total Credits

## INTERIOR ARCHITECTURE REQUIREMENTS

A complete list of requirements is below. Students should follow the curriculum requirements in place at the time they entered the major. Curriculum checksheets from previous academic years are available online (https://sohe.wisc.edu/prospective-students/advising/ curriculum-checksheets). This requirement list should be used in combination with a DARS report.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Phase One: Design Core |  |  |
| DS 120 | Design: Fundamentals I | 3 |
| DS 220 | Design: Fundamentals II | 3 |
| DS 130 | Introduction to Interior Architecture | 3 |
| DS 501 | Special Topics (Select topic title: <br> Intro to Visual Communication) | 3 |
| DS 252 | Design Leadership Symposium | 1 |
| Phase Two: Professional Course Sequence |  |  |
| Interior Architecture Studio Core |  |  |


| DS 222 | Interior Design I | 4 |
| :---: | :---: | :---: |
| DS 322 | Interior Design II | 4 |
| DS 622 | Interior Design III | 4 |
| DS 623 | Interior Design IV | 4 |
| DS 626 | Interior Design V | 4 |
| Content Area Courses |  |  |
| DS 221 | Person and Environment Interactions | 3 |
| DS 223 | Interior Architectural Design | 3 |
| DS 224 | Interior Materials and Finishes | 3 |
| DS 241 | Visual Communication I | 3 |
| DS 242 | Visual Communication II | 3 |
| DS 421 | History of Architecture and Interiors <br> I: Antiquity through 18th Century | 3 |
| DS 422 | History of Architecture \& Interiors II: 19th and 20th Centuries | 3 |
| DS 451 | Color Theory and Technology | 3 |
| DS 561 | Textiles: Specifications and End Use Analysis | 3 |
| DS 501 | Special Topics (Select topic: Senior Capstone Programming) | 2 |
| DS 501 | Special Topics (Select topic: Lighting, Acoustics, \& Thermal Comfort in Buildings) | 3 |
| DS 624 | Portfolio Preparation | 3 |
| Professional Development |  |  |
| DS 252 | Design Leadership Symposium (Completed in Phase One: Design Core) |  |
| INTER-HE 202 | SoHE Career \& Leadership Development | 1 |
| DS 601 | Internship | 3 |
| Design Focus ${ }^{1}$ |  | 6 |

Select 6 credits in consultation with your SoHE academic advisor.
Electives
Select electives to meet minimum total of 120 degree credits

1 Design Focus courses are intended to be an opportunity for students to develop more depth and uniqueness to their course of study. See Design Focus course list below. Please work with your SoHE academic advisor to seek approval for coursework taken outside of Design Studies.

Design Studies course list

| Code | Title | Credits |
| :--- | :--- | ---: |
| DS 101 | Introduction to Textile Design | 3 |
| DS 227 | Textile Design: Printing and Dyeing I | 3 |
| DS 251 | Textile Science | 3 |
| DS 252 | Design Leadership Symposium <br> (May be taken twice) | 1 |
| DS/ANTHRO/ | Dimensions of Material Culture | 4 |
| ART HIST/HISTORY/ |  |  |
| LAND ARC 264 | Design Thinking for Transformation | 3 |
| DS 341 |  |  |


| DS 361 | Design-Related International <br> Experience | $1-6$ |
| :--- | :--- | ---: |
| DS 501 | Special Topics (offerings vary by <br> semester) | $1-3$ |
| DS/COMP SCI/ | Wearable Technology | 3 |
| ISY E 518 | Global Artisans | 3 |
| DS 527 | Virtual Reality | 3 |
| DS/COMP SCI 579 |  |  |
| DS/LAND ARC 639 | Culture and Built Environment | 3 |

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. |
| :--- | :--- |
|  | The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | formats and credits earned in UW-Madison Study |
| Abroad/Study Away programs. |  | | Undergraduate students must maintain the minimum |
| :--- |
| grade point average specified by the school, college, or |
| academic program to remain in good academic standing. |

## LEARNING OUTCOMES

1. Grounded in the history and theory relevant to the built environment and human behavior.
2. Intellectual skills for inquiry, creative thinking, and critical analysis.
3. Professional skills that prepare them for applying what they have learned to create new knowledge and solve problems in a real world setting.
4. Apply the design process to identify and explore complex problems and generate creative solutions that optimize the human experience within the interior environment. This includes the ability to apply research and the principles and theories of Design to their solutions.
5. Apply their knowledge of building materials and systems, building construction, and industry specific codes, standards and guidelines in order to enhance the health, safety, welfare and performance of building occupants.

## ADVISING AND CAREERS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

The Student Academic Affairs \& Career Development Office (SAA) fosters undergraduate students' personal, academic, and professional
development. Through advising, academic planning, and career education we support students as they navigate the college experience-from exploring our majors as prospective students to becoming SoHE alumni.

## ACADEMIC ADVISING

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## PEOPLE

Professors Angus, Dong, Moskowitz, Nelson, Rengel, Sarmadi; Associate Professors Hark, Kallenborn, Shin; Assistant Professors Fairbanks, Ponto, Thorleifsdottir; Faculty Associates Godrey, Kurutz, Sager

For more information, visit the School of Human Ecology faculty and staff directory (https://sohe.wisc.edu/connect/faculty-staff).

## WISCONSIN EXPERIENCE

## INTERNSHIPS

Internships are a vital part of student career development and a highly valued component of the undergraduate curriculum in the School of Human Ecology. High-quality internships foster student development by bringing theories and classroom-based learning to life in real-world settings. In addition, internships give students the opportunity to explore careers related to their major, gain relevant experience in their field(s) of interest, and develop a better understanding of what is expected in a workplace by performing the tasks of a professional in that field.

For SoHE majors, internships are a requirement of our undergraduate curriculum. Students must have at least a junior standing (54+ credits) in order to pursue a 3-credit internship and must complete a minimum of 150 hours at the internship site. To be eligible, an internship must be educational in nature, directly relate to a student's major and career goals, and be approved by the Student Academic Affairs \& Career Development Office (https://sohe.wisc.edu/prospective-students/ contact-us).

For more information, visit SoHE Internships (https://sohe.wisc.edu/ prospective-students/career-preparation/internships).

## STUDENT ORGANIZATIONS

School of Human Ecology student organizations include:
American Society of Interior Designers-Student Chapter (IDO) Apparel and Textile Association (ATA)
Association of Fundraising Professionals-UW-Madison Chapter
Community and Nonprofit Leaders (CNLUW)
Financial Occupations Club for University Students (FOCUS)
Phi Upsilon Omicron (National Honor Society in Family and Consumer Sciences)
Students for Families and Children (SFC)
Student Retail Association (SRA)

## RESOURCES AND SCHOLARSHIPS

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## SCHOLARSHIPS AND OTHER FINANCIAL RESOURCES

The School of Human Ecology awards many merit and need-based scholarships each year. The deadline to apply for scholarships is typically late in the fall semester. To be eligible for these awards, scholarship recipients must be registered as full-time SoHE students.

Students who experience emergency financial situations may inquire about the availability of short-term loans through the SoHE Student Academic Affairs \& Career Development Office. In addition, university scholarships, loans, and employment are available through the Office of Student Financial Aid (https://financialaid.wisc.edu) (333 East Campus Mall; 608-262-3060).

## ACCREDITATION

## Accreditation

Council for Interior Design Accreditation (https://accredit-id.org)
Accreditation status: Accredited. Next accreditation review: 2023.

## TEXTILES AND FASHION DESIGN, B.S.

Textiles and Fashion Design (TFD) is a unique hybrid program that combines a deep understanding of materials and techniques with an academic base of history, science, and contemporary design. The heart of the major lies in the hands-on studio courses where students learn to weave, dye, print, construct, pattern, illustrate, design and innovate. Going beyond technique, TFD faculty encourage students to intuitively make, analyze and revise, leading to discovery and creative problem solving. Special topics focus on environmental, economic, and cultural sustainability as well as technology and non-traditional entrepreneurship.

Coursework in the TFD program is enhanced by visiting lecturers, special projects with industry partners, and the on-site Helen Louise Allen Textile Collection. Upper-level students in the major are given the opportunity to professionally show their work to a public audience in the fall annual student showcase and the spring fashion show.

Our award-winning students are both highly creative and superb craftspeople engaged in addressing real world problems and offering sustainable solutions.

## TFD

Our bachelor of science degree (B.S.) in textiles and fashion design (TFD) highlights craft technique as a pathway to creative practice and prepares students for an exciting creative career in design. Studies can focus primarily in textiles or in fashion, but students are encouraged to experiment in both areas. The program emphasizes interdisciplinary partnerships and encourages learning by doing in studios, outreach projects, and sustainable practices.

Through capstone and thesis experiences in the final year, students are given time and mentoring to create and present their own unique body of work.

## TFD-FIT

For those leaning toward an industry career, our program gives students the option to apply to spend their senior year at Fashion Institute of Technology (http://www.fitnyc.edu) (FIT) in New York City, the hub of the textile and fashion trade. The FIT experience provides students with industry specific skills which, when paired with the creative liberal arts background, makes our graduates highly desirable and often recruited by industry leaders. Students apply to FIT in their junior year. If accepted by FIT, they participate in a visiting student program in one area of focus:

Fashion Design, Textile Surface Design, Accessory Design, or Textile Development and Marketing.

Upon graduation, students who attend FIT are awarded a bachelor of science (B.S.) degree from the University of Wisconsin-Madison in textiles and fashion design with a named option in FIT. A named option is a formally documented sub-major within an academic major program. Named options appear on the transcript with degree conferral. FIT students also earn an associate of applied science (A.A.S) degree from FIT. Students attending FIT who are considered Wisconsin nonresidents continue to pay out-of-state tuition, even if they reside in the state of New York.

## HOW TO GET IN

## PROSPECTIVE UW-MADISON STUDENTS

All prospective UW-Madison students must apply through the central Office of Admissions and Recruitment (https:// www.admissions.wisc.edu).

Freshmen should declare their intention to pursue the textiles and fashion design (TFD) major when they apply for admission to UWMadison. In addition, students may indicate interest in the TFD major when registering for Student Orientation, Advising, and Registration (SOAR).

## CURRENT UW-MADISON STUDENTS

First-year students in good academic standing and first-semester transfer students may declare the TFD major upon request. All other students must apply through a competitive application process.

The best way for interested students to receive advising or additional information is by contacting the Student Academic Affairs \& Career Development Office (https://sohe.wisc.edu/prospective-students/ contact-us).

Visit On-campus Student Application (https://sohe.wisc.edu/prospective-students/prospective-students/applying-human-ecology) for application information and the October and February deadlines.

For transfer students, sequential courses and courses taught only once a year should be taken into account when calculating time toward completion of the degree, as graduation time may be extended.

Students intending to complete their final year of study at FIT must complete an additional application. Only students with a 3.0 or higher GPA in December of their third year in the program are eligible to apply for admission to FIT.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to
the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part $B$ requirements.


## SCHOOL OF HUMAN ECOLOGY REQUIREMENTS

All Textiles and Fashion Design students complete the School of Human Ecology requirements listed below. Then, students complete the Textiles and Fashion Design requirements OR the Textiles and Fashion Design-FIT requirements.

| Code Title | Credits |
| :--- | ---: |
| Arts and Humanities |  |
| Literature | 3 |
| Humanities | 6 |
| Social Science | 9 |
| Physical, Biological and Natural Science | 9 |
| Human Ecology Breadth | 3 |
| Select one Human Ecology course from CNSR SCI, |  |
| CSCS, HDFS, or INTER-HE |  |

Total Credits

## TEXTILES AND FASHION DESIGN REQUIREMENTS

A complete list of requirements is below. Students should follow the curriculum requirements in place at the time they entered the major. Curriculum checksheets from previous academic years are available online (https://sohe.wisc.edu/prospective-students/advising/ curriculum-checksheets). This requirement list should be used in combination with a DARS report.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Design Core |  |  |
| DS 101 | Introduction to Textile Design | 3 |
| DS 120 | Design: Fundamentals I | 3 |
| DS 153 | Fabric and Apparel Structures I | 3 |
| DS 251 | Textile Science | 3 |
| DS 355 | History of Fashion, 1400-Present | 3 |
| or DS 430 | History of Textiles |  |

## Textiles and Fashion Design Focus Area

Choose either the Fashion Sequence or the Textiles
Sequence

| DS 154 | Processes for Apparel Design: Clothing Construction II |  |
| :---: | :---: | :---: |
| DS 253 | Patternmaking for Apparel Design |  |
| DS 210 | Fashion Illustration |  |
| DS 225 | Apparel Design I |  |
| Textiles Sequence (must be taken in this order) |  |  |
| DS 227 | Textile Design: Printing and Dyeing I |  |
| DS 228 | Textile Design: Structural Enrichment I |  |
| DS/ART 229 | Textile Design: Weaving I |  |
| DS 327 | Textile Design: Manual/Computer Generated Imagery and Pattern |  |
| Choose three additio for 9 total credits | nal Textiles \& Fasion Design courses | 9 |
| Professional Development |  |  |
| DS 252 | Design Leadership Symposium | 1 |
| INTER-HE 202 | SoHE Career \& Leadership Development | 1 |
| CNSR SCI 111 | Financial Life Skills for Undergraduates | 1 |
| or CNSR SCI 321 | Financial Life Skills for Life After Graduation |  |
| Depth Courses |  |  |
| Choose 15 credits from | $m$ the following courses: | 15 |
| Other Textiles and and above) | Fashion Design Courses (300 level |  |
| DS 341 | Design Thinking for Transformation |  |
| DS 501 | Special Topics (Collection Development) |  |
| DS 527 | Global Artisans |  |
| DS 529 | Building a Sustainable Creative Practice |  |
| DS 570 | Design and Fashion Event Management |  |
| DS 561 | Textiles: Specifications and End Use Analysis |  |
| M H R 322 | Introduction to Entrepreneurial Management |  |
| CNSR SCI 257 | Introduction to Retailing |  |
| CNSR SCI 555 | Consumer Strategy \& Evaluation |  |
| CNSR SCI 561 | Retail Channel Strategy \& OmniChannel Retailing |  |
| CNSR SCI 562 | The Global Consumer |  |
| CNSR SCI 657 | Consumer Behavior |  |
| ART 469 | Interdisciplinary Studies in the Arts |  |
| Capstone Experience |  |  |
| DS 601 | Internship | 3 |
| DS 690 | Senior Thesis | 2-4 |

## TEXTILES AND FASHION DESIGN: FIT OPTION

- Textiles and Fashion Design: FIT (Fashion Institute of Technology) (p. 1683)


## UNIVERSITY DEGREE REQUIREMENTS

$\left.\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\ \text { students must earn a minimum of } 120 \text { degree credits. } \\ \text { The requirements for some programs may exceed } 120 \\ \text { degree credits. Students should consult with their college }\end{array} \\ \text { or department advisor for information on specific credit } \\ \text { requirements. }\end{array}\right\}$

## LEARNING OUTCOMES

1. Have grounding in the history and theory relevant to the human ecological perspective.
2. Have intellectual skills for inquiry, creative thinking, and critical analysis.
3. Have professional skills that prepare them for applying what they have learned to create new knowledge and solve problems in a real world setting.
4. Textiles and Fashion Design students will have the ability to move beyond technique, taking creative risks to develop conceptually cohesive work through advanced knowledge of materials, processes, and an understanding of design principles.
5. Textiles and Fashion Design students will have the ability to participate in professional discussions and critique that are informed by foundational knowledge of fashion and/or textile history, theory, and science.

## ADVISING AND CAREERS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

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Association of Fundraising Professionals-UW-Madison Chapter
Community and Nonprofit Leaders (CNLUW)
Financial Occupations Club for University Students (FOCUS)

Phi Upsilon Omicron (National Honor Society in Family and Consumer Sciences)
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## RESOURCES AND SCHOLARSHIPS

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## TEXTILES AND FASHION DESIGN: FIT (FASHION INSTITUTE OF <br> TECHNOLOGY)

For those leaning toward an industry career, the textiles and fashion design program gives students the option to apply to spend their senior year at Fashion Institute of Technology (http://www.fitnyc.edu) (FIT) in New York City, the hub of the textile and fashion trade. The FIT experience provides students with industry specific skills which, when paired with the creative liberal arts background, makes our graduates highly desirable and often recruited by industry leaders. Students apply to FIT in their junior year. If accepted by FIT, they participate in a visiting student program in one area of focus: Fashion Design, Textile Surface Design, Accessory Design, or Textile Development and Marketing.

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## REQUIREMENTS

A complete list of requirements is below. Students should follow the curriculum requirements in place at the time they entered the major. Curriculum checksheets from previous academic years are available online (https://sohe.wisc.edu/prospective-students/advising/ curriculum-checksheets). This requirement list should be used in combination with a DARS report.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Textiles and Fashion Design: FIT Named Option Requirements |  |  |
| Design Core |  |  |
| DS 101 | Introduction to Textile Design | 3 |
| DS 120 | Design: Fundamentals I | 3 |
| DS 153 | Fabric and Apparel Structures I | 3 |
| DS 251 | Textile Science | 3 |
| $\begin{aligned} & \text { DS } 355 \\ & \text { or DS } 430 \end{aligned}$ | History of Fashion, 1400-Present History of Textiles | 3 |
| Textiles and Fashion Design Focus Area |  |  |
| Choose eithe Sequence | shion Sequence or the Textiles | 12 |
| Fashion Sequence (must be taken in this order) |  |  |
| DS 154 | Processes for Apparel Design: Clothing Construction II |  |
| DS 253 | Patternmaking for Apparel Design |  |
| DS 210 | Fashion Illustration |  |
| DS 225 | Apparel Design I |  |
| Textiles Sequence (must be taken in this order) |  |  |
| DS 227 | Textile Design: Printing and Dyeing I |  |


| DS 228 | Textile Design: Structural Enrichment I |  |
| :---: | :---: | :---: |
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| DS 327 | Textile Design: Manual/Computer Generated Imagery and Pattern |  |
| Choose three additio courses for 9 total | nal Textiles \& Fashion Design dits | 9 |
| Professional Development |  |  |
| DS 252 | Design Leadership Symposium | 1 |
| INTER-HE 202 | SoHE Career \& Leadership Development | 1 |
| CNSR SCI 111 | Financial Life Skills for Undergraduates | 1 |
| or CNSR SCI 321 | Financial Life Skills for Life After Graduation |  |
| Fashion Institute of Technology FIT |  |  |
| Visiting Student Program Courses |  | 30 |

## HUMAN DEVELOPMENT AND FAMILY STUDIES

The Department of Human Development and Family Studies (HDFS) serves undergraduate and graduate students by offering a bachelor of science in human development and family studies and a Ph.D. in human ecology: human development and family studies. Students and faculty in HDFS are dedicated to improving the quality of life for children, adolescents, and adults by discovering, integrating, applying and disseminating knowledge about lifespan human development, relationships, families, and communities, all in their larger social contexts. The application of human ecological and interdisciplinary perspectives to solve societal problems and strengthen the well-being of children, adults, and families is a distinctive feature of the department.

## DEGREES/MAJORS/CERTIFICATES

- Human Development and Family Studies, B.S. (p. 1684)


## PEOPLE

Professors Papp, Poehlmann-Tynan, Raison, Roberts, Small; Associate Professors Dilworth-Bart, Duncan, Halpern-Meekin, Hartley, Kirkorian, Nix; Assistant Professors Kerr, Litzelman; Faculty Associates Burkholder, Levchenko

For more information, visit the School of Human Ecology faculty and staff directory (https://sohe.wisc.edu/connect/faculty-staff).

## RESOURCES AND SCHOLARSHIPS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

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## ACADEMIC ADVISING

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To explore academic advising resources or schedule an appointment with a SoHE academic advisor, visit Advising in SoHE (https://sohe.wisc.edu/ prospective-students/advising).

## CAREER DEVELOPMENT

Active engagement in the career development process is a vital component of a student's personal growth in college and future success as a life-long learner, professional, and global citizen. SoHE career advisors help prepare students for life post-graduation through individual and group advising and integration of career readiness throughout our curriculum.

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## SCHOLARSHIPS AND OTHER FINANCIAL RESOURCES

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## HUMAN DEVELOPMENT AND FAMILY STUDIES, B.S.

The undergraduate major in human development and family studies (HDFS) offers specialized courses in human development from infancy through old age, couples and family relationships, research methods, policymaking, parent-child relations, family health and well-being, parent education and support, and ethnic and cultural diversity in families. In addition to coursework, all students engage in a 150-hour, semester-long internship or high-impact learning experience in a professional setting related to their major and career goals. These settings include community mental health programs, early childhood education, legislative offices, health care agencies, research labs, criminal justice systems, child and family life education, and community-based social justice programs.

The major prepares students for careers in human and family service organizations and for graduate or professional school in a variety of fields including health care, education, family law, counseling, occupational
therapy, program evaluation, physical therapy, case management, and the child life profession.

## HOW TO GET IN

## PROSPECTIVE UW-MADISON STUDENTS

All prospective UW-Madison students must apply through the central Office of Admissions and Recruitment (https:// www.admissions.wisc.edu).

Students who indicate interest in the human development and family studies (HDFS) major on their UW-Madison application will be admitted to the HDFS major upon admittance to the university. In addition, students may indicate interest in HDFS when registering for Student Orientation, Advising, and Registration (SOAR).

## CURRENT UW-MADISON STUDENTS

First-year students in good academic standing and first-semester transfer students may declare the HDFS major upon request. All other students must apply through a competitive application process.

The best way for interested students to receive advising or additional information is by attending a Becoming a SoHE Student Workshop (https://sohe.wisc.edu/prospective-students/prospective-students/ becoming-sohe-student-workshops).

Visit On-campus Student Application (https://sohe.wisc.edu/prospective-students/prospective-students/applying-human-ecology) for application information and the October and February deadlines.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :--- | :--- |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of <br> one 4- or 5-credit course with a laboratory component; <br> or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |

## SCHOOL OF HUMAN ECOLOGY REQUIREMENTS

| Code $\quad$ Title | Credits |  |
| :--- | ---: | ---: |
| Arts and Humanities |  |  |
| Literature | 6 |  |
| Humanities | 6 |  |
| Social Science | $3-4$ |  |
| PSYCH 202 Introduction to Psychology | 6 |  |
| Select 6 credits designated Social Science breadth | 9 |  |
| Physical, Biological and Natural Science | 3 |  |

Select a Human Ecology course from CNSR SCI, CSCS,
DS, or INTER-HE
Total Credits

## HUMAN DEVELOPMENT AND FAMILY STUDIES REQUIREMENTS

A complete list of requirements is below. Students should follow the curriculum requirements in place at the time they entered the major. Curriculum checksheets from previous academic years are available online (https://sohe.wisc.edu/prospective-students/advising/ curriculum-checksheets). This requirement list should be used in combination with a DARS report.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Learning Outcome 1: Lifespan Human Development |  |  |
| Earlier Lifespan |  |  |
| Select one of the following: |  | 3 |
| HDFS 362 | Development of the Young Child |  |
| ED PSYCH 320 | Human Development in Infancy and Childhood |  |
| PSYCH 460 | Child Development |  |
| Later Lifespan |  |  |
| HDFS 363 | Development from Adolescence to Old Age | 3 |
| Learning Outcome 2: Family and Community Diversity |  |  |
| Select one of the foll | wing: | 3 |
| HDFS/ CNSR SCI 465 | Families \& Poverty |  |
| HDFS 474 | Racial Ethnic Families in the U.S. |  |

$\begin{array}{ll}\text { HDFS/ } & \text { African American Families } \\ \text { AFROAMER/ } & \\ \text { SOC WORK } 521\end{array}$

## Learning Outcome 3: Internal Family Processes

Select one of the following:
HDFS 471 Parent - Child Relations
HDFS 516 Stress and Resilience in Families Across the Lifespan
HDFS 517 Couple Relationships
Learning Outcome 4: Social Institution Influences
Select one of the following: 3
HDFS 469 Family and Community Influences on the Young Child
HDFS 535 A Family Perspective in Policymaking
HDFS/COM ARTS/ Mass Media and Youth JOURN 616
Learning Outcome 5: Assessment, Prevention, Intervention, and Outreach
Select one of the following: 3

| HDFS 650 | Parent Education and Support |
| :--- | :--- |
| Programs |  |

Learning Outcome 6: Understanding Social Science
Research
Statistics
Select one of the following: 3-4

SOC/ Statistics for Sociologists I
C\&E SOC 360
STAT 301 Introduction to Statistical Methods
STAT 371 Introductory Applied Statistics for the Life Sciences
PSYCH 210 Basic Statistics for Psychology
Research Methods
Select one of the following:

| HDFS 425 | Research Methods in Human <br> Development and Family Studies |
| :--- | :--- |
| PSYCH 225 | Research Methods |
| SOC/ | Methods of Sociological Inquiry |
| C\&E SOC 357 |  |

## Professional Development

| INTER-HE 202 | SoHE Career \& Leadership <br> Development | 1 |
| :--- | :--- | ---: |
| HDFS 601 | Internship | 3 |
| Additional high-impact practice course to be approved by <br> the student's SoHE academic advisor | 3 |  |
| Electives | $31-32$ |  |
| Select courses to bring degree credit total to 120 |  |  |
| Total Credits |  |  |

1
Examples include service learning course, second internship or research experience, study abroad experience, select upper-level HDFS courses, or undergraduate teaching assistantship experience.

## UNIVERSITY DEGREE REQUIREMENTS

\(\left.$$
\begin{array}{ll}\text { Total Degree } & \begin{array}{l}\text { To receive a bachelor's degree from UW-Madison, } \\
\text { students must earn a minimum of } 120 \text { degree credits. } \\
\text { The requirements for some programs may exceed } 120 \\
\text { degree credits. Students should consult with their college } \\
\text { or department advisor for information on specific credit } \\
\text { requirements. }\end{array} \\
\text { Residency } & \begin{array}{l}\text { Degree candidates are required to earn a minimum of } 30 \\
\text { credits in residence at UW-Madison. "In residence" means } \\
\text { on the UW-Madison campus with an undergraduate } \\
\text { degree classification. "In residence" credit also includes } \\
\text { UW-Madison courses offered in distance or online }\end{array}
$$ <br>

formats and credits earned in UW-Madison Study\end{array}\right\}\)| Abroad/Study Away programs. |
| :--- |
| Quality of |
| Undergraduate students must maintain the minimum <br> Grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |
|  |
| Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Knowledge of lifespan human development (including cognitive, social, and emotional development and individual differences) in social and ecological contexts.
2. Knowledge of family and community diversity.
3. Knowledge of internal family processes, including parenting and parent-child relations, couples, and family relationships across generations and family health and wellbeing.
4. Ability to consider and evaluate how children, adults, and individual families affect and are affected by policies, media, or other social institutions.
5. Knowledge about the effective and ethical practice of assessment, prevention, intervention, or outreach for individuals and families.
6. Ability to understand, evaluate, and ethically conduct social science research.
7. Ability to demonstrate relevant professional skills.

## ADVISING AND CAREERS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

The Student Academic Affairs \& Career Development Office (SAA) fosters undergraduate students' personal, academic, and professional development. Through advising, academic planning, and career education we support students as they navigate the college experience-from exploring our majors as prospective students to becoming SoHE alumni.

## ACADEMIC ADVISING

Each SoHE student is assigned to an academic advisor in the Student Academic Affairs \& Career Development Office. SoHE academic
advisors support academic and personal success by partnering with current and prospective SoHE students as they identify and clarify their educational goals, develop meaningful academic plans, and pursue their own Wisconsin Experience.

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## CAREER DEVELOPMENT

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To explore career development resources or schedule an appointment with a SoHE career advisor, visit Internship and Career Preparation (https://sohe.wisc.edu/prospective-students/career-preparation).

## PEOPLE

Professors Papp, Poehlmann-Tynan, Raison, Roberts, Small; Associate Professors Dilworth-Bart, Duncan, Halpern-Meekin, Hartley, Kirkorian, Nix; Assistant Professors Kerr, Litzelman; Faculty Associates Burkholder, Levchenko

For more information, visit the School of Human Ecology faculty and staff directory (https://sohe.wisc.edu/connect/faculty-staff).

## WISCONSIN EXPERIENCE

## INTERNSHIPS

Internships are a vital part of student career development and a highly valued component of the undergraduate curriculum in the School of Human Ecology. High-quality internships foster student development by bringing theories and classroom-based learning to life in real-world settings. In addition, internships give students the opportunity to explore careers related to their major, gain relevant experience in their field(s) of interest, and develop a better understanding of what is expected in a workplace by performing the tasks of a professional in that field.

For SoHE majors, internships are a requirement of our undergraduate curriculum. Students must have at least a junior standing (54+ credits) in order to pursue a 3-credit internship and must complete a minimum of 150 hours at the internship site. To be eligible, an internship must be educational in nature, directly relate to a student's major and career goals, and be approved by the Student Academic Affairs \& Career Development Office (https://sohe.wisc.edu/prospective-students/ contact-us).

For more information, visit SoHE Internships (https://sohe.wisc.edu/ prospective-students/career-preparation/internships).

## STUDENT ORGANIZATIONS

School of Human Ecology student organizations include:
American Society of Interior Designers-Student Chapter (IDO)
Apparel and Textile Association (ATA)

Association of Fundraising Professionals-UW-Madison Chapter Community and Nonprofit Leaders (CNLUW)
Financial Occupations Club for University Students (FOCUS) Phi Upsilon Omicron (National Honor Society in Family and Consumer Sciences)
Students for Families and Children (SFC)
Student Retail Association (SRA)

## RESOURCES AND SCHOLARSHIPS

## STUDENT ACADEMIC AFFAIRS \& CAREER DEVELOPMENT

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To explore career development resources or schedule an appointment with a SoHE career advisor, visit Internship and Career Preparation (https://sohe.wisc.edu/prospective-students/career-preparation).

## SCHOLARSHIPS AND OTHER FINANCIAL RESOURCES

The School of Human Ecology awards many merit and need-based scholarships each year. The deadline to apply for scholarships is typically late in the fall semester. To be eligible for these awards, scholarship recipients must be registered as full-time SoHE students.

Students who experience emergency financial situations may inquire about the availability of short-term loans through the SoHE Student Academic Affairs \& Career Development Office. In addition, university scholarships, loans, and employment are available through the Office of Student Financial Aid (https://financialaid.wisc.edu) (333 East Campus Mall; 608-262-3060).

## HUMAN ECOLOGY - SCHOOL-WIDE

## DEGREES/MAJORS/CERTIFICATES

- Individual Major, B.S. (p. 1687)
- School of Human Ecology Honors (http://guide.wisc.edu/ undergraduate/human-ecology/school-wide/school-human-ecologyhonors)


## INDIVIDUAL MAJOR, B.S.

The individual major is a program for undergraduate students who want to fulfill a specific academic goal that is not easily attained through a major in one or more departments. The major must meet a course of study that involves at least two departments and be targeted at a specific problem or academic interest identified by the student. A student proposal must be submitted and approved by the SoHE Undergraduate Program Council. Students are encouraged to begin working with faculty and advisors in the Student Academic Affairs \& Career Development Office by the end of the sophomore year. Thirty credits must be earned in residence after the term in which the proposal is approved. The major will be guided by a committee of at least three faculty members (with no more than two faculty members from one department).

Individual majors are intended to create a unique program of study that otherwise does not exist on this campus individually or in a combination of majors and certificate programs. Students should carefully explore all University of Wisconsin-Madison majors and certificate programs before pursuing an individual major. A proposal that essentially parallels an existing SoHE or campus major will not be approved.

Graduates of the individual major earn a bachelor of science in human ecology. The major will match the approved proposal title, which must have a human ecology focus.

## HOW TO GET IN

## ELIGIBILITY

Students must be in good academic standing and have a minimum cumulative GPA of 3.5 to be considered for an individual major. Any interested student should have completed at least two semesters (a minimum of 24 credits) in residence before submitting an application. Ideally, proposals will be made by the end of sophomore year or the beginning of junior year.

## PROPOSING AN INDIVIDUAL MAJOR

After discussing their proposed plan with a SoHE advisor and ensuring they meet the application qualifications, students will begin building a faculty committee and developing a proposal. An individual major must be composed of at least two different SoHE academic departments. If a third department is selected, it may be from in or outside of SoHE. Students should develop a one-page abstract to share with faculty as they work to build their committee. Once the committee is formed, the student will select one committee member as the major advisor. The major advisor must be from the SoHE department in which the majority of courses for the program will be taken. The student will work with the faculty committee to develop the proposal and select all required
courses for the individual major, the majority of which must be completed in SoHE. The student will then submit a formal proposal to the SoHE Student Academic Affairs \& Career Development Office to be forwarded for action to the SoHE Undergraduate Program Council, which meets throughout the academic year.

Please contact the SoHE Student Academic Affairs \& Career Development Office for the complete individual major proposal instructions.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

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General - Breadth-Humanities/Literature/Arts: 6 credits
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- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## INDIVIDUAL MAJOR REQUIREMENTS

The student will work with the faculty committee to develop the individual major proposal and select all required courses, the majority of which must be completed in SoHE. If the Individual Major is approved by the SoHE Undergraduate Program Council, the student will complete all required courses as outlined with the faculty committee.

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

Residency

## Quality of

 WorkDegree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## ADVISING AND CAREERS

Students interested in pursuing an individual major should first meet with a SoHE academic advisor to ensure program eligibility and to discuss their area of interest and rationale. Appointments should be made by contacting the SoHE Student Academic Affairs \& Career Development Office at 608-262-2608.

## PEOPLE

Visit the School of Human Ecology faculty and staff directory (https:// sohe.wisc.edu/connect/faculty-staff).

## WISCONSIN EXPERIENCE

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## STUDENT ORGANIZATIONS

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Community and Nonprofit Leaders (CNLUW)
Financial Occupations Club for University Students (FOCUS)

Phi Upsilon Omicron (National Honor Society in Family and Consumer Sciences)
Students for Families and Children (SFC)
Student Retail Association (SRA)

## RESOURCES AND SCHOLARSHIPS

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## SCHOOL OF NURSING

The School of Nursing (https://nursing.wisc.edu), established in 1924, is the leading nursing research institution in Wisconsin and a crucial part of the state's health care system.

The school offers a full array of degree programs enrolling more than 1,000 students-the bachelor of science in nursing (BSN), the doctor of nursing practice (DNP), and the doctor of philosophy in nursing (Ph.D.), along with several graduate-level certificate programs.

At the undergraduate level, degree options include the Traditional BSN, a four-year degree program; the Accelerated BSN, a 12-month program for second-degree candidates; and the RN to BSN (BSN@Home) program, for registered nurses who hold an associate's degree in nursing and wish to earn the baccalaureate degree. Options exist for honors study in the major, as well as joint programs whereby students can earn the master of public health along with the BSN or transition directly to the Ph.D. program via the Early Entry Ph.D. Option.

Student life pairs the educational and social resources of a large, worldclass university with a supportive environment at the school. Students receive comprehensive support services related to advising, program planning, clinical placements, career services, financial aid, and postgraduation credentialing.

World-renowned facilities for clinical practice and research are available in and around Madison. These include University of Wisconsin Hospital and Clinics, American Family Children's Hospital, UW Carbone Cancer Center and William S. Middleton Memorial Veterans Hospital; hospitals and clinics in urban and rural settings; nursing homes; day-care centers; and public health agencies. The university's location in Wisconsin's capital offers additional opportunities in state government and policy making.

On campus, Signe Skott Cooper Hall, the School of Nursing's new facility, has state-of-the-art classrooms, simulation labs, meeting and research facilities, and social gathering spaces in an environment dedicated to the health and wellness of students, faculty, staff and the communities and populations we serve.

The school's mission is to develop leaders for the profession and society -we make discoveries, enhance systems, and improve health through research, education, and practice.

## DEGREES/MAJORS/CERTIFICATES

- Nursing, BSN (p. 1696)
- Nursing, BSN (Accelerated Program) (p. 1700)
- Nursing, BSN (Collaborative Program) (p. 1703)


## PEOPLE

## OFFICE OF ACADEMIC AFFAIRS ADMINISTRATION

Linda D. Scott, PhD, RN, NEA-BC, FAAN

Dean and Professor
Idscott@wisc.edu ( Idscott@wisc.edu)

Danny G. "Dan" Willis, DNS, RN, PMHCNS-BC, FAAN<br>Associate Dean for Academic Affairs, Professor<br>dgwillis@wisc.edu (dgwillis@wisc.edu)

## Karen Mittelstadt

Assistant Dean for Academic Affairs (Academic Dean) mittelstadt@wisc.edu ( mittelstadt@wisc.edu) 608-263-5284

Karen D. Solheim, PhD, RN
Undergraduate Program Director, Clinical Professor kdsolheim@wisc.edu (kdsolheim@wisc.edu)

## ADVISING AND STUDENT SERVICES

## Katie Bleier

Director of Advising and Student Services katie.bleier@wisc.edu ( katie.bleier@wisc.edu) 608-263-5172

## Molly Censky

Undergraduate Advisor
molly.censky@wisc.edu ( molly.censky@wisc.edu)

## Beth Dawson

Career Advisor
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## Kate Knudson

Undergraduate Advisor
kathryn.knudson@wisc.edu ( kathryn.knudson@wisc.edu)

## Darby Sugar

Undergraduate Advisor and Academic Support Coordinator darby.sugar@wisc.edu ( darby.sugar@wisc.edu)

## ADMISSIONS AND RECRUITMENT

## Mandi Moy

Director of Admissions and Recruitment
mandi.moy@wisc.edu (mandi.moy@wisc.edu)

## Brent Fisher

Undergraduate Admissions and Recruitment Coordinator bjfisher@wisc.edu (bjfisher@wisc.edu)

## CLINICAL PLACEMENT

Tina DeGroot
Director of Clinical Practica
tmdegroot@wisc.edu (tmdegroot@wisc.edu)

## STUDENT INFORMATION AND TECHNOLOGY

## Jonathan Henkel

Student Information and Technology Manager jonathan.henkel@wisc.edu ( jonathan.henkel@wisc.edu)

## Laura Linde Turnes

Curricular Representative
llinde@wisc.edu (llinde@wisc.edu)

## ENTERING THE SCHOOL

## ADMISSION TO UW-MADISON

All prospective UW-Madison nursing students must apply through the central Office of Admissions and Recruitment (https:// www.admissions.wisc.edu).

## PRE-NURSING FRESHMEN

Students who indicate interest in the nursing major on their UW-Madison application will be admitted to the School of Nursing as pre-nursing (PRN) students. In addition, students may indicate interest in the nursing major when registering for Student Orientation, Advising, and Registration (SOAR). The School of Nursing is the academic home for pre-nursing students, providing orientation, academic advising, academic support, etc., while students complete nursing prerequisite courses and general education requirements in preparation to apply to the nursing major. Most pre-nursing students apply to the nursing major midway through their sophomore year to enter the two-year Traditional BSN program as juniors.

## PRE-NURSING TRANSFERS

Students may transfer into UW-Madison as pre-nursing students. As with pre-nursing freshmen, transfer students have an academic home in the School of Nursing as they work to complete prerequisites and general education requirements in preparation to apply to the two-year Traditional BSN program.

## SECOND-DEGREE CANDIDATES

Students seeking to earn a second degree in nursing can apply directly to either the Traditional BSN program or the Accelerated BSN program upon completing necessary admission requirements (see details below). Second-degree candidates must be admitted directly into the nursing program; they cannot enter UW-Madison as pre-nursing students.

## ADMISSION TO THE NURSING PROGRAM TRADITIONAL BSN <br> As students complete the requirements to be eligible to apply to the nursing program, they apply to the two-year Traditional BSN program. To be eligible to apply, students must complete the necessary prerequisite courses and have the minimum 2.75 cumulative and prerequisite GPAs; complete details on the Traditional BSN admission requirements and application process can be found on the Traditional BSN admission page (p. 1696) of this Guide.

## ACCELERATED BSN FOR SECOND-DEGREE CANDIDATES

Second-degree candidates can apply for the Accelerated BSN program. This is a 12-month intensive baccalaureate program that offers the quickest route to licensure as a registered nurse (RN) for students who have already completed a bachelor's degree or graduate degree in a non-nursing discipline. Students must complete nursing prerequisite courses and the university General Education Requirements, and have the minimum GPAs, to be eligible to apply. Complete details on the accelerated BSN admission requirements and application process can be found on the Accelerated BSN admission page (p. 1700) of this Guide.

## RN TO BSN (BSN@HOME)

Registered nurses who have an associate's degree or diploma in nursing can apply to enter the BSN@Home program to earn their bachelor's degree in nursing (BSN). There are GPA minimums and course
requirements necessary for admission eligibility. These details are included on the BSN@Home admission page (p. 1703) of this Guide.

## CURRENT UW-MADISON STUDENTS

Students with at least a 2.75 cumulative and nursing prerequisite GPA may transfer into the School of Nursing as pre-nursing (PRN) students. Students who are not in the School of Nursing may also apply for the Traditional BSN program without being pre-nursing students. Transfer requests (i.e., classification changes) must be made before the twelfth week of the semester in order to be applied to that semester. Requests made after the twelfth week will take effect at the start of the following semester. For more information and to request a classification change to PRN, students should contact the nursing Office of Academic Affairs at 608-263-5202 or academic.affairs@nursing.wisc.edu ( academic.affairs@nursing.wisc.edu).

## POLICIES AND REGULATIONS

The students, faculty, administration, and staff of the School of Nursing are part of the University of Wisconsin-Madison's academic community, and as such, are subject to the policies, rules, and regulations of the university. In addition, the school and its respective programs may, as deemed necessary, develop their own policies and procedures to augment those of the university. Following are the specific School of Nursing policies and regulations that expand upon or differ from the policies of the university as a whole.

## ACADEMIC STATUS

## Academic Actions (Warning, Probation, Drop)

Every student (pre-nursing and nursing) is expected to maintain at least a 2.5 GPA on all work carried, whether passed or not, in each semester or summer session. Students who maintain this average are considered in good standing. Failure to earn this minimum GPA will result in the academic action of warning, probation, or dropped (academically dismissed). Students must be in good academic standing in order to be eligible for graduation.

## If not on warning and:

1. Earns a GPA in a semester or summer session of $1.75-2.49=$ warning
2. Earns a GPA in a semester or summer session of less than $1.75=$ probation

## If on warning and:

1. Earns a GPA in a semester or summer session of $1.75-2.49=$ probation
2. Earns a GPA in a semester or summer session of less than $1.75=$ dropped from the program

## If on probation and:

1. Earns a GPA in a semester or summer session of 2.5 or above but cumulative GPA remains under 2.5 = continued probation
2. Earns a GPA in a semester or summer session of less than 2.5 or a nursing cumulative GPA below 2.5 = dropped from the program

In addition to the academic actions detailed above, nursing (NUR) students are placed on probation if they:

1. Earn a grade of F or NC in any nursing course, and/or

## 2. Earn a nursing cumulative GPA below 2.5

Any student on academic action will automatically be cleared of action status when the semester GPA is 2.5 or above and the cumulative GPA is 2.5 or above; and if NUR or NCP (i.e., BSN@Home) classification, the nursing cumulative GPA is at least 2.5 or above.

## Dean's Honor List

The purpose of the Dean's Honor List is to recognize superior academic achievement of undergraduate students. Students must achieve a minimum GPA of 3.75 on a semester load of not fewer than 12 credits in order to be placed on the Dean's Honor List. A notation of Dean's Honor List will appear on the student's grade report and transcript. Students who earn a semester GPA of 3.25-3.74 on 12 or more credits will receive a congratulatory statement on their end-of-semester grade report form.

## English as a Second Language

All nursing students must be proficient in English to provide safe patient care and to be successful academically. Students facing challenges in these areas may be referred by self-identification, a faculty member, or advisor to support services. Although limited English proficiency in itself is not a reason for dismissal, it can interfere with a student's ability to complete course requirements, leading to failure to progress or meet program requirements.

## Good Standing

To be in good standing, students must maintain:

- a cumulative GPA of 2.5 or above, and
- a cumulative GPA of 2.5 or above on all nursing courses completed, and
- a GPA of 2.5 or above in the semester just completed


## Graduating with Distinction

Graduation with Distinction will be noted on the transcript of students who earned 60 or more credits at UW-Madison and a GPA that places them in the top 20 percent of those graduating from the School of Nursing that term.

## Satisfactory Academic Progress

The time required to complete the program depends on the sequence of courses, plan of study, and placement availability in nursing courses. Students may complete the program in four years; however, additional semesters or summer sessions may be needed to fulfill requirements. If requirements for the degree have not been completed within five years after admission to the nursing major, the student's academic record will be reviewed by the Office of Academic Affairs to establish additional requirements, if appropriate.

## APPEALS, GRIEVANCES, AND PETITIONS Appeals

Appeals are limited to requests to continue in the nursing program after being dropped from the program for academic reasons. A written appeal must be filed with the assistant dean for academic affairs within 10 working days of the date of the letter notifying the student of the decision to discontinue the student in the program. Details on the appeal process can be found in the Student Appeals and Grievance Procedures (https://nursingstudentnet.wiscweb.wisc.edu/wp-content/uploads/ sites/222/2017/12/ep-appeals-grievances.pdf).

## Grievances

Any student who believes that he or she has been treated inequitably is encouraged to resolve the matter informally. The student should first talk
with the person or group at whom the grievance is directed in an effort to resolve the issue informally. A grievance procedure is available to resolve student concerns regarding inequitable treatment that have not been satisfactorily resolved through the informal resolution process or where the student believes that informal resolution would not be productive. Details on the appeal process can be found in the Student Appeals and Grievance Procedures (https://nursingstudentnet.wiscweb.wisc.edu/wp-content/uploads/sites/222/2017/12/ep-appeals-grievances.pdf).

## Petition for Special Consideration

Nursing students may use the Petition for Special Consideration (https://nursingstudentnet.wiscweb.wisc.edu/wp-content/uploads/ sites/222/2017/07/petition-spec-consideration-ug.pdf) to request an alternative or exception to an academic rule, regulation, procedure, or requirement.

## CLINICAL/EXPERIENTIAL LEARNING COURSES

All nursing students are required to complete credit hours in the clinical setting under the supervision of a nursing professional. In the School of Nursing, the term experiential learning is used to describe the clinical course experience. These clinical experiences support the mission of the School of Nursing, integrating practice and coursework, to provide a comprehensive nursing education. There are some policies specific to experiential learning courses:

## Compliance Requirements

The School of Nursing is committed to ensuring all nursing students are compliant with national and state guidelines for personnel providing nursing care, as well as additional/specific requirements mandated by the school's clinical affiliates as set forth in the clinical affiliation agreements. Therefore all nursing students are required to be in full adherence to the school's compliance program while enrolled in the nursing program. The school's compliance program includes immunizations, trainings, and a background check. Students will be held accountable for complying with the clinical eligibility requirements prior to entering the program and throughout their program of study. All students are required to keep their compliance documents up to date as an essential part of their professional responsibility for patient safety. Review the Nursing Student Compliance Program (https:// students.nursing.wisc.edu/clinicals-compliance/compliance) for complete details.

## Clinical Placements

Students are assigned to clinical placement sites based on the faculty's selection of clinical sites specific to the learning objectives of the course, site characteristics, and availability. Students need to be prepared to travel up to 90 miles from the School of Nursing and have varied schedules including evenings, nights and weekends. Clinical shifts may be 4-12 hours long. The School of Nursing secures clinical placements for all students who are eligible. Students are not asked to nor allowed to arrange their own clinical placements.

## Transportation

The School of Nursing recognizes that students need educational experiences beyond those available in hospitals in Madison, Wisconsin. In answer to this educational need, and in order to secure enough clinical sites for all students, the school places its students in a variety of venues in and beyond Madison. This includes ambulatory sites, clinics, rehabilitation centers, home health agencies, geriatric facilities, school districts, nursing homes, etc. This gives our students comprehensive exposure to a broad range of patients, illness, and care. Nursing students are responsible for arranging their own transportation to and from their clinical sites. First-year clinicals are accessible by public transportation
from Signe Skott Cooper Hall and other points in Madison. Secondyear clinicals require travel to and from an agency, as well as to and from homes, schools, and other sites. Locales may be up to 90 miles from Madison. Therefore, second-year nursing students are required to have (1) a valid driver's license, and (2) individual access to a car. Students are responsible for all transportation costs incurred, including gas and parking fees. Students with extenuating circumstances that have an impact on their clinical transportation options (e.g., driving/ medical restrictions) should use the Petition for Special Consideration (https://nursingstudentnet.wiscweb.wisc.edu/wp-content/uploads/ sites/222/2017/07/petition-spec-consideration-ug.pdf) to request an accommodation or exception to the transportation policy. The petition must be submitted on/by March 1 for clinical placements during the next fall term and on/by November 1 for the next spring term placements. These deadlines are firm, as a petition must be reviewed in advance of clinical assignments. There is no guarantee the school will be able to honor such requests/conditions, and exceptions are granted in very rare circumstances.

## Uniforms

Nursing students are required to purchase the approved School of Nursing uniform. The uniform consists of a white top and navy pants. The white top, embroidered with the School of Nursing logo, is available in two styles and the pants will be available in three styles. Lab coats embroidered with the school logo are also required and are worn when students are on their clinical units doing clinical preparation and during most community clinical experiences. In addition to the uniform requirements, there are also professional appearance guidelines (https:// students.nursing.wisc.edu/clinicals-compliance/clinical-information) for students.

## Unsafe Clinical Performance

A student who demonstrates unsafe nursing practice that jeopardizes the client's or family's physical or emotional welfare may be dismissed at any time from the clinical area. Unsafe clinical practice is defined as any behavior determined by faculty or a preceptor to be actually or potentially detrimental to the client or to the healthcare agency. Unsafe clinical practice can include behaviors related to physical or mental health problems; use of alcohol, drugs, or chemicals; lack of preparation for clinical; or deficits in problem-solving skills. Reports of unsafe clinical performance will be routed through the course professor and/or the course coordinator to the Associate Dean for Academic Affairs who will work with the faculty and student to determine the appropriate outcome, which may include immediate removal from the course (i.e., administrative drop) and subsequent implications for academic progression.

## COURSES AND ENROLLMENT

## Attendance

The School of Nursing expects that students recognize they have entered a profession in which their commitment to full participation in the learning environment is an essential component of what will become a style of lifelong learning. Regular class attendance is a student obligation and students are responsible for all the work of all educational activities. Students should not expect to be excused from required coursework for personal/family events, work obligations, or because of noncompliance with School of Nursing or clinical agency health and onboarding requirements. In extraordinary circumstances, an absence may be granted at the discretion of the course instructor. This might include an absence due to personal crisis, military or civic obligation, authorized university activity, or health concerns that affect the student's
ability to safely care for patients. In most cases, students will be required to provide documentation regarding the absence.

## Didactic Course Attendance

In most didactic courses, attendance and/or participation are factored into the grading process. Absences may place students in jeopardy of not meeting course learning outcomes and thus successfully completing the course. If this occurs, the instructor will consult with the Undergraduate Program Director and/or the Assistant Dean for Academic Affairs to determine the appropriate course of action, which may include being removed (i.e., administratively dropped) from the course. Students should review each course syllabus for specific policies related to absences in that course and make-up experiences, if applicable.

## Experiential Learning Attendance

It is the expectation that students attend all Experiential Learning activities as clinical learning is essential to the completion of the nursing program. If a student must miss an Experiential Learning session due to an extraordinary circumstance, a decision as to whether the student will make up the experience/hours will be based on the student's progress in meeting course learning outcomes. The instructor, in consultation with the course coordinator (if applicable), will determine if the absence will be made up and the nature of the make-up experience. The instructor/course coordinator will consult with the Undergraduate Program Director and/or the Assistant Dean for Academic Affairs in situations where absence is placing the student's success in the course at risk. A student who misses more than 12 Supervised Experiential Learning hours for any reason will be removed (i.e., administratively dropped) from the course as the result of not being able to meet course learning outcomes. Students should review each course syllabus for specific policies related to absences in that course and make-up experiences/hours, if applicable.

## Credit/No Credit Courses

Some courses are designated as being offered on a Credit/No Credit basis. The transcript for the course will indicate either CR (meaning the student earned credits for the course) or $N$ (meaning the the student did not earn any credit for the class). Students may not take such courses on any other basis.

## Concurrent Registration and Enrollment

In some rare circumstances, and only with prior approval of the academic dean, students may enroll to earn degree credit concurrently at UWMadison and any other accredited postsecondary school, including the UW-Extension. Requests for approval should be made prior to the end of the second week of classes of the semester in which dual registration is desired. Courses must be completed during the semester in which concurrent enrollment is allowed. To request permission for concurrent enrollment, submit the Petition for Special Consideration (http:// academic.son.wisc.edu/studentnet/forms/petition-spec-considerationug.pdf).

## Drop Notation

The Drop (DR) notation appears on students' records if they drop a class or classes after the last day to drop courses or withdraw without a DR or W grade notation appearing on students' transcripts. For the specific deadline for dropping classes so a DR will not appear on a student's records, see Deadlines at a Glance (http://www.registrar.wisc.edu/ spring_deadlines_at_a_glance.htm) on the Office of the Registrar website. Please note that the School of Nursing does not backdate drops to erase them from a student's academic records or extend the drop deadline so that the DR will not appear.

## Dropping a Nursing Course

A student who drops a nursing (N\#) course may reenroll in the course when space is available. A student who drops a nursing course a second time is not eligible for the course a third time.

## Independent Study

Students are responsible for identifying their area of interest or question, establishing objectives for their learning experience, and developing a learning contract with the faculty member. All independent study requires the consent of the instructor. Approval forms are available on the forms page (https://students.nursing.wisc.edu/policies-forms/forms) within the School of Nursing Student Site.

## Registration Changes

The Office of the Registrar publishes university deadlines for adding and dropping individual courses, withdrawing (from all courses), and selection options such as pass/fail and audit. Changing enrollment can have consequences for academic standing, tuition, progress toward degree, etc. Students are strongly encouraged to consult with an academic advisor or the academic dean in the School of Nursing prior to initial enrollment and before making any changes to enrollment. Exceptions to or extensions of the university deadlines may only be requested via the Petition for Special Consideration (http://academic.son.wisc.edu/ studentnet/forms/petition-spec-consideration-ug.pdf).

## Reentry

Any student who leaves the School of Nursing and wishes to return after an absence of one semester or more must file a reentry application with the UW-Madison Office of Admissions and Recruitment. Permission to reenter is dependent on program capacity, previous academic standing, and length of absence. Immediate placement in required nursing courses is not assured. Students seeking reentry to the baccalaureate program who have left on academic action must be reviewed by the Office of Academic Affairs. If readmission is granted, academic requirements may be specified to insure currency in nursing knowledge and skills prior to enrolling in clinical nursing courses. These requirements may include remediation and/or repetition of courses, depending on academic standing or length of time since leaving the program. The remaining program will be planned as considered best for the student and according to the current curriculum.

## Retaking Courses

Each individual required nursing course may be repeated only once with a maximum of two repeated courses in the curriculum. Students who do not successfully complete a course after two attempts or who must repeat more than two different courses will be dis-enrolled from the nursing program. A course for which a student earned a grade below $C$ (or NC in a clinical course) must be repeated within the next two semesters in residence. All grades earned will be used in calculating the student's cumulative and nursing grade point averages, but credits will be counted only once toward the minimum nursing and degree credit requirements.

Didactic/Theory Courses: Undergraduate students may repeat any required didactic/theory course once without special permission.

Clinical Courses: To repeat a clinical course, an appeal must be made to the Associate Dean for Academic Affairs who will determine if the appeal merits approval. Upon a successful appeal, a student may repeat a clinical course based upon course schedule and program capacity.

## Withdrawal

A nursing student who finds it necessary to withdraw during a semester or summer session must talk with an academic advisor and complete the withdrawal process. Failure to do so may result in a recording of failure
for all courses. Any student may withdraw from the program without grades being recorded during the first 12 weeks of a semester. After the 12th week, a student may withdraw only with the permission of the Office of Academic Affairs.

## CREDITS

## 30-Credit residence requirement

Students must complete at least 30 credits at UW-Madison. Baccalaureate students must complete at least 15 credits in nursing courses from the School of Nursing, including one required clinical nursing course at the 400 level or above.

## Credit Load

A full-time program is 12 to 18 credits for a semester. Students who wish to carry more than 18 credits per semester must obtain permission from the Office of Academic Affairs. Students will be assessed additional tuition per credit on all credits carried over 18.

## Retrocredits

The School of Nursing grants retroactive foreign language credit to students for foreign language skill developed in high school or elsewhere. To earn retroactive credits for language, students must enroll in a higher level language course at UW-Madison before the end of the first two semesters in residence. Transfer students must enroll in the course on the UW-Madison campus before they earn 30 degree credits (including credits transferred from other campuses but not including AP, CLEP, IB, or retro credits in another language). Students must earn a grade of $B$ or better. If these conditions are met, retroactive credits should appear automatically on a student's transcript by the beginning of the following semester. Students will receive credit for the UW course completed and for all lower level courses in that language up to 16 retroactive credits maximum. These retroactive language credits may be used to meet degree requirements of the college or department, but may not be used to meet humanities requirements. They will be counted as electives only.

## DEGREES

## Second Undergraduate Degree

Second undergraduate degree candidates are considered for admission to both the pre-nursing and nursing classifications. Students who apply as second undergraduate program candidates must meet the admission and transfer grade point requirements of the university in place at the time they apply for admission. If admitted, an action is taken granting permission to pursue a second degree.

## Second Major

Students may request permission to pursue a second major along with the nursing degree. Students must complete the nursing school's Petition for Special Consideration (https://nursingstudentnet.wiscweb.wisc.edu/ wp-content/uploads/sites/222/2017/07/petition-spec-considerationug.pdf) to make the request.

## GRADES

## Grading Scale

The school has a standard grading scale in nursing courses that are graded A-F, as noted below. Some Experiential Learning (i.e., clinical) courses are graded Credit/No Credit.

A: 94-100
AB: 88-93.99
B: 82-87.99
BC: 76-81.99
C: 70-75.99
D: 65-69.99

## F: <65

## Incompletes

An incomplete may be reported for a student who has carried a subject with a passing grade until near the end of the semester and then, because of illness or other unusual and substantiated cause beyond the student's control, is unable to take or complete the final examination or is unable to complete some limited amount of term work. An Incomplete is not given to a student who stays away from a final examination except as indicated above. In the absence of substantiated cause, the grade shall be F. Even with such proof, if the student's work has convinced the instructor that $s /$ he cannot pass the course, the grade shall be F. Any Incomplete taken by a School of Nursing student must be completed by the end of the student's next semester of residence (specifically, by the last day of classes), excluding summer sessions. If the work is not completed by this deadline, the Incomplete will lapse into a Failure unless the time limit has been extended in writing by the Office of Academic Affairs.

## Minimum Grade Requirement

Students must earn a grade of $C$ (2.0) or higher in each required nursing (N\#) course, including didactic/theory and clinical courses. Students must receive credit (CR) in any clinical course that is offered on a Credit/ No Credit basis. Any student who earns a grade below $C$ or does not receive credit for a clinical course must repeat the course and earn a C or higher (or CR in a clinical course) in order to progress in the program in accordance with subsequent course prerequisites.

## Pass/Fail

The total number of ungraded credits (i.e., pass/fail) applied to graduation requirements may not exceed 24 . Students who plan graduate study are advised to consult with graduate studies departments to determine acceptance of credits taken under the pass/fail option. Students eligible for the pass/fail privilege are continuing students with NUR, NCP (BSN@Home), or PRN classifications who have a minimum 2.5 cumulative GPA on all courses completed and have no end-of-semester academic actions on their current record. Newly admitted students in these classifications are also eligible for the pass/fail privilege. Only one course can be carried on pass/fail basis during each semester or summer session; or 3 or 4 credits of 1 -credit modular courses. No required courses may be carried under the pass/fail option. The registrar's office will convert final letter grades reported by the student's instructor to an $S$ (pass) grade if the letter grade is $C$ or higher or to a $U$ (fail) if the final letter grade is below C . Course credits in which a student obtains a U grade cannot be counted toward the minimum of 124 credits required for graduation. Students interested in the pass/fail option must contact their nursing academic advisor to determine eligibility.

## PROFESSIONAL STANDARDS

Students in the School of Nursing must demonstrate patterns of professional behavior that 1) follow the legal and ethical codes of nursing; 2) demonstrate intellectual honesty and a strong sense of personal integrity; 3) show exemplary moral and ethical character; 4) display a responsible, civil attitude towards patients, fellow healthcare workers, classmates, faculty, and staff; 5) show respect for the human rights of individuals; and 6) demonstrate appropriate action to ensure the safety of clients, self, and others. Professional behavior is expected in the classroom, clinical settings, learning activities, and in any additional circumstances where a student represents the university or the School of Nursing. Students whose behavior does not comply with these professional standards will receive sanctions that may include but are not
limited to a lower or failing grade in a course, immediate removal from a course (i.e., administrative drop), or dismissal from the nursing program.

## RESOURCES

## SIGNE SKOTT COOPER HALL

In fall 2014, the School of Nursing moved to the new Signe Skott Cooper Hall. This $\$ 53.3$ million nursing building features world-class technology and innovative educational spaces that will allow the nursing school to address health care's new standard of excellence-high-tech and hightouch methods and practices that result in better patient outcomes and greater satisfaction with care.

## ADVISING AND STUDENT SERVICES OFFICE OF ACADEMIC AFFAIRS

The Office of Academic Affairs is the undergraduate dean's office for the School of Nursing. Staff members interpret school regulations, policies, and program requirements; make exceptions around requirements and deadlines; advise prospective and current students; monitor students having academic difficulties; coordinate compliance; facilitate the program's admissions process; and maintain the official files of students in the school.

## ACADEMIC ADVISING

Academic advising is an essential component of undergraduate education. The primary advising mission in the School of Nursing is to help students identify and clarify their academic pathways and educational goals, and to help them develop meaningful plans to ensure academic success. Advising is an ongoing, caring, and collaborative relationship between advisor and student that provides meaning, guidance, and support throughout the educational process. Every prenursing (PRN) and nursing (NUR) student is assigned a professional advisor in the nursing school (https://students.nursing.wisc.edu/ undergraduate-menu/undergraduate-advising). Advising is offered in individual appointments, group advising, and graduation checks for seniors.

## CAREER ADVISING

In addition to professional academic advisors, the School of Nursing has career advising available to help students prepare for a successful career in nursing. Services include resume and job search assistance, online job postings, information sessions, and nursing career fairs.

## ACADEMIC SUPPORT SERVICES

The Nursing Learning Center (https://students.nursing.wisc.edu/support-assistance/nursing-learning-center) in Cooper Hall is a place where students can gather with other like-minded, focused, and enthusiastic students to improve not only their understanding of the course material but of their own learning styles. Sessions are designed to assist prenursing and nursing students in weekly small-group study formats. Current courses supported include anatomy, physiology, pharmacology, and pathology, as well as courses in the nursing curriculum. Workshops and other sessions help students with test preparation, study skills, time management, etc.

## STUDENT ORGANIZATIONS

The School of Nursing encourages and supports students to pursue their interests and form social networks. In addition to numerous associations
available to students on the broader campus (including the Aspiring Nurses Association [ANA] for pre-nursing students), there are a number of student-run groups established specifically for current nursing students. These include the Student Nurses' Association, the Multicultural Student Nurses' Organization, the Nurse's Christian Fellowship, the Global Health Interest Group, the Holistic Nursing Group, the Perinatal Interest Group, and the Student Geriatric Interest Group. The purpose of these groups is to give students the opportunity to enhance their experiences related to professional development, social circles, political action, community service, and academic achievement, as well as foster connections between faculty, staff, and students.

## FINANCIAL AID AND SCHOLARSHIPS

The School of Nursing awards more than $\$ 400,000$ in scholarships each year to admitted undergraduate nursing students. Awards are based on both academic merit and financial need. Students are invited to apply to nursing specific scholarships, as well as campus-wide or non-nursing scholarships, through the Scholarships@UW-Madison system (http:// www.scholarships.wisc.edu).

## HONORS

## HONORS PROGRAM

The School of Nursing offers an Honors Program for those high-ability students seeking early research involvement with a faculty mentor. Students who successfully complete the Honors Program graduate with distinguished academic performance and receive a Bachelor of Science in Nursing (BSN) with Honors. In addition, students of the Honors Program acquire an enriched view of nursing science.

Each student in the Honors Program has an active role in identifying a faculty mentor. Once a student is assigned a faculty mentor, the mentor will help the student understand the research process and provide research-related resources. The mentor will also assist with identification and implementation of a senior honors thesis.

Interested students apply for admission to the Honors Program during their first semester in the two-year Traditional BSN program. Admission to the Honors Program is based on past academic work, a short essay, and a letter of reference.

Review the Honors Program (https://students.nursing.wisc.edu/ undergraduate-menu/undergraduate-program) page of the Student Site for complete details.

## SCHOOL OF NURSING

## DEGREES/MAJORS/CERTIFICATES

- Nursing, BSN (p. 1696)
- Nursing, BSN (Accelerated Program) (p. 1700)
- Nursing, BSN (Collaborative Program) (p. 1703)
- School of Nursing Honors (http://guide.wisc.edu/undergraduate/ nursing/nursing/school-nursing-honors)


## NURSING, BSN

The bachelor of science in nursing (BSN) degree program prepares individuals for careers in professional nursing in hospitals and other health care agencies. This Traditional BSN program provides a foundation for progressing to positions of increased responsibility, leadership, and continued education in graduate programs. Upon successful completion of the program, students receive a bachelor of science in nursing degree from the UW-Madison School of Nursing.

The curriculum includes courses in nursing as well as in liberal arts and sciences. Most students enter UW-Madison as pre-nursing students and spend their first two years completing nursing prerequisite and general education courses. Students then apply midway through their sophomore year to enter the nursing program as juniors. From there, the two-year nursing component includes lectures, laboratory, and clinical courses. Nursing courses emphasize clinical decision-making and the application of theoretical knowledge. Clinical experiences are offered in hospital settings and in community health settings. Elective courses in general education and in nursing permit students to pursue individual interests.

## HOW TO GET IN

Admission to the nursing major is competitive and determined by a comprehensive review of each student's academic preparation and performance, leadership, extracurricular activities and service, health care experience and background, diversity in experience and background, and the quality of application statements/essays.

Upper Division admission is the standard route into the Traditional BSN nursing program. In this model, students enter UW-Madison as pre-nursing students (PRN), they spend the first two years completing general education requirements and nursing prerequisites, and then apply for admission to the nursing program for the final two years on campus. Students may also apply to transfer directly into the Traditional BSN campus from another institution, upon completing the admission requirements.

Admission is highly competitive and based on factors including academic performance, pattern and trend of grades, courses taken, leadership roles, extracurricular activities, experiences related to health care, and experiences or background in diverse cultural, social, and geographic settings. Approximately half the students who apply for admission are admitted. The application deadline is February 1 to enter the nursing program the following fall.

To be considered for the Traditional BSN program, students must, at the time of application:

1. be in progress to complete at least 54 degree credits of collegelevel course work by the end of the spring semester;
2. have a minimum cumulative college GPA of 2.75 (based on a 4.0 scale) at the end of the fall semester and again at the end of the spring semester;
3. have completed or have in progress four of the following seven prerequisite courses by the end of the fall semester, and be enrolled to complete all seven by the end of the spring semester; and
4. have a minimum combined prerequisite GPA of 2.75 and earn at least a $C(2.0)$ in each of the individual seven prerequisite coures.

The seven prerequisite courses are:

1. Chemistry w/ Lab
2. Microbiology
3. Human Anatomy
4. Human Physiology
5. Psychology (introductory)
6. Sociology (introductory)
7. Human Growth and Development

Students transferring to the University of Wisconsin-Madison, as well as students who already have a bachelor's degree and wish to earn a second degree in nursing, also apply to the Traditional BSN program via the Upper Division Admission option. More information on the admission process and requirements for transfer students and seconddegree students is available on the School of Nursing website (https:// nursing.wisc.edu/undergraduate/bsn).

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth—Humanities/Literature/Arts: 6 credits
Education

- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## TRADITIONAL BSN MAJOR

 REQUIREMENTS SCIENCECode
Title
Credits
Science
Chemistry

| Select one of the following: |  | 4-5 |
| :---: | :---: | :---: |
| CHEM 103 | General Chemistry I |  |
| CHEM 108 | Chemistry in Our World |  |
| CHEM 109 | Advanced General Chemistry |  |
| Equivalent |  |  |
| Microbiology |  |  |
| Select one of the following: |  | 3 |
| MICROBIO 101 | General Microbiology |  |
| BIOCHEM 501 | Introduction to Biochemistry |  |
| Equivalent |  |  |
| Human Anatomy |  |  |
| ANAT\&PHY 337 | Human Anatomy (or equivalent) | 3 |
| Physiology |  |  |
| ANAT\&PHY 335 | Physiology (or equivalent) | 5 |
| Pharmacology |  |  |
| PHM SCI 401 | Survey of Pharmacology (or equivalent) | 3 |
| Pathology |  |  |
| PATH 404 | Pathophysiologic Principles of Human Diseases (or equivalent) | 3 |
| Total Credits |  |  |

## HUMANITIES AND SOCIAL SCIENCE

| Code $\quad$ Title | Credits |  |
| :--- | :--- | ---: |
| Humanities and Social Science |  |  |
| Psychology | Introduction to Psychology (or <br> equivalent) | 3 |
| PSYCH 202 | 3 |  |
| Sociology | 3 |  |
| Select any introductory Sociology course | 3 |  |
| Human Growth and Development | 6 |  |
| Select three credits of Human Growth and Development |  |  |
| Humanities | 7 |  |
| Select six credits of Humanities | 22 |  |
| Humanities or Social Science |  |  |
| Select seven credits of Humanities or Social Science | 2 |  |

## MATH

| Code | Title | Credits |
| :--- | :--- | ---: |
| Math |  |  |
| College Algebra |  |  |
| MATH 112 | Algebra (or equivalent) | 3 |
| Total Credits |  | 3 |

## ELECTIVES

| Code | Title | Credits |
| :--- | :--- | :---: |
| Electives |  |  |
| Select 15-27 credits of electives | $15-27$ |  |
| Total Credits | $15-27$ |  |

## NURSING

| Code | Title | Credits |
| :---: | :---: | :---: |
| Nursing |  |  |
| NURSING/S\&A PHM/ SOC WORK 105 | Health Care Systems: Interdisciplinary Approach | 2 |
| NURSING 313 | Foundations of Nursing Practice | 2 |
| NURSING 314 | Health Promotion and Disease Prevention Across the Lifespan | 3 |
| NURSING 315 | Professionalism in Nursing Practice | 2 |
| NURSING 316 | Foundations of Nursing Practice: Experiential Learning | 4 |
| NURSING 323 | Health and Illness Concepts with Individuals and Families | 4 |
| NURSING 324 | Meeting the Psychosocial Health Needs of Individuals, Families, and Communities | 3 |
| NURSING 325 | Professionalism in Health Care Settings | 2 |
| NURSING 326 | Health and Illness Concepts with Individuals and Families: Experiential Learning I | 2 |
| NURSING 327 | Health and Illness Concepts with Individuals and Families: Experiential Learning II | 2 |
| NURSING 434 | Health and Illness Concepts with Individuals, Families, and Communities | 5 |
| NURSING 435 | Evidence-Based Practice | 1 |
| NURSING 436 | Health and Illness Concepts with Individuals, Families, and Communities: Experiential Learning | 4 |
| NURSING 437 | Social Justice in Local and Global Settings | 3 |
| NURSING 443 Advanced Concepts in Complex Nursing Practice |  | 5 |
| NURSING 444 Health Systems, Policy, Economics, and Research |  | 3 |
| NURSING 445 Transformative Nursing Capstone |  | 1 |
| NURSING 446 Advanced Concepts in Complex Nursing Practice: Experiential Learning |  | 4 |
| Total Credits |  | 52 |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Promote health and manage illness by providing safe, client-centered, culturally congruent care across the lifespan in a variety of health care settings.
2. Employ professional nursing leadership concepts to address patient care and system needs to promote quality health care outcomes and health equity for all.
3. Make effective use of technology for patient care, education, and management of health information.
4. Understand the roles and scope of practice of disciplines of the health care team and practice as an effective, collaborating member of the interprofessional team.
5. Use knowledge sources effectively to provide evidence-based care.
6. Identify health disparities and advocate for basic essential health services for all.
7. Allocate health care resources to maximize the health care benefit to clients, families, and community.
8. Assume fiscal and ethical responsibility for clinical practice.
9. Function as a member of the nursing profession within the community and the world.

## ADVISING AND CAREERS

The School of Nursing provides dedicated, professional academic and career advising to undergraduate students in their pre-nursing and nursing years. As one of the smaller schools on campus, the school is able to offer a great deal of personal attention and individualized academic and career advising.

## ACADEMIC ADVISING

All pre-nursing and nursing students are assigned an academic advisor based on the students last name. Generally speaking, freshmen receive advising in small-group sessions. Once students enter their sophomore year, they move to one-on-one advising appointments with their assigned advisor. Detailed information on the school's academic advising system and staff (https://students.nursing.wisc.edu/undergraduate-menu/ undergraduate-advising) are available on the school's student intranet, called the Student (http://academic.son.wisc.edu/studentnet) Site (https://students.nursing.wisc.edu). Questions about advising can also be directed to the Office of Academic Affairs at 608-263-5202.

## CAREER ADVISING

The school offers career advising services to provide resources and strategies for career planning and placement. This includes workshops and job/internship fairs, resume review, job search resources, and
licensure information. In addition, the school offers a 1-credit seminar N590 Introduction to Career Development in Nursing.

## PEOPLE

## ADMINISTRATION

## Linda D. Scott, PhD, RN, NEA-BC, FAAN

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## Karen Mittelstadt

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## Karen D. Solheim, PhD, RN

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## ADVISING AND STUDENT SERVICES

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## Kate Knudson

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## Darby Sugar

Undergraduate Advisor and Academic Support Coordinator darby.sugar@wisc.edu ( darby.sugar@wisc.edu)

## ADMISSIONS AND RECRUITMENT

## Mandi Moy

Director of Admissions and Recruitment
mandi.moy@wisc.edu (mandi.moy@wisc.edu)

## Brent Fisher

Undergraduate Admissions and Recruitment Coordinator bjfisher@wisc.edu (bjfisher@wisc.edu)

## CERTIFICATION/LICENSURE

Earning the bachelor of science in nursing degree is the first step toward becoming a Registered Nurse. Graduates must also take and and pass the National Council Licensure Exam (NCLEX-RN) to receive their nursing license and begin their careers as nurses in hospitals, community health and mental health agencies, industrial health centers, nursing homes,
family planning centers, crisis care centers, and beyond. A nursing license gives an individual permission to practice nursing, granted by the state where he or she met the requirements.

The School of Nursing works with students as they complete graduation requirements and the two-step process to register for the NCLEX. Specifically the school verifies graduation and assists students as they register for the exam. Most students take the NCLEX within three months of graduation. More than 90 percent of School of Nursing graduates pass the NCLEX on first attempt.

## RESOURCES AND SCHOLARSHIPS

## SIGNE SKOTT COOPER HALL

In fall 2014, the School of Nursing moved to the new Signe Skott Cooper Hall. This \$53.3 million nursing building features world-class technology and innovative educational spaces that will allow the nursing school to address health care's new standard of excellence-high-tech and hightouch methods and practices that result in better patient outcomes and greater satisfaction with care.

## ADVISING AND STUDENT SERVICES

## OFFICE OF ACADEMIC AFFAIRS

The Office of Academic Affairs is the undergraduate dean's office for the School of Nursing. Staff members interpret school regulations, policies, and program requirements; make exceptions around requirements and deadlines; advise prospective and current students; monitor students having academic difficulties; coordinate compliance; facilitate the program's admissions process; and maintain the official files of students in the school.

## ACADEMIC ADVISING

Academic advising is an essential component of undergraduate education. The primary advising mission in the School of Nursing is to help students identify and clarify their academic pathways and educational goals, and to help them develop meaningful plans to ensure academic success. Advising is an ongoing, caring, and collaborative relationship between advisor and student that provides meaning, guidance, and support throughout the educational process. Every prenursing (PRN) and nursing (NUR) student is assigned a professional advisor in the nursing school (https://students.nursing.wisc.edu/ undergraduate-menu/undergraduate-advising). Advising is offered in individual appointments, group advising, and graduation checks for seniors.

## CAREER ADVISING

In addition to professional academic advisors, the School of Nursing has career advising available to help students prepare for a successful career in nursing. Services include resume and job search assistance, online job postings, information sessions, and nursing career fairs.

## ACADEMIC SUPPORT SERVICES

The Nursing Learning Center (https://students.nursing.wisc.edu/support-assistance/nursing-learning-center) in Cooper Hall is a place where students can gather with other like-minded, focused, and enthusiastic students to improve not only their understanding of the course material but of their own learning styles. Sessions are designed to assist prenursing and nursing students in weekly small-group study formats. Current courses supported include anatomy, physiology, pharmacology,
and pathology, as well as courses in the nursing curriculum. Workshops and other sessions help students with test preparation, study skills, time management, etc.

## STUDENT ORGANIZATIONS

The School of Nursing encourages and supports students to pursue their interests and form social networks. In addition to numerous associations available to students on the broader campus (including the Aspiring Nurses Association [ANA] for pre-nursing students), there are a number of student-run groups established specifically for current nursing students. These include the Student Nurses' Association, the Multicultural Student Nurses' Organization, the Nurse's Christian Fellowship, the Global Health Interest Group, the Holistic Nursing Group, the Perinatal Interest Group, and the Student Geriatric Interest Group. The purpose of these groups is to give students the opportunity to enhance their experiences related to professional development, social circles, political action, community service, and academic achievement, as well as foster connections between faculty, staff, and students.

## FINANCIAL AID AND SCHOLARSHIPS

The School of Nursing awards more than \$400,000 in scholarships each year to admitted undergraduate nursing students. Awards are based on both academic merit and financial need. Students are invited to apply to nursing specific scholarships, as well as campus-wide or non-nursing scholarships, through the Scholarships@UW-Madison system (http:// www.scholarships.wisc.edu).

## ACCREDITATION

## ACCREDITATION

Commission on Collegiate Nursing Education (http:// www.aacnnursing.org/CCNE)

Accreditation status: Next accreditation review: 2019-2020.

## CERTIFICATION/LICENSURE

National Council of State Boards of Nursing NCLEX-RN (https:// www.ncsbn.org/nclex.htm)

| Year of <br> Exam | UW-Madison <br> Graduates: <br> First Attempt | National <br> First <br> AttempI |
| :---: | :---: | :---: |
| April- <br> September <br> 2017 | $93 \%$ | $85 \%$ |
| April- <br> September <br> 2016 | $91 \%$ | $86 \%$ |
| April- <br> September <br> 2015 | $88 \%$ | $83 \%$ |

Note: UW-Madison BSN Graduates pass rate reflects all UW-Madison Bachelor of Science-Nursing graduates who tested during the April-toSeptember test period for the first time, including recent and previous graduates.

## NURSING, BSN (ACCELERATED PROGRAM)

Students who already have a bachelor's degree or higher and are interested in making a career change to nursing can apply to enter this fast-track professional program to earn the bachelor of science in nursing (BSN) in just 12 months.

It is an intense, rigorous program with students completing approximately 1 credit a week, for a total of 49 credits over 12 months. This equates to an average of 50 classroom-based, clinical, and out-ofclass hours each week.

Tuition is a flat rate of $\$ 45,000$ for Wisconsin residents (including reciprocity for MN residents), $\$ 60,000$ for nonresidents, plus fees and other program-related expenses.

## HOW TO GET IN

## SCHOOL OF NURSING REQUIREMENTS

Following are the requirements to be eligible to apply for the Accelerated BSN program:

- Bachelor's degree in a non-nursing field from an accredited institution, completed by the program start date. Students anticipating spring graduation can apply the prior fall; proof of timely progress is required.
- Admission to UW-Madison as a post-undergraduate degree-seeking student (separate application required)
- Minimum college-level cumulative GPA of 2.75
- Completion of the prerequisites listed below with a grade of $C$ or better in each course and a minimum combined GPA of 2.75. The first four prerequisites (science courses) must be completed by the application deadline and within seven years of the program start date. All prerequisites must be complete before the program start date. Prerequisite equivalency information is available on the BSN Prerequisite Course Equivalencies (https://nursing.wisc.edu/ undergraduate/course-equivalencies) page.
a. Chemistry w/Lab
b. Microbiology
c. Human Anatomy
d. Human Physiology
e. Psychology (introductory)
f. Sociology (introductory)
g. Human Growth and Development

Note: Anatomy and physiology may be satisfied by one semester of anatomy and one semester of physiology or by A\&P I and II. With the latter option, students must complete both courses at the same institution.

## UW-MADISON GENERAL EDUCATION REQUIREMENTS

Applicants must also complete the following university-wide General Education Requirements (http://gened.wisc.edu/Req.htm). At least two must be completed by the application deadline, and all prerequisites must be completed before the program start date

1. Communications Part A: Literacy Proficiency
2. Quantitative Reasoning Part A: QR Proficiency
3. Quantitative Reasoning Part B: Enhanced QR Proficiency
4. Ethnic Studies

Note: There is also a Communications Part B requirement; however, it will be satisfied with coursework in the program, so prior completion is not necessary.

## APPLICATION DATES AND DEADLINES

The program requires two applications: one to UW-Madison, plus a supplemental application to the School of Nursing for the Accelerated BSN program. Both applications open September 1 and the deadline is October 1. In-person interviews occur in November. Admission decisions are released in December and students must submit their intent to enroll by March 1.

## TRANSFER CREDIT EVALUATION AND PROOF OF ENROLLMENT

An unofficial transfer credit evaluation to check for completion of the nursing prerequisite courses and the university's General Education Requirements will be completed by the School of Nursing prior to the decision release date. Admission is contingent upon official verification by the UW-Madison Office of Admissions and Recruitment.

Applicants will be required to submit proof of enrollment at the time of application for any prerequisites not yet completed. If enrollment has not opened for a particular course, students will be asked to submit a statement of intent to register that lists the course, institution, dates of instruction, and enrollment date.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## SCHOOL OF NURSING REQUIREMENTS

The Accelerated bachelor of science in nursing (BSN) degree is a 49credit curriculum comprised of 17 didactic and experiential learning (i.e., clinical) nursing courses. The program builds on the coursework Accelerated BSN students completed in their prior undergraduate and/ or graduate degree(s) and the prerequisite coursework, including the university's General Education Requirements, completed in preparation for admission to the program.

## MAJOR REQUIREMENTS

During the 12 -months in the Accelerated BSN program, students complete 49 credits of required nursing coursework, including classroombased active learning courses and experiential learning courses in the clinical environment. This nursing coursework will include Pathology and Pharmacology.

## NURSING

| Code | Title | Credits |
| :---: | :---: | :---: |
| Nursing |  |  |
| NURSING 313 | Foundations of Nursing Practice | 2 |
| NURSING 314 | Health Promotion and Disease Prevention Across the Lifespan | 3 |
| NURSING 315 | Professionalism in Nursing Practice | 1 |
| NURSING 316 | Foundations of Nursing Practice: Experiential Learning | 5 |
| NURSING 317 | Pharmacology Essentials for Nursing Practice | 2 |
| NURSING 318 | Pathophysiology Essentials for Nursing Practice | 3 |
| NURSING 323 | Health and Illness Concepts with Individuals and Families | 4 |
| NURSING 324 | Meeting the Psychosocial Health Needs of Individuals, Families, and Communities | 3 |
| NURSING 326 | Health and Illness Concepts with Individuals and Families: Experiential Learning I | 2 |
| NURSING 327 | Health and Illness Concepts with Individuals and Families: Experiential Learning II | 2 |
| NURSING 434 | Health and Illness Concepts with Individuals, Families, and Communities | 4 |


| NURSING 436 | Health and Illness Concepts <br> with Individuals, Families, and <br> Communities: Experiential Learning | 2 |
| :--- | :--- | ---: |
| NURSING 437 $\quad$Social Justice in Local and Global <br> Settings | 2 |  |
| NURSING 443 Advanced Concepts in Complex Nursing <br> Practice | 5 |  |
| NURSING 446 Advanced Concepts in Complex Nursing |  |  |
| Practice: Experiential Learning |  |  |
| NURSING 447 Scholarship for Evidence-Based Practice | 5 |  |
| NURSING 448 Leadership in the Profession of Nursing | 2 |  |
| Total Credits | 49 |  |

## UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Work

## LEARNING OUTCOMES

1. Promote health and manage illness by providing safe, client-centered, culturally congruent care across the lifespan in a variety of health care settings.
2. Employ professional nursing leadership concepts to address patient care and system needs to promote quality health care outcomes and health equity for all.
3. Make effective use of technology for patient care, education, and management of health information.
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5. Use knowledge sources effectively to provide evidence-based care.
6. Identify health disparities and advocate for basic essential health services for all.
7. Allocate health care resources to maximize the health care benefit to clients, families, and community.
8. Assume fiscal and ethical responsibility for clinical practice.
9. Function as a member of the nursing profession within the community and the world.

## ADVISING AND CAREERS

## ACADEMIC ADVISING

The Office of Academic Affairs provides comprehensive academic advising services to students in the Accelerated BSN program. Darby Sugar advises all Accelerated BSN students and can be reached at darby.sugar@wisc.edu ( darby.sugar@wisc.edu).

## CAREER ADVISING

The school offers career advising services to provide resources and strategies for career planning and placement. This includes workshops and job/internship fairs, resume review, job search resources, and licensure information. Visit the Career Services (http:// academic.son.wisc.edu/studentnet/cs_g/career_services) page of the StudentNet for more information.

## PEOPLE

## ADMINISTRATION

Linda D. Scott, PhD, RN, NEA-BC, FAAN
Dean and Professor
Idscott@wisc.edu (Idscott@wisc.edu)
Danny G. "Dan" Willis, DNS, RN, PMHCNS-BC, FAAN
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d ( ecward@wisc.edu)gwillis@wisc.edu ( dgwillis@wisc.edu)

## Karen Mittelstadt

Assistant Dean for Academic Affairs (Academic Dean) mittelstadt@wisc.edu ( mittelstadt@wisc.edu)
608-263-5284
Karen D. Solheim, PhD, RN
Undergraduate Program Director, Clinical Professor kdsolheim@wisc.edu (kdsolheim@wisc.edu)

## ADVISING AND STUDENT SERVICES

## Katie Bleier

Director of Advising and Student Services
katie.bleier@wisc.edu ( katie.bleier@wisc.edu)
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## Darby Sugar

Accelerated BSN Advisor
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Beth Dawson
Career Advisor
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## ADMISSIONS AND RECRUITMENT

## Mandi Moy

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mandi.moy@wisc.edu (beth.dawson@wisc.edu)

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## CERTIFICATION/LICENSURE

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## RESOURCES/SCHOLARSHIPS

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## STUDENT ORGANIZATIONS

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The School of Nursing awards more than $\$ 400,000$ in scholarships each year to admitted undergraduate nursing students. Awards are based on both academic merit and financial need. Students are invited to apply to nursing specific scholarships, as well as campus-wide or non-nursing scholarships, through the Scholarships@UW-Madison system (http:// www.scholarships.wisc.edu).

## ACCREDITATION

## ACCREDITATION

Commission on Collegiate Nursing Education (http:// www.aacnnursing.org/CCNE)

Accreditation status: Next accreditation review: 2019-2020.

## CERTIFICATION/LICENSURE

National Council of State Boards of Nursing NCLEX-RN (https:// www.ncsbn.org/nclex.htm)

| Year of |  |  |
| :---: | :---: | :---: |
| Exam | UW-Madison <br> Graduates: <br> First Attempt | National <br> First <br> Attemp1 |
| April- | $93 \%$ | $85 \%$ |
| September <br> 2017 |  |  |
| April- <br> September <br> 2016 | $91 \%$ | $86 \%$ |

April- $88 \% \quad 83 \%$
September
2015
Note: UW-Madison BSN Graduates pass rate reflects all UW-Madison Bachelor of Science-Nursing graduates who tested during the April-toSeptember test period for the first time, including recent and previous graduates.

## NURSING, BSN (COLLABORATIVE PROGRAM)

## BSN@HOME

The RN to BSN program, called the BSN@Home (http://bsnathome.com) program, is for Registered Nurses who already have an associate's degree or diploma in nursing and wish to earn the bachelor of science in nursing degree.

The curriculum is designed for working adults. Almost all required coursework is completed online. Students can complete the program in as little as a year and a half.

The BSN@Home program is cooperatively administered by six campuses in the University of Wisconsin System: UW-Madison, UW-Eau Claire, UW-Green Bay, UW-Milwaukee, UW-Oshkosh and UW-Stevens Point. Students typically select their home institution based on proximity. All BSN@Home students are required to complete the same core nursing curriculum, but specific admission and degree requirements vary among campuses.

## HOW TO GET IN

## ELIGIBILITY REQUIREMENTS

- Associate's degree in nursing (ADN) or diploma in nursing from an accredited nursing program. Students with an ADN (or equivalent degree) through an international institution are eligible for admission consideration if they have completed the following required coursework. International Nurse Admission Requirements can be downloaded from this page.
- Overall GPA of 2.5 on 4.0 scale
- RN license
- Resident of Wisconsin, upper peninsula of Michigan, and/or contiguous counties in Illinois, lowa or Minnesota
- Meets university transfer admission requirements (https:// www.admissions.wisc.edu/apply/transfer/requirements.php) at UWMadison. Factors considered in admission decisions include:
- Cumulative grade point average (GPA): While the average GPA of admitted transfers is a 3.4, UW-Madison will consider prospective BSN@Home if they have a cumulative GPA of at least 2.5 with steady grade trends and patterns. GPA calculations will include all grades received for repeated courses; the initial grade, as well as grades received in second and subsequent attempts will be included in the GPA calculation.
- College-Level Course Preparation: Students must have completed at least 24 transferable (https://www.admissions.wisc.edu/ apply/transfer/transfer_credit.php) (college-level) non-nursing
credits in addition to the nursing classes they completed in their ADN or nursing piploma program.
- High School Record: Regardless of the number of college credits earned, the high school transcript is required and must show proof of graduation.
- Required Courses: Students must have completed one year each of high school algebra, plane geometry, and collegepreparatory math, and two high school years or two college semesters of a single foreign language. Requirements may vary if students graduated high school 1991 or prior. Contact the Office of Admissions and Recruitment (https:// www.admissions.wisc.edu/contact.php) with specific questions about academic background.


## TO APPLY

## ADMISSIONS TIMELINE

Students can begin the program in either spring or fall.

- Fall term application opens: August 1
- Spring term application opens: February 1.
- Deadlines: The application is due by 11:59 p.m. Pacific time on the noted deadline dates (https://www.admissions.wisc.edu/apply/ freshman/deadlines.php).


## REVIEW OF APPLICATIONS

Applications are reviewed by the UW-Madison Office of Admissions and Recruitment. Students will be evaluated on both high school and college records. Admission to the program is selective.

## TO APPLY

Complete the UW System Application for Admission (https:// apply.wisconsin.edu):

- Intended campus: UW-Madison
- Intended major. BSN@Home/Nursing Collaborative Program

For this program, there is no supplemental application submitted to the School of Nursing.

## UW-MADISON REENTRY ADMISSION

Students who have previously attended UW-Madison as degreeseeking students are eligible to apply to the BSN@Home program by submitting a Reentry Application (https://www.admissions.wisc.edu/ apply/reentry). Second-degree candidate should select BSN@Home/ Nursing Collaborative Program as the intended major. Students who have not previously earned an undergraduate degree through UW-Madison will be readmitted to their previous classification (e.g., Letters \& Science). If readmitted to the previous classification, students should email (bsnadmit@son.wisc.edu) the School of Nursing to request consideration for admission to the BSN@Home program.

Reentry applications will be evaluated by the UW-Madison Office of Admissions and Recruitment. While the Reentry Admissions (https:// www.admissions.wisc.edu/apply/reentry) site lists university-wide application deadlines, students should submit the application by the following dates to ensure access to open nursing courses:

- Summer term: February 1
- Fall semester: March 1
- Spring semester. October 1


## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

General - Breadth-Humanities/Literature/Arts: 6 credits
Education - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits

- Breadth-Social Studies: 3 credits
- Communication Part A \& Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A \& Part B *
* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.


## RN TO BSN (BSN@HOME) MAJOR REQUIREMENTS <br> SCIENCE

Code Title Credits

Science
Chemistry
Select one of the following: 4-5

Anatomy \& Physiology

| ANAT\&PHY 335 | Physiology | 5 |
| :--- | :--- | ---: |
| Pharmacology ${ }^{1}$ |  | 3 |
| PHM SCI 401 | Survey of Pharmacology (or <br> equivalent) | 3 |

Pathology ${ }^{2}$

| PATH 404 | Pathophysiologic Principles of <br> Human Diseases (or equivalent) | 3 |
| :--- | :--- | ---: |
| Total Credits | $18-19$ |  |
| 1 | Most often satisfied by CNP 490 Special Topics in Nursing: Clinical |  |
| 2 | Pharmacology in the BSN@Home program. |  |
| Most often satisfied by CNP 490 Special Topics in Nursing: <br> Pathophysiology in the BSN@Home program. |  |  |

HUMANITIES AND SOCIAL SCIENCE
Code Title Credits

| Humanities and Social Science |
| :--- |
| Psychology |


| PSYCH 202 | Introduction to Psychology (or |
| :--- | :--- |
| equivalent) |  |

Sociology
Select any introductory Sociology course
Human Growth and Development

| Humanities | 6 |
| :--- | :--- |
| Select six credits of Humanities | 6 |


| Humanities or Social Science |  |
| :--- | :--- |
| Select seven credits of Humanities or Social Science | 7 |

Total Credits 22

## MATH

| Code | Title | Credits |
| :--- | :--- | ---: |
| Math |  |  |
| College Algebra |  |  |
| MATH 112 | Algebra (or equivalent) | 3 |
| Total Credits |  | 3 |

## ELECTIVES

| Code | Title | Credits |
| :--- | :--- | :--- |
| Electives |  |  |
| Select $15-27$ credits of electives | $15-27$ |  |
| Total Credits | $15-27$ |  |

## NURSING PRIOR LEARNING CREDITS

Prior learning credits are awarded in recognition of the associate's degree in nursing (ADN) or nursing diploma. Students who earned the ADN from a Wisconsin Technical College receive 30 Prior Learning Credits. All other students receive 24.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Nursing |  | 2 |
| NURSING/S\&A PHM/ Health Care Systems: <br> SOC WORK 105  | Interdisciplinary Approach <br> NURSING 212 | Human Responses to Health and <br> Illness I |
| NURSING 219 | Clinical Nursing I | 4 |
| NURSING 310 | Mental Health and Mental Illness: <br> Implications for Nursing | 4 |
| NURSING 312 | Human Responses to Health and <br> Illness II | 3 |


| NURSING 319 | Nursing Care in the Inpatient <br> Setting | 4 |
| :--- | :--- | :---: |
| NURSING 332 | Essentials of Family-centered <br> Perinatal and Pediatric Nursing | 3 |

Total Credits 24

## BSN@HOME NURSING COURSEWORK

Code Title Credits

Nursing

| CNP 306 | Transitions: Practice, Professional and Personal | 3 |
| :---: | :---: | :---: |
| CNP 407 | Foundations of Professional Nursing Practice | 3 |
| CNP 441 | Chronic Care Management | 3 |
| CNP 446 | Research and Evidence-Based Practice | 3 |
| CNP 447 | Leadership and Management | 3 |
| CNP 453 | Information Management and Healthcare Technology | 3 |
| CNP 454 | Community Health Nursing | 3 |
| CNP 519 | Capstone Practicum for Registered Nurses | 3 |
| NURSING 433 | Essentials of Gerontological Nursing ${ }^{1}$ | 3 |
| Total Credits |  | 27 |
| 1 Gerontolo | e may be satisfied by credit-by-exa |  |

Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.
Quality of Undergraduate students must maintain the minimum Work grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Promote health and manage illness by providing safe, client-centered, culturally congruent care across the lifespan in a variety of health care settings.
2. Employ professional nursing leadership concepts to address patient care and system needs to promote quality health care outcomes and health equity for all.
3. Make effective use of technology for patient care, education, and management of health information
4. Understand the roles and scope of practice of disciplines of the health care team and practice as an effective, collaborating member of the interprofessional team
5. Use knowledge sources effectively to provide evidence-based care.
6. Identify health disparities and advocate for basic essential health services for all.
7. Allocate health care resources to maximize the health care benefit to clients, families, and community.
8. Assume fiscal and ethical responsibility for clinical practice.
9. Function as a member of the nursing profession within the community and the world.

## PEOPLE

## ADMINISTRATION

Linda D. Scott, PhD, RN, NEA-BC, FAAN
Dean and Professor
Idscott@wisc.edu (Idscott@wisc.edu)
Danny G. "Dan" Willis, DNS, RN, PMHCNS-BC, FAAN
Associate Dean for Academic Affairs, Professor dgwillis@wisc.edu (dgwillis@wisc.edu)

## Karen Mittelstadt

Assistant Dean for Academic Affairs (Academic Dean) mittelstadt@wisc.edu ( mittelstadt@wisc.edu) 008-263-5284

Karen D. Solheim, PhD, RN
Undergraduate Program Director, Clinical Professor kdsolheim@wisc.edu (kdsolheim@wisc.edu)

## ADVISING, STUDENT SERVICES, AND ADMISSIONS

## Katie Bleier

Director of Advising and Student Services
katie.bleier@wisc.edu ( katie.bleier@wisc.edu)
608-263-5172

## TBD

BSN@Home Advisor and Admissions Coordinator
kctobin@wisc.edu ( darby.sugar@wisc.edu)

## Beth Dawson

Career Advisor
b ( mlrussell@wisc.edu)eth.dawson@wisc.edu ( beth.dawson@wisc.edu)

## ACCREDITATION

## ACCREDITATION

Commission on Collegiate Nursing Education (http:// www.aacnnursing.org/CCNE)

Accreditation status: Next accreditation review: 2019-2020.

## CERTIFICATION/LICENSURE

National Council of State Boards of Nursing NCLEX-RN (https:// www.ncsbn.org/nclex.htm)

| Year of <br> Exam | UW-Madison <br> Graduates: <br> First Attempt | National <br> First <br> Attempi |
| :---: | :---: | :---: |
| April- <br> September <br> 2017 | $93 \%$ | $85 \%$ |
| April- | $91 \%$ | $86 \%$ |
| September <br> 2016 |  |  |
| April- <br> September <br> 2015 | $88 \%$ | $83 \%$ |

Note: UW-Madison BSN Graduates pass rate reflects all UW-Madison Bachelor of Science-Nursing graduates who tested during the April-toSeptember test period for the first time, including recent and previous graduates.

## SCHOOL OF PHARMACY

Established by the Wisconsin Legislature in 1883, the "Department of Pharmacy" was the second pharmacy school in the United States associated with a state university. The start was a modest one-a single laboratory and a student body of 28. From the beginning, under the leadership of its first director, Dr. Frederick B. Power, the school became a prominent force in the development of pharmacy as a profession in the state and the country.

The UW-Madison School of Pharmacy was the first in the country to establish a four-year curriculum (optional) leading to the B.S.-Pharmacy degree (1892); in 1960, this became a five-year program. In fall 1997, the four-year, professional-level Doctor of Pharmacy (Pharm.D.) program replaced the B.S.-Pharmacy program. In fall 1997, the school also began to offer the nontraditional Doctor of Pharmacy (Pharm.D.) program, an opportunity for U.S.-licensed pharmacists who are graduates of B.S.-Pharmacy programs accredited by the American Council on Pharmaceutical Education to further their professional education. The school was the first to offer graduate work leading to the master of science and doctor of philosophy degrees in pharmacy; pioneered in pharmaceutics, history of pharmacy, social studies of pharmacy, and pharmacy administration; and was one of the first to offer a master of science degree with a major in hospital pharmacy. A four-year B.S.-Pharmacology and Toxicology major/degree is also available to undergraduate students.

With an enrollment of more than 500 undergraduate and professional students, the School of Pharmacy is part of the Center for Health

Sciences, which includes the School of Medicine and Public Health, the School of Nursing, University Hospital and Clinics, and the State Laboratory of Hygiene. Students have opportunities to interact with other students and professional personnel in related fields as they prepare to meet the health care needs of society.

Recognizing the importance of good communication between pharmacists, patients, and other health care professionals, the school designed the Pharm.D. program to provide pharmacy students with opportunities to develop and improve written and oral communication skills and to understand the sociological and psychological aspects of illness and drug therapy.

Believing that its role in pharmacy education extends beyond the boundaries of the campus, the school has an active continuing education and extension program. Several on-campus educational programs are conducted annually for state pharmacists. Other educational programs are taken directly to pharmacists to help them keep up with the changes occurring in the profession.

## PROFESSIONAL PHARMACY

Pharm.D. graduates are presented with opportunity and challenge: the opportunity to participate in the exciting field of health care and the challenge of expanding the role of the pharmacy professional within this changing system. Pharmacists are important members of the comprehensive health care team; the expertise of pharmacists is vital to the success of the health care team as it designs, implements, and monitors drug therapy for the benefit of patients. Pharmacists use their expertise to keep pace with the rapid changes taking place in the health care system and the growing complexities of providing optimal pharmaceutical care to patients. This care requires that pharmacists be effective health educators. The ultimate success of drug therapy can depend upon how well patients understand and follow their drug regimens. Therefore, opportunities for the development and improvement of communication skills, both written and oral, are essential components of the Pharm.D. professional curriculum; required and elective courses throughout the curriculum provide valuable practical experience in effective interaction with patients and other health practitioners.

Pharmacy offers many career opportunities. Graduates traditionally have pursued careers in community, hospital, and long-term care pharmacy, the pharmaceutical industry, pharmacy education, and government agencies. Pharmacists serve also in other roles, including managed care, home care, and primary care, to increase the availability and quality of pharmaceutical care.

Community pharmacy. Many pharmacists are employed in community pharmacies; these can be independent pharmacies, chain store pharmacies, or health maintenance organization (HMO) pharmacies. Community pharmacy practice usually is general in nature and involves a large ambulatory patient population. Community pharmacists are the most accessible health professionals. They prepare and dispense prescriptions, develop pharmaceutical care plans, counsel patients on the appropriate use of prescription and nonprescription drugs, and maintain patient medication records and profiles. In addition, community pharmacists consult with other members of the health care team and serve as important sources of information for the public. Other opportunities include involvement in business management, marketing strategies, inventory control, and personnel. Pharmacists supervise the activities of pharmacy technicians.

Hospital pharmacy practice includes active involvement with inpatient care in hospitals and outpatient care in ambulatory clinics. Hospital
pharmacists participate with other health care professionals in the care of patients, obtain medication histories from newly admitted patients, develop pharmaceutical care plans, perform pharmacokinetic drug consultations, monitor drug therapies, educate patients about their drug therapy, administer medications, operate medication distribution systems, and prepare intravenous solutions and other dosage forms.

Hospital pharmacists supervise the activities of pharmacy technicians in purchasing, storing, and distributing drugs to patients. Hospital pharmacists also carry out clinical research and practice in specialized areas of pharmacy, such as nuclear pharmacy, the provision of drug and poison information to other members of the health care team and to the public, infusion therapy, oncological pharmacy, pediatric pharmacy, and psychiatric pharmacy.

## Home care, assisted-living, extended care, and long-term care

pharmacy. Residents in assisted-living, extended care, or long-term care facilities may require pharmaceutical care similar to that found in acute care hospitals, while patients residing at home may require a wide range of pharmaceutical care services.

Other career opportunities. Pharmacists are prepared to assume positions in the pharmaceutical industry, in areas such as research and discovery, clinical investigation, product formulation, quality control, marketing, and sales. Some pharmacists practice in government agencies, such as the U. S. Public Health Service, the Veterans Administration, the Armed Forces, and the Food and Drug Administration, and in other federal and state agencies. Opportunities for research and teaching are available at many colleges and universities, in the pharmaceutical industry, and in some government agencies. Pharmacists with graduate or advanced professional education teach in schools of pharmacy. Specialization in nuclear pharmacy, veterinary pharmacy, technical writing for scientific and professional journals, or administration of state and national professional pharmacy organizations are additional areas that graduates may consider.

Graduate study. Well-qualified graduates who wish to prepare themselves for a variety of careers, including university teaching and research, industrial research, and pharmacy administration, will find outstanding opportunities for specialized study and research. The University of Wisconsin-Madison School of Pharmacy provides extensive research facilities and graduate courses in a wide variety of pharmacy-related areas. The M.S. and Ph.D. degrees are conferred upon candidates who have met the requirements of their respective fields of study. Postdoctoral training is available with faculty for those holding the Ph.D. degree, and in the form of residencies and fellowships for those holding the Pharm.D. degree.

## REGISTRATION AS A PHARMACIST

The practice of pharmacy, recognized as a public health profession, is regulated by law. In Wisconsin, as in all states, pharmacy practice is limited to those who are professionally competent and are licensed by the state.

Educational requirements. To be eligible for licensure in Wisconsin, a candidate must be a graduate of an accredited school of pharmacy in the United States, or must meet the requirements established by the Wisconsin Pharmacy Examining Board for graduates of pharmacy schools in other countries.

Internship. Wisconsin requires the completion of 1,740 hours of internship to qualify for licensure. With proper planning, the Pharm.D. degree at the University of Wisconsin-Madison School of Pharmacy,
completed with required clerkships under the supervision of qualified preceptors, can fulfill the internship requirement.

Internship requirements vary from state to state, although credit for internship generally is transferable. A person who plans to intern and/ or become licensed in another state should contact the pharmacy examining board of that prospective state for information about the internship and/or licensure requirements of that state.

Licensing examination. Following completion of the internship requirement, prospective pharmacists must pass the national examinations (NAPLEX, MPJE) and an examination administered by the Wisconsin Pharmacy Examining Board. The board then issues a registration certificate entitling the holder to practice pharmacy in Wisconsin

## ACCREDITATION

The Accreditation Council for Pharmaceutical Education (ACPE) (http:// www.acpe-accredit.org) accredits professional pharmacy degree programs; ACPE membership comes from the American Pharmacists Association (APhA) (http://www.pharmacist.com), the National Association of Boards of Pharmacy (NABP) (http://www.nabp.net), and the American Association of Colleges of Pharmacy (AACP) (http:// www.aacp.org/Pages/Default.aspx). The purposes of ACPE are to advance the standard of pharmaceutical education and to accredit schools and colleges of pharmacy.

The School of Pharmacy Pharm.D. program is accredited by:
ACPE (http://www.acpe-accredit.org)
20 North Clark Street, Suite 2500
Chicago, IL 60602
312-664-3575; fax 312-664-4652
info@acpe_accredit.org (info@acpe-accredit.org)

## PHARMACOLOGY AND TOXICOLOGY

The bachelor of science degree in pharmacology and toxicology ("PharmTox") focuses on the biomedical sciences. Pharmacology is concerned with the properties, effects, and mechanisms of action of drugs, and with the interactions between chemical agents and biological systems. Toxicology, the science of poisons, combines the elements of biology and chemistry with those of many other disciplines to help us understand the harmful effects of chemicals on living organisms.

A major challenge for the pharmacologist is to determine how drugs act. This can be carried out at the subcellular and molecular level, the cellular level, the tissue level, the organ level, or the whole-animal level. Pharmacologists also are concerned with the development of new drugs that produce fewer side effects while curing disease, and provide more effective and/or more rapid treatment of disease in humans or animals.

Some pharmacologists are concerned with screening newly discovered drugs or synthesized compounds for potentially useful therapeutic activity, then characterizing that activity. Others conduct research by using drugs (as tools) to probe biological systems. The challenges of this research are to achieve a better understanding of normal bodily functions and to better understand the biological basis of disease.

Toxicologists find scientifically sound answers to questions about chemicals that may potentially threaten our health, about pesticides in the food we eat, pollutants in the air we breath, chemicals in the water we drink, and toxic waste sites near our homes. Some toxicologists are concerned with determining the cellular mechanisms by which drugs
and chemicals produce toxic effects. Many are involved in subspecialty areas in toxicology research, such as reproductive and developmental toxicology, neurotoxicology, immunotoxicology, and inhalation toxicology. Researchers in these areas utilize both laboratory animals and in vitro systems to examine the cellular, biochemical, and molecular processes underlying toxic responses.

Other researchers are involved in research to define safe exposure limits for new chemicals before they reach the market, or to identify and determine the relative risks to humans of occupational and/or environmental exposure to chemicals. For example, toxicologists in this area are concerned with the adverse effects on humans and animals of long-term exposure to air and water pollutants, food additives, drugs, and agricultural and industrial chemicals. The development of new poisons that are more selective and effective against insects and pests is yet another challenge for the toxicologist; so, too, is the development of new antidotes for the more rapid and effective treatment of poisons by drugs and chemicals.

The pharmacology and toxicology B.S. degree receives its accreditation through UW-Madison accreditation by the North Central Association of Colleges and Schools.

## DEGREES/MAJORS/CERTIFICATES

- Pharmaceutical Sciences, B.S. (p. 1710)
- Pharmacology and Toxicology, B.S. (p. 1710)


## ENTERING THE SCHOOL

## ACADEMIC AND ADMISSION POLICIES

School of Pharmacy academic policies (regarding such matters as academic and professional conduct, academic progress, honor roll, pass/fail registration, and independent study coursework) for both the Pharm.D. and pharmacology and toxicology (PharmTox) programs can be found in the Pharm.D. and PharmTox student policy handbooks (https:// pharmacy.wisc.edu/student-resources).

## ADMISSION POLICIES AND PROCEDURES

## Pharm.D. and B.S.-Pharmacology and Toxicology Admission

Admission to both programs is selective and competitive, and requires specific prerequisite coursework as well as a complete admissions application. For detailed information on prerequisites for the pharmacology and toxicology major, see the "How to Get In" tab in the Guide.

An overall cumulative GPA of at least 3.00 (or 3.20 over the most recent 60 semester credits) is required for admission to the Pharm.D. program.

Completion of the required School of Pharmacy course requirements does not guarantee admission. Each applicant's admission credentials are considered not only on their own merit, but also in comparison with the credentials of other applicants.

Information about the required elements of the applications can be found on the School of Pharmacy website (https://pharmacy.wisc.edu/ programs).

## RESOURCES

## FINANCIAL AID

Students who seek financial assistance should contact the UW-Madison Office of Student Financial Aid (https://financialaid.wisc.edu) for financial aid applications and information about scholarships, loans, grants (not available to Pharm.D. students), work-study programs, and student employment.

## LOANS

The School of Pharmacy administers limited short-term loan funds available to students enrolled in the school. The maximum amount of outstanding short-term loans is $\$ 2000$, with repayment expected as soon as possible, usually within one year of the date of the loan. Short-term loans are meant to assist students until funds from major sources arrive.

## SCHOOL OF PHARMACY SCHOLARSHIPS

About 120 School of Pharmacy students are awarded scholarships each year, in varying amounts. Only students who have been admitted to the Pharm.D. program or the B.S.-Pharmacology and Toxicology program may apply for scholarships. Applications are available from the School of Pharmacy Student Services Office during the spring semester, and must be submitted by a specified date. The School of Pharmacy Scholarships Committee evaluates scholarship applicants on the bases of academic achievements, personal and professional accomplishments, and a written essay. Applicants are notified of the committee's decisions during the summer, and scholarships are presented at the annual Scholarships and Awards Ceremony each September.

## GRADUATION AWARDS

Annual awards to students graduating from the School of Pharmacy recognize scholastic achievement, leadership qualities, involvement in student organizations, professional potential, and general achievements. The awards program is supported by professional organizations, School of Pharmacy alumni, and the pharmaceutical industry. Some awards carry financial remuneration. Awards are presented at the Hooding Ceremony (Pharm.D. graduates) and at the graduation reception (B.S.Pharmacology and Toxicology graduates) each May.

Contact the School of Pharmacy Student and Academic Affairs Office for information about the scholarships and awards administered by the school.

## MINORITY AFFAIRS

The primary goals of the Multicultural Affairs Program in Pharmacy (MAPP) are to identify, recruit, admit, retain, and graduate students of color who are interested in the pharmaceutical professions, and to encourage the full participation of students of color in pre-professional and professional life.

MAPP focuses on the early identification and continuous development of School of Pharmacy and School of Pharmacy students. To accomplish these goals, MAPP and the diversity coordinator collaborate to serve as the bridge between pre-School of Pharmacy and School of Pharmacy admission and retention activities, by providing and disseminating information, by promoting activities that are designed to enlighten students about university resources, and by encouraging leadership development and academic success. Advanced Opportunity Program
(AOP) scholarships, based upon need, are available to students in the School of Pharmacy.

The School of Pharmacy is committed to admitting a diverse student body, to help students prepare to become productive and involved members of an increasingly complex and diverse society. Applicants are encouraged to share information about their own unique backgrounds and experiences with the admissions committee (e.g. gender, racial/ ethnic/cultural heritage, socioeconomic class, age, first-generation college student, geography, historical underrepresentation, multicultural and/or international experience, sexual identity/orientation).

## STUDENT ORGANIZATIONS

Pharmacy students will find many organizations open to them, both in the school and across the UW-Madison campus. For more information about Pharmacy student groups, see this link (https://pharmacy.wisc.edu/ student-organizations).

## FACILITIES

The School of Pharmacy is located in Rennebohm Hall, the state-of-the-art pharmacy building. Rennebohm Hall is located on the west side of campus, near University Hospital and Clinics and Health Sciences Learning Center. The School of Pharmacy provides students and faculty with the finest possible physical environment for professional pharmacy and for research in pharmaceutical fields of study.

The combination of small-enrollment courses and the availability of modern apparatus, equipment, computers, and laboratories creates optimal educational opportunities. School of Pharmacy students may take advantage of the resources not only of the school, but also of other schools and colleges on campus.

For Pharm.D. students, community and hospital pharmacies serve as clinical sites for the required and elective clerkships in the professional curriculum. Through these experiences, students become acquainted with actual pharmacy practice as they work under the supervision of registered pharmacists, who serve as preceptors. Throughout the Pharm.D. curriculum, students participate in an active program that is focused on the patient and the development of pharmacist-patient communication.

## LIBRARIES

The Ebling Library (http://ebling.library.wisc.edu) is located in Health Sciences Learning Center (HSLC), 750 Highland Avenue, directly across the street from Rennebohm Hall. A skywalk connects Rennebohm Hall to the HSLC. Ebling Library opened in June 2004 and combines the collections of the three former Health Sciences Libraries on the UWMadison campus: the former F. B. Power Pharmaceutical Library; the former F. L. Weston Clinical Sciences Center Library; and the former William S. Middleton Health Sciences Library. The library's collection includes journals, books, and other materials related to pharmacy (including pharmacy, pharmacology, toxicology, herbals, and the history of pharmacy), nursing, medicine and allied health. Many journals and books of interest to pharmacy students are available full-text online through the campus computer network. Most materials in the library can be checked out with a valid UW-Madison student identification card.

Library staff members are available to help students locate information, assist with the development of research strategies, provide instruction for database searching, and help with the evaluation of materials. Through electronic reserves, library staff post course exams, lecture notes and
handouts, journal articles, book chapters, and audio files, as requested by instructors.

The Ebling Library maintains a selection of brochures and handouts pertaining to residency and career opportunities. The library's website (http://ebling.library.wisc.edu/pharmacy) includes links to job openings, sample resumes and cover letters, and educational opportunities.

## RESEARCH FACILITIES AND EQUIPMENT

The School of Pharmacy provides graduate students and other students enrolled in independent study projects laboratory space, instruments, and supplies necessary to conduct scientific research. Among the instruments available to students are two nuclear magnetic resonance spectrometers, recording ultraviolet and infrared spectrophotometers, spectrophoto-fluorometers, several modern mass spectrometers, gas chromatographs and high-pressure liquid chromatographs, liquid scintillation spectrometers, gamma counters, a scanning laser densitometer, ultracentrifuges, and microscopes. Also available are a peptide synthesizer, an oligonucleotide synthesizer, equipment for smallscale fermentation, numerous tissue culture laboratories, and other pieces of specialized equipment necessary to conduct research. Animal care facilities are available for a variety of terrestrial and aquatic species. Additional facilities and resources within the School of Pharmacy include cold rooms, an electronics shop, and a well-provisioned stockroom. Computer specialists are available to offer individualized tutoring and group classes. Other campus resources, such as the Biotron, a system of controlled environmental facilities, and core instrumentation, microscopic, and biotechnology facilities, also are available to students.

## SCHOOL OF PHARMACY

## DEGREES/MAJORS/CERTIFICATES

- Pharmaceutical Sciences, B.S. (p. 1710)
- Pharmacology and Toxicology, B.S. (p. 1710)


## PHARMACEUTICAL SCIENCES, B.S.

The B.S. in pharmaceutical sciences is not a major, but is an internal degree granted to current doctor of pharmacy (Pharm.D.) students after they complete their second year of the Pharm.D. program. In order to qualify for the B.S. in pharmaceutical sciences, students must have attended UW-Madison prior to entering the School of Pharmacy, and must meet all degree requirements. More detailed information about this degree may be found on the school website (https://pharmacy.wisc.edu/ programs/pharmd/curriculum/bs-ps).

Students interested in pursuing an undergraduate degree offered by the School of Pharmacy may want to investigate the B.S. Pharmacology/ Toxicology (p. 1710) program. This interdisciplinary major in the biomedical sciences can serve as a foundation for further education in graduate or professional degree programs, or for entry-level scientific employment

## PHARMACOLOGY AND TOXICOLOGY, <br> B.S.

Pharmacology and toxicology (PharmTox) is an undergraduate major offered through the School of Pharmacy; successful completion of program requirements leads to the Bachelor of Science-Pharmacology and Toxicology degree. Pharmacology and toxicology are biomedical sciences often referred to as sister disciplines. Pharmacology is the study of the sites, properties, effects, and mechanisms of drug action - the interactions of chemicals with biological systems. Toxicology addresses adverse effects of chemicals on humans and animals and includes exposure assessment, hazard identification, dose response assessment, and risk characterization. Both subjects integrate multiple scientific disciplines and rely on cutting-edge biotechnological approaches to gain insight into drug and toxicant action at the molecular level. Though the degree is titled "Pharmacology and Toxicology," the program's curriculum is multidisciplinary across various biomedical sciences

Pre-PharmTox studies involve the completion of at least 60 credits and the fulfillment of all prerequisite coursework. This typically takes two academic years (i.e., freshman and sophomore years) to complete. Prerequisite coursework can be done at UW-Madison or at most accredited colleges and universities. The School of Pharmacy website (https://pharmacy.wisc.edu/programs/pharm-tox/admissions/transfers) provides information regarding which courses at various colleges and universities fulfill pre-PharmTox course requirements. Questions about course equivalencies from other colleges or universities can be addressed with the PharmTox advisor.

At UW-Madison, pre-PharmTox students are usually in either the College of Letters \& Science or the College of Agricultural and Life Sciences during their freshman and sophomore years while taking prerequisite coursework and preparing to apply to the major. Students can request to be assigned to the PharmTox advisor during this time, in addition to having a primary academic advisor in their current school. It is important to stay in contact with the PharmTox advisor to remain up-to-date with admission requirements and program changes. Applications are typically due in February, with students being admitted to the major and beginning core coursework in fall of the following year (typically junior year). The core major curriculum typically requires two years to complete (junior and senior years).

## HOW TO GET IN

See the School of Pharmacy Academic and Admission Policies (p. 1708).

## APPLICATION

Application to the B.S. in Pharmacology and Toxicology is required as the program's size is limited. Students (both at UW-Madison and at other institutions) typically apply to the program by the beginning of February in their sophomore year for subsequent fall semester admission; students are not admitted at any other time of the year. (Note that potential transfer students must also apply to UW-Madison itself (https://www.admissions.wisc.edu/apply/transfer/deadlines.php)).
Students are notified by the end of March regarding their admission status. Applications and current due dates can be found on our website (https://pharmacy.wisc.edu/programs/pharm-tox/admissions).

To strengthen applications for admission and demonstrate their preparedness for this rigorous academic major, applicants are encouraged to enroll in course loads of 14-16 credits per semester during pre-PharmTox studies.

To be eligible to apply, students must complete the following courses by the end of the summer semester prior to entering the program. Potential transfer students from a wide variety of regional institutions can find course equivalents (from their current university/college) on this School of Pharmacy webpage (https://pharmacy.wisc.edu/programs/pharm-tox/ admissions/transfers/equivalencies).

## INTRODUCTORY BIOLOGY

Code Title Credits
Select one of the following options:

| BIOLOGY/ | Introductory Biology |
| :--- | :--- |
| BOTANY/ | and Introductory Biology |
| ZOOLOGY 151 |  |
| \& BIOLOGY/ |  |
| BOTANY/ |  |
| ZOOLOGY 152 |  |
| BIOLOGY/ | Animal Biology |
| ZOOLOGY 101 | and Animal Biology Laboratory |
| \& BIOLOGY/ | and General Botany |
| ZOOLOGY 102 |  |
| \& BOTANY/ |  |
| BIOLOGY 130 |  |
| BIOCORE 381 | Evolution, Ecology, and Genetics |
| \& BIOCORE 382 | and Evolution, Ecology, and |
| \& BIOCORE 383 | Genetics Laboratory |
| \& BIOCORE 384 | and Cellular Biology |
|  | and Cellular Biology Laboratory |

GENERAL AND ORGANIC CHEMISTRY
Code Title
Credits
Select one of the following general chemistry options:

| CHEM 103 | General Chemistry I |  |
| :--- | :--- | :--- |
| \& CHEM 104 | and General Chemistry II |  |
| CHEM 109 | Advanced General Chemistry |  |
| CHEM 115 | Chemical Principles I |  |
| Select ALL of the following organic chemistry courses: |  |  |
| CHEM 343 | Introductory Organic Chemistry | 3 |
| CHEM 345 | Intermediate Organic Chemistry | 3 |
| CHEM 344 | Introductory Organic Chemistry <br> Laboratory | 2 |

## CALCULUS I

Code
Title
Credits
Select one of the following options: ${ }^{1}$

| MATH 221 | Calculus and Analytic Geometry 1 |
| :--- | :--- |
| MATH 171 | Calculus with Algebra and |
| \& MATH 217 | Trigonometry I |
|  | and Calculus with Algebra and |
|  | Trigonometry II |

[^52] I requirement for this major

## PHYSICS I

Code Title Credits

Select one of the following (please note that while Physics
II is not a prerequisite, it is a graduation requirement):

| PHYSICS 103 | General Physics |
| :--- | :--- |
| PHYSICS 201 | General Physics |
| PHYSICS 207 | General Physics |

## COMMUNICATION

The UW-Madison Communication Part A requirement must be fulfilled.

## SOCIAL SCIENCE

Any course that qualifies as social science (S or Z) credit, 3 credits required.

## OTHER COLLEGE COURSES

Sixty (60) credits must be completed by the end of the summer semester prior to entering the program. AP, IB, retrocredits, and credit-granting transfer coursework from other institutions (including coursework completed while in high school) all count toward the 60 credits.

## REQUIREMENTS

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (p. 22) section of the Guide.

| General | - Breadth-Humanities/Literature/Arts: 6 credits |
| :---: | :---: |
| Education | - Breadth-Natural Science: 4 to 6 credits, consisting of one 4 - or 5 -credit course with a laboratory component or two courses providing a total of 6 credits |
|  | - Breadth-Social Studies: 3 credits |
|  | - Communication Part A \& Part B * |
|  | - Ethnic Studies * |
|  | - Quantitative Reasoning Part A \& Part B * |
|  | The mortarboard symbol appears before the title of any ourse that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements. |

## OVERVIEW OF REQUIREMENTS

The Pharmacology and Toxicology B.S. degree requires the following groups of coursework:

- University General Education requirements (above - those that are also prerequisite requirements will be completed before entering the
program; remaining gen ed requirements can be completed at any time prior to graduation)
- Prerequisite requirements (completed prior to admittance/entrance to the program)
- Pharmacology and Toxicology major requirements (mostly completed after entering the program, though some courses can be completed earlier)

The PharmTox degree does not require any additional breadth courses beyond the University General Education requirements. Foreign language coursework can count towards the "Humanities/Literature/Arts" gen ed requirement.

School of Pharmacy academic policies (regarding matters such as academic and professional conduct, academic progress/probation, honor roll, pass/fail registration, and independent study coursework) are found in the PharmTox student policy handbook (https://pharmacy.wisc.edu/ student-resources)

## PREREQUISITE REQUIREMENTS

To be eligible to apply, students must complete the following courses by the end of the summer semester prior to entering the program. Potential transfer students from a wide variety of institutions can find course equivalents (from their current university/college) on this School of Pharmacy webpage (https://pharmacy.wisc.edu/programs/pharm-tox/ admissions/transfers/equivalencies).

## INTRODUCTORY BIOLOGY



Select one of the following options:

| BIOLOGY/ | Introductory Biology |
| :--- | :--- |
| BOTANY/ | and Introductory Biology |
| ZOOLOGY 151 |  |
| \& BIOLOGY/ |  |
| BOTANY/ |  |
| ZOOLOGY 152 |  |
| BIOLOGY/ | Animal Biology |
| ZOOLOGY 101 | and Animal Biology Laboratory |
| \& BIOLOGY/ | and General Botany |
| ZOOLOGY 102 |  |
| \& BOTANY/ |  |
| BIOLOGY 130 |  |
| BIOCORE 381 Evolution, Ecology, and Genetics <br> \& BIOCORE 382 and Evolution, Ecology, and <br> \& BIOCORE 383 Genetics Laboratory <br> \& BIOCORE 384 and Cellular Biology <br>  and Cellular Biology Laboratory |  |

## GENERAL AND ORGANIC CHEMISTRY

Code Title Credits

Select one of the following general chemistry options:
$\left.\begin{array}{ll}\text { CHEM 103 } & \begin{array}{l}\text { General Chemistry I } \\ \text { \& CHEM 104 }\end{array} \\ \text { and General Chemistry II }\end{array}\right]$

| CHEM 344 | Introductory Organic Chemistry <br> Laboratory | 2 |
| :--- | :--- | :--- |

## CALCULUS I

Code
Title
Credits
Select one of the following options: ${ }^{1}$

| MATH 221 | Calculus and Analytic Geometry 1 |
| :--- | :--- |
| MATH 171 | Calculus with Algebra and |
| \& MATH 217 | Trigonometry I |
|  | and Calculus with Algebra and <br>  <br>  <br> Trigonometry II |

1 MATH 211 Calculus taken at UW-Madison does not fulfill the Calculus I requirement for this major.

## PHYSICS I

Code Title Credits

Select one of the following (please note that while Physics II is not a prerequisite, it is a graduation requirement):

| PHYSICS 103 | General Physics |
| :--- | :--- |
| PHYSICS 201 | General Physics |
| PHYSICS 207 | General Physics |

## COMMUNICATION

The UW-Madison Communication " A " requirement must be fulfilled.

## SOCIAL SCIENCE

Any course that qualifies as social science (S or Z) credit, 3 credits required.

## OTHER COLLEGE COURSES

Sixty (60) credits must be completed by the end of the summer semester prior to entering the program. AP, IB, retrocredits, and credit-granting transfer coursework from other institutions (including coursework completed while in high school) all count towards the sixty credits.

## PHARMACOLOGY AND TOXICOLOGY MAJOR REQUIREMENTS

Students must take most of their major-level coursework in very specific semesters in order to graduate within four semesters of starting the program - see four year plans (p. 1715) for course sequences. However, the five credits of elective coursework, statistics, genetics, and Physics II requirements can be completed at any time, including prior to admission to the program. The laboratory-based advanced independent study requirement must be completed in semesters 1,2 , or 3 of the foursemester curriculum and must be performed after admission to the program.

## LABORATORY-BASED ADVANCED INDEPENDENT STUDY (699), 2 CREDITS

Must be completed in semesters 1, 2, or 3 of the PharmTox major curriculum and have prior approval to meet PharmTox major requirements. A wet-lab basic science experience available in a variety of academic departments can fulfill the requirement. "Wet lab" research is laboratory-based research involving one or more of the following: laboratory animals; animal organs, tissues or cells; biochemical methods/techniques; molecular biology technology; cell
culture; chemical synthesis; preparation of solutions; use of chemical hoods; etc.

## PHYSICS II

| Code | Title | Credits |
| :--- | :---: | ---: |
| Select one of the following: |  |  |
| PHYSICS 104 | General Physics | 4 |
| PHYSICS 202 | General Physics | 5 |
| PHYSICS 208 | General Physics | 5 |

## STATISTICS

| Code | Title <br> Select one of the following: | Credits |
| :--- | :--- | ---: |
| STAT 371 | Introductory Applied Statistics for <br> the Life Sciences | 3 |
| STAT 301 | Introduction to Statistical Methods | 3 |
| STAT/B M I 541 | Introduction to Biostatistics | 3 |
| BOTANY 575 | Special Topics (Introduction to <br> Modern Statistical Methods for <br> Biologists) | $1-3$ |
| STAT/F\&W ECOL/ Statistical Methods for Bioscience I |  |  |
| HORT 571 |  | 4 |

## BIOCHEMISTRY

## Code

BIOCHEM 507
\& BIOCHEM 508

## Title

General Biochemistry I
and General Biochemistry II

## PHYSIOLOGY

Code Title

## Credits

Select one of the following:

| ANAT\&PHY 335 | Physiology | 5 |
| :--- | :--- | ---: |
| BIOCORE 485 | Organismal Biology | 5 |
| \& BIOCORE 486 | and Organismal Biology Laboratory |  |

## GENETICS

| Code | Title | Credits |
| :---: | :---: | :---: |
| Select one of the following: |  |  |
| GENETICS 466 | Principles of Genetics | 3 |
| GENETICS 467 <br> \& GENETICS 468 | General Genetics 1 and General Genetics $2^{1}$ | 6 |
| BIOCORE 381 <br> \& BIOCORE 382 <br> \& BIOCORE 383 <br> \& BIOCORE 384 | Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory and Cellular Biology and Cellular Biology Laboratory ${ }^{2}$ | 10 |

1 If students choose GENETICS 467 \& GENETICS 468 , 3 credits from this sequence will count towards the 5 required elective credits.
2 Students who have taken BIOCORE for introductory biology will have typically also completed the genetics requirement via BIOCORE courses taken sophomore/second year.

## PATHOLOGY

PATH 404 Pathophysiologic Principles of Human Diseases

## PHARMACUETICAL SCIENCES



## ELECTIVES IN THE MAJOR

Students must complete at least 5 elective credits in the pharmacology and toxicology major from the below list. Electives in the pharmacology and toxicology major are available within the School of Pharmacy and in many departments. It is suggested that students select electives in consultation with their advisor. Another option for fulfilling a portion or all of these 5 credits are additional laboratory-based independent study (i.e., 699) credits beyond the minimum 2 credits required for the major. Additional 699 credits must be approved by the PharmTox program to count towards the elective requirement (unless they are done within the same laboratory that was originally approved).

| Pharmaceutical <br> Code <br> Pciences/Pharmacy <br> Title | Credits |
| :--- | :--- | ---: |


| Anatomy \& Physiology |  |  | Math |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Title | Credits | Code | Title | Credits |
| ANAT\&PHY 337 | Human Anatomy | 3 | MATH 605 | Stochastic Methods for Biology | 3 |
| ANATOMY 329 | Human Anatomy-Kinesiology | 2 | Medical Microbiology \& Immunology |  |  |
| Animal Sciences |  |  | Code | Title | Credits |
| Code | Title | Credits | M M \& I 301 | Pathogenic Bacteriology | 2 |
| AN SCI/DY SCI 434 | Reproductive Physiology | 3 | M M \& I/MICROBIO/ PATH-BIO 528 | Immunology | 3 |
| Biochemistry |  |  | M M \& I/PATHBIO 529 | Immunology Laboratory | 2 |
| BIOCHEM/ <br> NUTR SCI 510 | Biochemical Principles of Human and Animal Nutrition | 3 | Medical Physics |  |  |
| BIOCHEM 550 | Topics in Medical Biochemistry | 2 | Code | Title | Credits |
| BIOCHEM 551 | Biochemical Methods | 4 | MED PHYS/ | Radiobiology | 2-3 |
| $\begin{array}{ll}\text { M M \& I 575 } & \text { Biology of Viruses }\end{array}$ |  |  | H ONCOL 410 Microbiology |  |  |
| BIOCHEM 601 | Protein and Enzyme Structure and Function | 2 | Code | Title | Credits |
| BIOCHEM/GENETICS/MICROBIO 612 |  | 3 | MICROBIO 303 | Biology of Microorganisms | 3 |
|  |  | MICROBIO 304 | Biology of Microorganisms Laboratory | 2 |
|  |  | MICROBIO 305 | Critical Analyses in Microbiology | 1 |
| Biology Core Curriculum |  |  | MICROBIO/ General Virology-Multiplication <br> ONCOLOGY/ Viruses <br> PL PATH 640  |  | 3 |
| Code | Title |  |  |  | Credits |  |
| BIOCORE 587 | Biological Interactions |  |  |  | 3 |  |
| Chemical and Biological Engineering |  |  | Neuroscience |  |  |
| Code | Title | Credits | Code | Title | Credits |
| CBE/B M E 783 | Design of Biological Molecules | 3 | NEURODPT 533 | Molecular Physiology | 2 |
| Chemistry |  |  | Oncology |  |  |
| Code | Title | Credits | Code | Title | Credits |
| CHEM 547 | Advanced Organic Chemistry | 3 | ONCOLOGY 401 | Introduction to Experimental | 2 |
| CHEM 561 | Physical Chemistry | 3 |  | Oncology |  |
| CHEM 565 | Biophysical Chemistry | 4 | Pathobiological Scie | nces |  |
| Environmental Studies |  |  | Code | Title | Credits |
| Code | Title | Credits | PATH-BIO/HORT 500 | Molecular Biology Techniques | 3 |
| ENVIR ST/ <br> POP HLTH 471 | Introduction to Environmental Health | 3 | Psychology <br> Code <br> Title |  |  |
| ENVIR ST/ <br> POP HLTH 502 | Air Pollution and Human Health | 3 | PSYCH 450 | Primates and Us: Insights into Human Biology and Behavior | 3 |
| ENVIR ST/HIST SCI/ <br> MED HIST 513 | Environment and Health in Global Perspective | 3 | PSYCH 454 | Behavioral Neuroscience | 3 |
|  |  |  | PSYCH/ | Neurobiology | 3 |
| Food Science |  |  | ZOOLOGY 523 |  |  |
| Code | Title | Credits | Toxicology (Molecular \& Environmental Toxicology) |  |  |
| FOOD SCI 550 | Fermented Foods and Beverages |  | Code | Title | Credits |
| Genetics |  |  | M\&ENVTOX/ CIV ENGR/ SOIL SCI 631 | Toxicants in the Environment: | 3 |
| Code | Title | Credits |  | Sources, Distribution, Fate, \& Effects |  |
| GENETICS 545 | Genetics Laboratory | 2 |  |  |  |
| GENETICS/BOTANY/ <br> HORT 561 | Introductory Cytogenetics | 2-3 | M\&ENVTOX/ <br> AGRONOMY/ <br> ENTOM/ <br> F\&W ECOL 632 | Ecotoxicology: The Chemical Players | 1 |



## QUALITY OF WORK REQUIREMENTS AND PASS/FAIL

Students must have a 2.000 cumulative grade point average at the time of graduation in order to earn a Pharmacology and Toxicology B.S. degree.

No course that is used for Pharmacology and Toxicology degree requirements may be taken as pass/fail and must be taken for a letter grade (AP, IB, or other test credits or placement exemptions are excluded from this requirement). This includes all prerequisite coursework, major requirements, and University General Education requirements.

## UNIVERSITY DEGREE REQUIREMENTS

| Total Degree | To receive a bachelor's degree from UW-Madison, <br> students must earn a minimum of 120 degree credits. <br> The requirements for some programs may exceed 120 <br> degree credits. Students should consult with their college <br> or department advisor for information on specific credit <br> requirements. |
| :--- | :--- |
| Residency | Degree candidates are required to earn a minimum of 30 <br> credits in residence at UW-Madison. "In residence" means <br> on the UW-Madison campus with an undergraduate <br> degree classification. "In residence" credit also includes <br> UW-Madison courses offered in distance or online |
| Quality of | Abroad/Study Away programs. |
| WorkUndergraduate students must maintain the minimum <br> grade point average specified by the school, college, or <br> academic program to remain in good academic standing. |  |
|  | Students whose academic performance drops below <br> these minimum thresholds will be placed on academic <br> probation. |

## LEARNING OUTCOMES

1. Demonstrate a knowledge and understanding of the supportive biomedical fields of Biochemistry, Genetics, Physiology, Pathophysiology and Statistics.
2. Demonstrate a knowledge and understanding of the major fields of Pharmacology and Toxicology and show an ability to evaluate, interpret, critique and discuss published scientific findings.
3. Perform laboratory techniques and procedures, interpret the results and present in a written form suitable for submission for publication.
4. Formulate a research question, design experimental procedures and provide evidence-based support in a written grant application that contributes to the knowledge in a selected field.
5. Conduct laboratory-based research for an independent project, formulate an oral scientific presentation and deliver the presentation to peers.
6. Apply statistical methods in preparing and interpreting scientific findings.
7. Apply ethical principles in conducting scientific research.
8. Demonstrate an ability to collaborate with peers in scientific endeavors.

## FOUR-YEAR PLAN

Below are sample four-year plans for the pharmacology \& toxicology major, incorporating both prerequisites and major coursework. They focus on science coursework sequencing and do not take into account factors such as AP or advance standing credits, additional summer courses, study abroad, or preparing for standardized tests like the MCAT or PCAT.

It is critical that you talk with your advisor about your tentative plan for course sequences and prerequisites, which courses are offered fall vs. spring vs. summer, etc.

## EXAMPLE PLAN: CHEM 103/104; PHYSICS I IN FIRST YEAR

Freshman

| Fall | Credits Spring | Credits |  |
| :---: | :---: | :---: | :---: |
| CHEM 103 | 4 CHEM 104 | 5 |  |
| MATH 221 | $\begin{aligned} & 5 \text { PHYSICS 103, } \\ & 201 \text {, or } 207 \end{aligned}$ | 4-5 |  |
| Communication A | 3 Social Science | 3-4 |  |
| Electives | 3-4 Electives | 3-4 |  |
|  | 15-16 | 15-18 |  |
| Sophomore |  |  |  |
| Fall | Credits Spring | Credits Summer | Credits |
| CHEM 343 | 3 CHEM 345 | 3 CHEM 344 | 2 |
| ZOOLOGY/ <br> BIOLOGY/ <br> BOTANY 151 <br> (or Biocore) | 5 ZOOLOGY/ BIOLOGY/ BOTANY 152 (or Biocore) | 5 |  |
| Ethnic Studies | 3-4 Humanities | 3-4 |  |
| Electives | 3 PharmTox elective | 3 |  |
|  | 14-15 | 14-15 | 2 |


| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| BIOCHEM 507 | 3 BIOCHEM 508 | 3 |
| ANAT\&PHY 335 (or Biocore) | 5 GENETICS 466 <br> (not req. if Biocore taken) | 3 |
| PHM SCI 558 | 2 PATH 404 | 3 |
| STAT 371 | 3 PHM SCI 679 | 1 |
| Humanities | 3 Research (699 credit) | 2-3 |
|  | 16 | 12-13 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| PHM SCI/ <br> PHMCOL- <br> M 521 | 3 PHM SCI/ PHMCOLM 522 | 3 |
| PHM SCI 623 or BIOCHEM 630 | ```3 PHM SCI/ M&ENVTOX/ MEDICINE/ PATH/ PHMCOL-M/ POP HLTH 626``` | 3 |
| PHM SCI/ <br> M\&ENVTOX/ <br> MEDICINE/ <br> ONCOLOGY/ <br> PATH/ <br> PHMCOL-M/ <br> POP HLTH 625 | 3 PHM SCI 679 | 1 |
| PharmTox elective or research | $\begin{gathered} \text { 2-3 PHYSICS 104, } \\ 202 \text {, or } 208 \end{gathered}$ | 4-5 |
| Electives | 3-4 Electives or research | 3-4 |
|  | 14-16 | 14-16 |

Total Credits 116-127

## EXAMPLE PLAN: CHEM 109; BIOLOGY IN FIRST YEAR

| Freshman |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| CHEM 109 | 5 CHEM 343 | 3 |
| MATH 221 | 5 ZOOLOGY/BIOLOGY/ BOTANY 151 | 5 |
| Communication A | 3 Social Science | 3-4 |
| Electives | 3-4 Electives | 3-4 |
|  | 16-17 | 14-16 |
| Sophomore |  |  |
| Fall | Credits Spring | Credits |
| ZOOLOGY/BIOLOGY/ <br> BOTANY 152 | 5 CHEM 344 | 2 |
| CHEM 345 | 3 PHYSICS 103, 201, or 207 | 4-5 |
| Ethnic Studies | 3-4 Humanities | 3-4 |
| Electives or research | 2-3 PharmTox elective | 3 |


|  | Electives or research | 2-3 |
| :---: | :---: | :---: |
|  | 13-15 | 14-17 |
| Junior |  |  |
| Fall | Credits Spring | Credits |
| BIOCHEM 507 | 3 BIOCHEM 508 | 3 |
| PHM SCI 558 | 2 GENETICS 466 | 3 |
| ANAT\&PHY 335 | 5 PATH 404 | 3 |
| STAT 371 | 3 PHM SCI 679 | 1 |
| Humanities | 3 Electives or research | 2-3 |
|  | 16 | 12-13 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| PHM SCI/PHMCOL- <br> M 521 | 3 PHM SCI/PHMCOL- <br> M 522 | 3 |
| PHM SCI 623 or BIOCHEM 630 | ```3 PHM SCI/M&ENVTOX/ MEDICINE/PATH/ PHMCOL-M/ POP HLTH }62``` | 3 |
| PHM SCI/M\&ENVTOX/ MEDICINE/ONCOLOGY/ PATH/PHMCOL-M/ POP HLTH 625 | 3 PHM SCI 679 | 1 |
| PharmTox elective | 2-3 PHYSICS 104, 202, or 208 | 4-5 |
| Electives | 3 Electives | 3-5 |
|  | 14-15 | 14-17 |

Total Credits 113-126

## EXAMPLE PLAN: CHEM 103 SPRING OF FIRST YEAR

## Freshman

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| MATH 112, 113, | $3-5$ CHEM 103 | 4 |
| 114, or 171 |  |  |
| Social Science | 3-4 MATH 221 or <br> 217 | 5 |
| Communication | 3 PHYSICS 103 | 4 |
| A | 3-4 Electives | $3-4$ |
| Electives | $12-16$ | $16-17$ |


| Sophomore |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall | Credits Spring | Credits Summer | Credits |
| CHEM 104 | 5 CHEM 343 | 3 CHEM 345 | 3 |
| $\begin{aligned} & \text { ZOOLOGY/ } \\ & \text { BIOLOGY/ } \\ & \text { BOTANY } 151 \end{aligned}$ | $\begin{aligned} & 5 \text { ZOOLOGY/ } \\ & \text { BIOLOGY/ } \\ & \text { BOTANY } 152 \end{aligned}$ | 5 CHEM 344 | 2 |
| Ethnic Studies | 3-4 Humanities | 3-4 |  |
| Electives | 3 PharmTox elective | 3 |  |
|  | 16-17 | 14-15 | 5 |
| Junior |  |  |  |
| Fall | Credits Spring | Credits |  |
| BIOCHEM 507 | 3 BIOCHEM 508 | 3 |  |
| PHM SCI 558 | 2 GENETICS 466 | 3 |  |
| ANAT\&PHY 335 | 5 PATH 404 | 3 |  |


| STAT 371 | 3 PHM SCI 679 | 1 |
| :---: | :---: | :---: |
| Humanities | $\begin{aligned} & 3 \text { Research (699 } \\ & \text { credit) } \end{aligned}$ | 2-3 |
|  | 16 | 12-13 |
| Senior |  |  |
| Fall | Credits Spring | Credits |
| PHM SCI/ | 3 PHM SCI/ | 3-4 |
| PHMCOL- | PHMCOL- |  |
| M 521 | M 522 |  |
| PHM SCI 623 or BIOCHEM 630 | ```3 PHM SCI/ M&ENVTOX/ MEDICINE/ PATH/ PHMCOL-M/ POP HLTH 626``` | 3 |
| PHM SCI/ | 3 PHM SCI 679 | 1 |
| M\&ENVTOX/ |  |  |
| MEDICINE/ |  |  |
| ONCOLOGY/ |  |  |
| PATH/ |  |  |
| PHMCOL-M/ |  |  |
| POP HLTH 625 |  |  |
| PharmTox elective or research | $\begin{gathered} \text { 2-3 PHYSICS 104, } \\ 202 \text {, or } 208 \end{gathered}$ | 4-5 |
| Electives | 3-4 Electives or research | 3-4 |
|  | 14-16 | 14-17 |

Total Credits 119-132

## ADVISING AND CAREERS

## ADVISING

Pre-PharmTox students are often in the College of Letters \& Science or the College of Agricultural and Life Sciences during their freshman and sophomore years while they are taking prerequisite coursework and preparing to apply to the major. Students can request to be assigned to the PharmTox advisor during this time, in addition to having a primary academic advisor in their current school/college, and are welcome to meet with the PharmTox advisor at any time.

The PharmTox advisor advises both current undergraduates and prospective high school/transfer students interested in learning more about the major; appointments may be made by calling (608) 262-6234 or via the Scheduling Assistant (https://go.wisc.edu/l3my6o) (for current students). Advising is also available at SOAR for incoming students, and typically includes curriculum planning, career exploration, and introductions to enrollment tools. The advisor can connect prospective undergraduate students with juniors and seniors in the program, and, as appropriate, with PharmTox alumni. Once admitted to the major, students will have the PharmTox advisor assigned as their primary academic advisor. Reasons to see an advisor and how to maximize advising appointments can be explored at this w (https://pharmacy.wisc.edu/ student-academic-affairs/advising/current-students)ebsite (https:// pharmacy.wisc.edu/student-academic-affairs/advising/current-students/ preparing-for-appointments).

## CAREERS

Students completing the program will be well qualified to pursue entry-level scientific career employment (https://pharmacy.wisc.edu/ programs/pharm-tox/careers-in-pharm-tox) in industry (e.g., biomedical; biotechnology; consumer products; contract research organizations; regulatory affairs; pharmaceutical), in academic basic science and clinical research laboratories, or in various agencies of government focused on science, health, or the environment.

The program's depth and breadth has proved to be an excellent foundation for graduate work in pharmacology, toxicology, or other related biomedical sciences, as well as for medical school, veterinary medicine, and other health professions schools (e.g., pharmacy, dental, optometry, public health). For students who tailor their general education and elective coursework appropriately, the Pharmacology and Toxicology program can also uniquely launch students into scientific writing, business or regulatory positions, environmental positions, or law school. As future professionals aware of the pharmacological and toxicological sciences, pharmacology and toxicology graduates are well poised to make meaningful improvements in human and animal health.

Statistical information about immediate post-degree work or advanced degree attainment for alumni in the last decade may be found on the School website (https://pharmacy.wisc.edu/programs/pharm-tox/ student-outcomes). Due in part to its small size, the program has strong connections with its 300+ alumni who are located across the country and the globe. These alumni can be influential in connecting with current students, allowing current students access to conversations with those in the fields to which they aspire. More detailed career information (including current placement of PharmTox alumni, 1986-present) may be found by contacting the PharmTox advisor.

Available career resources:

- The PharmTox advisor can assist with resume building, interview preparation, and career exploration. Many L\&S and CALS career workshops and fairs are open to all students, including PharmTox students. The Career Exploration Center (https://cec.ccas.wisc.edu) (CEC) is also available to students who are in the early stages of career exploration, especially those who have lots of ideas or no ideas yet.
- BuckyNet (https://pharmacy.wisc.edu/student-academic-affairs/ career-development-services/buckynet) features employer job postings specifically available to UW-Madison students, and is a great place to browse for internships and full-time jobs. Students can also post resumes and allow employers to contact them regarding potential employment.
- The Center for Prehealth Advising (http://www.prehealth.wisc.edu) assists students with preparing for and applying to professional healthcare programs, including medicine, physical therapy, physician assistant, dentistry, and more.


## PEOPLE

## FACULTY DIRECTOR

Johnson, Jeffrey (Professor, Pharmaceutical Sciences)

## ACADEMIC STAFF AFFILIATED WITH PROGRAM

Gurnee, Kendra (Advisor and Program Coordinator)

Kopacek, Karen (Associate Dean for Student and Alumni Affairs)
de Villiers, Melgardt (Associate Dean for Academic Affairs)

## ADMISSIONS/OVERSIGHT COMMITTEE

Altschafl, Jeremy (Assistant Dean - Admissions)<br>Clagett-Dame, Margaret (Professor, Biochemistry)<br>Frey, Jannelle (Admissions Staff)<br>Gurnee, Kendra (Advisor and Program Coordinator)<br>Johnson, Jeffrey (Professor, Pharmaceutical Sciences)<br>Heideman, Warren (Professor, Pharmaceutical Sciences)<br>Hong, Seungpyo (Professor, Pharmaceutical Sciences)<br>Niemeyer, Ken (Graduate Programs Coordinator)<br>Sweet, Nadia (Alumna)<br>Vezina, Chad (Associate Professor, Comparative Biosciences)<br>de Villiers, Melgardt (Associate Dean for Academic Affairs)

## WISCONSIN EXPERIENCE

The following opportunities can help students connect with other students interested in pharmacology, toxicology, and other biomedical sciences, build relationships with faculty and staff, and contribute to out-of-classroom learning:

- The program's small size and cohort-based model makes it easy to arrange study groups, tutoring, and social events, and funds can be requested to support these activities.
- Students have access to a student commons, group study rooms, lockers, and a variety of gathering spaces in Rennebohm Hall. Ebling Library, located adjacent to Rennebohm Hall in the Health Sciences Learning Center, serves the School of Pharmacy student body, in addition to that of students from medicine, veterinary medicine, and nursing.
- The School of Pharmacy hosts a variety of student organizations (https://pharmacy.wisc.edu/student-organizations), several of which are available to PharmTox students. PharmTox students have their own Class Council with several representatives from each class. Junior and senior class presidents are elected each year and help facilitate Class Council, as well as serve on various School of Pharmacy committees as representatives of the PharmTox program

Students are required to participate in a wet-lab basic science research experience for at least one semester after being admitted to the major, though continued research involvement throughout one's time here is highly encouraged. The Biocommons website (http:// biology.wisc.edu/finding-mentor) has step-by-step information on how to find a research opportunity, and students can also speak with the advisor for additional guidance

- Study abroad is definitely possible, although a winter session, spring break, or summer session experience fits most easily with the PharmTox curriculum. Visit International Academic Programs (https://www.studyabroad.wisc.edu) or the International Internship

Program (http://internships.international.wisc.edu) to explore possibilities in global health, research, and more.

- One to two travel awards are given annually to allow seniors to attend a national conference in the field of pharmacology and toxicology, and funding is often available to facilitate travel for interested students to regional conferences near Madison.
- The annual Pharm.D./PharmTox Research Symposium provides students with an opportunity to present their research projects each spring.


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[^0]:    - Ensures that students of all racial and cultural backgrounds are successful and feel welcome

[^1]:    - Students must complete a minimum of $\mathbf{3 0}$ credits in residence, of which 15 or more must be in the major field as specified by the major department. These credits are in addition to credits earned for the first degree.
    - Candidates must complete all university, college, major, and curricular degree program requirements. Credits earned for the first degree will apply toward appropriate requirements for the second. However, students must take at least 30 additional credits, as noted

[^2]:    Total Credits 24-32

[^3]:    1 Courses also approved for lab credit

[^4]:    Total Credits 27-33

[^5]:    - Prepare for graduate study in neurobiology or related field

[^6]:    - The American Society for Biochemistry and Molecular Biology (ASBMB) UW-Madison Student Chapter (https://win.wisc.edu/ organization/ASBMB) is a student organization for students interested in biochemistry. ASBMB provides information about careers and job opportunities, how to get involved in research, and volunteer and outreach opportunities.

[^7]:    Total Credits 32

[^8]:    - Research labs. Food Science faculty welcome undergraduates to gain experience conducting meaningful research in their labs.

[^9]:    Total Credits 24-39

[^10]:    - Genetics and Genomics, B.S. (p. 168)

[^11]:    Total Credits 130

[^12]:    - Larry Nesper (http://www.anthropology.wisc.edu/staff/nesper-larry), Anthropology
    - Shannon Sparks (http://sohe.wisc.edu/staff/shannon-sparks-phd), Civil Liberties and Community Studies

[^13]:    Ellen and William E. Fisher Scholarship
    Ellen and William E. Fisher have provided funding for an annual scholarship to be awarded to an undergraduate student at the UWMadison who is studying the Chinese language. According to the terms of the gift agreement, the award is based on merit, therefore there is no application, but faculty will make a determination based on students progressing in the program. Mr. Fisher stipulated that the award must be made in the Fall semester, so that the recipient can use it in the Spring semester.

[^14]:    Foreign Language \& Area Studies (FLAS) Fellowships (https://
    flas.wisc.edu)
    FLAS fellowships are funded by the U.S. Department of Education and administered by the UW's National Resource Centers to assist students in acquiring foreign language and either area or international studies competencies. FLAS awards are only available for specific languages (https://flas.wisc.edu/Languages.html), and are contingent on federal funding. Please direct any questions to the FLAS Coordinator (https:// flas.wisc.edu/Languages.html) of your chosen language.

    Applicants must be U.S. citizens or permanent residents of the United States. Applications by students in professional fields are encouraged.

[^15]:    Gilman Scholarship Program
    Campus Representative: Andy Quackenbush
    (quackenbush@studyabroad.wisc.edu)
    The Gilman Scholarship Program is an undergraduate grant program for U.S. citizens of limited financial means to enable them to study abroad, thereby internationalizing their outlook and better preparing them to assume significant roles in the increasingly global economy.

[^16]:    Foreign Language \& Area Studies (FLAS) Fellowships (https:// flas.wisc.edu)
    FLAS fellowships are funded by the U.S. Department of Education and administered by the UW's National Resource Centers to assist students in acquiring foreign language and either area or international studies competencies. FLAS awards are only available for specific languages (https://flas.wisc.edu/Languages.html), and are contingent on federal funding. Please direct any questions to the FLAS Coordinator (https:// flas.wisc.edu/Languages.html) of your chosen language.

[^17]:    Undergraduate Academic Awards Office (https:// awards.advising.wisc.edu)
    We help UW-Madison undergraduates and recent graduates pursue nationally competitive scholarships
    (https://awards.advising.wisc.edu/scholarships/ nationally-competitive) and campus-wide awards (https:// awards.advising.wisc.edu/scholarships/campus-wide) for research, service and leadership-activities at the heart of the Wisconsin Experience. We can help you:

    - Find scholarship opportunities that match your goals and interests
    - Navigate the scholarship application process
    - Review scholarship essays
    - Prepare for national scholarship interviews

[^18]:    Undergraduate Academic Awards Office (https:// awards.advising.wisc.edu)
    We help UW-Madison undergraduates and recent graduates pursue nationally competitive scholarships
    (https://awards.advising.wisc.edu/scholarships/ nationally-competitive) and campus-wide awards (https:// awards.advising.wisc.edu/scholarships/campus-wide) for research, service and leadership-activities at the heart of the Wisconsin Experience. We can help you:

    - Find scholarship opportunities that match your goals and interests
    - Navigate the scholarship application process
    - Review scholarship essays
    - Prepare for national scholarship interviews

    Contact us (https://awards.advising.wisc.edu/schedule-anappointment) to schedule an appointment to discuss which opportunities are right for you.

[^19]:    - Earn a 3.300 overall university GPA

[^20]:    - Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)

[^21]:    - A course in biochemistry, satisfied by BIOCHEM 501 Introduction to Biochemistry or BIOCHEM 507 General Biochemistry I (3 credits)

[^22]:    - A course in biochemistry, satisfied by BIOCHEM 501 Introduction to Biochemistry or BIOCHEM 507 General Biochemistry I (3 credits)

[^23]:    - General Education requirements

[^24]:    Total Degree To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

[^25]:    - French, B.A. (p. 653)

[^26]:    General - Breadth-Humanities/Literature/Arts: 6 credits Education

    - Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
    - Breadth-Social Studies: 3 credits
    - Communication Part A \& Part B *
    - Ethnic Studies *
    - Quantitative Reasoning Part A \& Part B *
    * The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

[^27]:    - Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)

[^28]:    - Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)
    - Journalism (Bachelor of Arts-Journalism; Bachelor of Science-Journalism)
    - Music (Bachelor of Music)
    - Social Work (Bachelor of Social Work)

[^29]:    Total Credits

[^30]:    - Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)

[^31]:    Code Title Credits
    HISTORY 142
    History of South Asia to the Present

[^32]:    Code
    Title
    Credits

[^33]:    4

[^34]:    - SuccessWorks (https://careers.Is.wisc.edu)
    - Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)
    - INTER-LS 210 L\&S Career Development: Taking Initiative (1 credit, targeted to first- and second-year students)-for more information,

[^35]:    1 When topic is Russia, Eastern Europe, or Central Asia

[^36]:    1 The completion of CHEM 115 Chemical Principles I and CHEM 116 Chemical Principles II also satisfies the General Chemistry Requirement.

[^37]:    - Earn a 3.300 overall university GPA

[^38]:    - Applied Mathematics, Engineering and Physics (Bachelor of Science-Applied Mathematics, Engineering and Physics)

[^39]:    - Biochemistry, B.A. (L\&S) (p. 1046)

[^40]:    - Review the information available on the School of Music website (http://www.music.wisc.edu). Any questions may be directed to the School of Music Undergraduate Admissions Office.
    - Download and complete the music application. On the application form you will request an audition date.
    - Download and provide the recommendation forms to two recommenders. These will be people who can attest to the applicant's musical background and ability.
    - If there will be need for financial assistance, consult the Office of Student Financial Aid (https://financialaid.wisc.edu).
    - Request that official transcripts be sent to the School of Music Undergraduate Admissions Office from all high schools and colleges attended.

[^41]:    - SuccessWorks (https://careers.Is.wisc.edu)
    - Set up a career advising appointment (https://careers.Is.wisc.edu/ make-an-appointment)

[^42]:    Select additional electives to reach 35 -credit minimum for the major.

[^43]:    3.300 university GPA

[^44]:    Topics or Advances (1 course):

[^45]:    - Earn a 3.300 overall university GPA

[^46]:    - Earn a 3.300 overall unversity GPA

[^47]:    I SY E/PSYCH 549

[^48]:    Total Credits 30

[^49]:    The School of Education's Liberal Studies Requirements automatically satisfy most of the University General Education Requirements outlined above, including ethnic studies, humanities/literature, social studies, and science. Students pursuing most School of Education degree programs may also complete Communication Part B, Quantitative Reasoning

[^50]:    - Kinesiology: Exercise \& Movement Science (p. 1623)

[^51]:    - 2.5 minimum cumulative grade point average. This may be modified by the Last 60 Credits Rule.
    - 2.5 cumulative major grade point average.
    - 2.5 cumulative grade point average in all upper-level major coursework ("upper-level" is defined as all "intermediate" and "advanced" coursework).

[^52]:    1 MATH 211 Calculus taken at UW-Madison does not fulfill the Calculus

